Organizational Learning in Higher Education: Exploring One Institution’s Efforts to Meet the Emerging Changes in the Higher Education Landscape

by

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A Dissertation submitted to the faculty of the School of Education of Northeastern University in partial satisfaction of the requirements for the degree of Doctor of Education

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Boston, Massachusetts
March 2019

Oral Defense: March 11, 2019
Abstract
The purpose of this single, descriptive case study was to gain new insight into how members of a successful higher education institution – Virtual U – are learning to adapt to the dynamic and ever-changing environment. This study examined one successful institution of higher education that has experienced exponential financial and student growth in a time where other colleges and universities are struggling to survive. This institution began as a small brick and mortar institution in the northeast that was faced with fears of its own mortality and has since become one of the largest providers of online education in the United States serving more than 130,000 students. The over-arching research question sought to understand how organizational members describe their organizational learning system. The findings revealed that Virtual U’s dynamic social system reflects a relative balance of learning and performance actions. Findings revealed evidence of learning actions in terms of how Virtual U is seeking to anticipate future market needs, Virtual U is being intentional to reflect on their organizational goals, Virtual U has designed a structure to enable effective knowledge sharing practices, and Virtual U’s learning culture supports development of its employees toward institutional goals. This relative balance of performance and learning is consistent with the Organizational Learning Systems Theory (Schwandt, 1994, 1997). The premise of this theory is that organizations as social systems have the inherent capacity for performance and learning; and that the four subsystems of actions are functional prerequisites for the system to adapt to their environment. Virtual U’s findings reveal that their organizational members articulated both learning actions and performance actions for their system, although the focus on this dissertation was on the learning system.

Organizational Learning offers a promising framework for how higher education administration might understand the strategies, structures, and processes within their system that enable or inhibit the ability of the organization to create new knowledge and adapt to the changing conditions.
Keywords: higher education, organizational learning, environmental change, adaptive learning, culture of learning, organizational learning model, organizational performance, Schwandt Organizational Learning Model.
Dedication

This work is dedicated to my son, Kale. For all of the moments that this took from us, it is my hope that it gives you so much more.

“Go confidently in the direction of your dreams. Live the life you have imagined”

- Henry David Thoreau
Acknowledgements

I cannot even begin to explain the pleasures and the pains of this journey; like night and day, one moment spent in academic bliss, realization, and self-actualization, and the next moment spent incredibly tired, agonizing over deadlines, and wondering if I would survive this entire program and process. This program brought the words “suck it up” to a level that I cannot even begin to describe. I am incredibly thankful to have had this opportunity in life. This program stretched me as a human being, in ways that would not have been possible without these experiences and this knowledge. This experience, while I feel has literally provided me with some level of PTSD, has also been the greatest pleasure of my life, and for that I am incredibly thankful and grateful to all who have supported me on this journey and to Northeastern University for providing such an incredible academic program.

I would first like to thank my husband, Michael. Thank you for supporting all that I am, for allowing me to grow in my own ways, and for giving me the space and support necessary to do so. Thank you for encouraging me and supporting me through the journeys of my dreams. I have literally been in school through the decade of our marriage and I know that has not always been easy, especially in the end. There were times when I thought this work would break me and I know you felt that too. Thank you my darling, for loving me through it all. I love you. I would also like to thank my son, Kale. Thank you, my boy, for the patience, love, and understanding when mommy needed it most. There were times when I wanted nothing more than to play and have fun with you, but I hope that this work serves as an example to you that sometimes some things are worth the work, they are worth the wait, and they are worth your time. There is nothing more important than your education, Kale; your education will transform your life in ways that nothing else on this earth can.
I would like to thank my mother, Cherie. It was always made clear to your daughters that an education was important. That was also made clear to us without you having to say a word. Your example was clear enough. It was not easy going back to school as a single mother, but we learned that it was important and necessary. You were an example of hard work and dedication to your education and to your daughters. It was not the things you said, it was the things you did. Nothing was more important for us than your example and I hope that I serve as that same example for Kale. Thank you for being that example for me and for all mothers out there. The strength of my being has in large part come from being your daughter. I love you, mom.

I would also like to thank my mother-in-law, the original Dr. Kendrick, for all your love and support throughout my many years in college and this program. You too have served as an example to me, as a working professional woman, raising children, going to school, and making it happen. Thank you for being my sounding board, a source of encouragement, and a strong example to me and all women.

I would like to thank Dr. Margaret Gorman, one of the best instructors in this program and my trusted advisor in this work. Dr. Gorman, I could not have gotten luckier when I was assigned to you for this dissertation. You are without question one of the brightest minds in the field of organizational learning and you are certainly among the top of the most intelligent women I know. I admire your work, I admire your intellect, and I hope to one day be as noteworthy as you. Thank you for your incredible guidance in this process and for walking me off the cliff when I needed it. I am forever grateful to you and all that you are. I can only hope to do more work with you in the future.

I would like to thank Dr. Tova Sanders for your work with this program and your guidance to so many of us along the way. You are also an incredible example of a strong,
academic, working woman and I thank you for contributing your thoughts to this work as a member of this committee.

I would like to thank Dr. Emilsen Holguin, who is my friend, my example, and my mentor in many ways. You are the epitome of hard work, drive, and commitment to a greater purpose. I deeply admire your thoughtfulness in all elements of your life, your courage to fight the odds, your determination to make a difference, and your commitment to be a better you each and every day. I cannot thank you enough for being so encouraging and supportive throughout this program. It is my pleasure to call my friend and I look forward to many more years of awesome academic conversation and growth.

I would like to thank the president, leadership, and study participants in this research. This was truly an amazing experience. You are an exceptional institution of higher education in every sense of the word. I have never been more impressed with the leadership of any organization. Your belief in who you are, what you do, why you do it, and in your people is simply incredible. The empowerment that you have provided them is evident in the results that you produce. Your commitment and dedication to each other and to your students is unlike anything I have ever seen, and it is your institution that makes me believe that higher education in this country has a vibrant and innovative future. As I began to study organizational learning two years ago, I wondered if these models and practices could be successful in a higher education environment and what the results might be; I have the answer to that question now. It was my hope to be able to accurately capture and portray who you are and what you do, so that others might learn from your example. I am endlessly amazed by the learning that transpires in your institution and it was my absolute pleasure to study you. Thank you to the real Virtual U.

There are so many people who have been supportive and encouraging through this journey, I am unable to list you all by name, but some that must receive recognition are my
grandparents, Grace and Arle Ahl, who have always been two of my biggest fans and a source of positive support; I love you, grandma and grandpa. My sisters, Sunny and Skye, who were willing to listen to the madness of my life at times and show support when I needed it. Susan Moyer, my friend and confidant in my personal and professional life over the last five years. Nadina Comolli, my dear friend, for your constant support and belief in me. Nicole Donato, another incredibly strong woman and dear friend who has been supportive through the madness, and Naomi Hamner, for doing a sanity check in the end there, bringing me treats, love, and support.

This program has tested and challenged my soul in ways that were both making and breaking me. I move forward now, armed with this education and knowledge, as Dr. Noelle Kendrick, ready to pay it forward.
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Chapter 1: Introduction and Background

After multiple decades of reliable growth, higher education institutions are beginning to experience a decline in enrollments and operational revenues (Allen & Seaman, 2017; Jaschik, 2018; Marcus, 2017; National Center for Education Statistics, 2017; National Student Clearing House, 2017; Selingo, 2016a). Both undergraduate and graduate student enrollment had seen substantial increases since World War II, with large gains since the 1970s through the early 21st century. With the turn of the 21st century – from 2004 to 2014 – student enrollment rose 17% from 17.3 million to 20.2 million, by 2014 however, enrollment had dropped to 2010 levels of 18.1 million. Enrollment as of Spring 2017 across all institutional types was 18,071,004, down 1.5% from Spring 2016 (National Center for Education Statistics, 2017; National Student Clearing House, 2017). Higher education institutions no longer enjoy nearly effortless stability in the business of education. Many facets of the economy and the population have changed and altered the world in ways that have had a profound impact on American higher education student enrollment and the entire industry.

According to the National Student Clearing House (2017), which tracks enrollment patterns at all Title IV degree granting institutions in the United States, enrollments across the entire higher education spectrum of institutions (e.g., 4-year and 2-year nonprofit, for-profit, public and private) have declined consistently since 2014, though some institutional types have faced greater losses than others in recent years; 4-year public institutions were the only exception with a growth rate of 0.2 percent in the fall of 2016 and spring of 2017. Counter to the evidence of declining college enrollments and a shrinking population of college age students by the U.S. Census Bureau (Selingo, 2016a), a 2017 report by the National Center for Education Statistics predicted an increase in college enrollments by 15% from 2014 to 2025. As a disclaimer, the report states, however, that enrollment projections provided do not take into account factors such
as the cost of education, technological changes, the value of higher education, the impact of distance learning, and ethnic/racial backgrounds of nonresident aliens (Hussar & Bailey, 2017), all of which are factors that have played a substantial role in the massive shifts and declines in higher education enrollment to date (Jaschick, 2018; Selingo, 2016). To date, college enrollments continue to decline.

Higher education in the United States is faced with environmental turbulence in the form of seismic population shifts, changes in market trends, technological advances, increased competition, consumer culture, and a skeptical public that is questioning the value of higher education at large. These changes are occurring at a pace that many institutions are unable to keep up with (Moran, 2016) and many institutions are beset with challenges in trying to maintain financial stability for institutional survival (Allen & Seaman, 2017; The Business of Higher Education, 2017; Moran, 2016; Price, Schneider, & Quick, 2016; Schifrin, 2016; Selingo, 2016). There is increasing competition for a shrinking student population that has caused nothing short of a crisis on many college campuses, which has led to campus closures, mergers, institutional layoffs, budget cut backs, and lowered tuition rates; causing further damage to already struggling institutions.

As a result of the vast changes occurring in higher education and the increased competition, the need to integrate business practices into the higher education environment for survival has been recognized, but met with considerable challenge (Gumport, 2001; Rich, 2006). There are fears that introducing business practices in colleges and universities will erode the only meaningful bottom line in higher education, which is academic quality, and that adopting corporate behaviors will have a negative impact on higher education as a broader institution. There is negative sentiment that short-term economic exigencies are being prioritized to the detriment of long-term educational legacies that uphold democratic interests and shape the future
of the world (Gumport, 2001; Price et al., 2016). Nevertheless, as the pool of eligible students decreases and the landscape gets considerably more competitive, institutions are inevitably turning to business practices to recruit and retain students in the 21st century consumer culture (Denneen & Dretler, 2012; Marcus, 2017; Rich, 2006).

**The Purpose of the Study**

Organizational Learning offers a promising framework for how higher education administration might understand the strategies, structures, and processes within their system that enable or inhibit the ability of the organization to create new knowledge and adapt to the changing conditions. Introducing organizational learning practices into an institution of higher education has the possibility of creating the new knowledge necessary for institutional survival, without intentionally turning to unknown business practices that may not be successful in higher education institutions with an academic environment and culture. Organizational learning practices allow an organization to gain a deeper understanding of their own culture and learning capabilities, the nature of the changing environment, and the ways in which they can adjust or adopt practices that are better suited to the new landscape, their foundational mission, and values. An understanding by its members as to how the organization learns, yields greater levels of knowledge creation – producing actions and decisions that are best aligned to that organization and its environment – enabling the institution to form creative, innovative, and superior solutions to the challenges they face (Aminbeidokhti, Jamshidi, & Hoseini, 2016; Dodgson, 1993; Garvin, 1993; Kofman & Senge, 1993; March, 1991; Mirvis, 1996; Senge, 1990/2006).

There is little empirical research using an organizational learning systems framework to understand how American higher education institutions are creating new knowledge in order to be innovative for competitive advantage in a fluctuating environment. Organizations that have a
deeper and intentional understanding of their knowledge creation orientation are able to harness and produce knowledge in a systematic process that is capable of providing a considerable competitive advantage, even in the most challenging of landscapes (Fiol & Lyles, 1985; Garvin, 1993; Goh & Ryan, 2008; Hussein, Omar, Noordin, & Ishak, 2016; Kofman & Senge, 1993; Mirvis, 1996). This research will be valuable to higher education administrators at both traditional institutions and online institutions, as both institutional types are currently facing many of the same challenges and will continue to do so into the foreseeable future (Denneen & Dretler, 2012; Selingo, 2016a). There is a need for organizations to change business as usual behavior into resilient institutions that have the capacity to engage their markets effectively, while providing high quality education and workforce preparedness for their graduates (Moran, 2016).

The purpose of this research is to gain new insight into how members of a successful higher education institution are learning to adapt to the dynamic and ever-changing environment. This descriptive case study will examine this context at one successful institution of higher education that has experienced exponential financial and student growth in a time when other colleges and universities are struggling to survive. This institution began as a small brick and mortar institution in the northeast that was faced with fears of its own mortality and has since become one of the largest providers of online education in the United States, serving more than 130,000 students. This institution underwent transformational change and the leadership of the institution has attributed this change to learning. This study seeks to capture the organizational culture, structure, and practices that can improve learning capability for long-term sustainable growth in higher education institutions. This study seeks to capture how organizational members describe the learning system actions as their institution seeks to meet the emerging market changes.
Significance of the Study

The changing environmental landscape remains largely out of the control of higher education administrators. Influenced by population, technological, social, and economic factors, higher education institutions are operating on different terms and in a different landscape than was the case even a decade ago (Denneen & Dretler, 2012; Jaschik, 2018; Rich, 2006; Selingo, 2016a). The past decade has shown us that societal and economic forces have the power to shape the academic landscape – as much – if not more so, than higher education shaping society. For all institutions, there are formidable expectations to enhance access and academic quality, while embracing expensive technological systems, and at the same time having to cut costs (Denneen & Dretler, 2012; Gumport, 2001; Rich, 2006). The new political economy urges higher education administrators to view these challenges as business problems that can be solved with business solutions (The Business of Higher Education, 2017; Price et al., 2016; Rich, 2006). Business practices, however, seem counter to the values of many academic administrators who see education as a public good, for which the highest standards of quality cannot be compromised for business tactics (Gumport, 2001).

On a macro level, higher education appears to be shifting from being viewed as a social institution for which social justice, creativity, dissent, and new knowledge are created, to an institution that responds to market forces that are beholden to corporate needs, which results in higher education being viewed with industry status (Rich, 2006). This shift is raising questions about the purpose, business practices, and rising costs of higher education. There are concerns among administrators that considering higher education as a business is counter to the mission of their institutions, which is to keep higher education accessible and affordable, in addition to being thought leaders and worldly influencers (Gumport, 2001; Price et al., 2016).
On the other side are those who believe that higher education’s inability or unwillingness to adapt or use business strategies for student growth will result in loss of viability or usefulness of higher education institutions in modern society (Gumport, 2001; Price et al., 2016), and regardless of academic concerns, many institutions find themselves having to make business decisions to stay in operation (Denneen & Dretler, 2012; Marcus, 2017). In search of the right competitive formula, higher education administrators have turned to the business sector looking for ways to increase revenues and enrollments, cut costs, and provide customer service models that produce an advantage (Marcus, 2017; Rich, 2006). These business practices adopted from corporate environments – although potentially beneficial for short-term solutions – are often met with resistance, and do not serve as a means to create long-term solutions and the knowledge necessary for new innovation that will sustain higher education into the future. Business as usual is no longer sustainable in higher education institutions; their survival is dependent on their ability to learn and adapt to the changing environment around them.

The significance of this matter is also based in the charge of higher education institutions with global sustainability efforts by the United Nations and other organizations that seek to transform our current society into a more sustainable, equitable, and just world (Cebrian, Grace, & Humphris, 2013). Higher education institutions are responsible for developing minds and creating new knowledge that will provide superior solutions to the world’s most critical challenges. Academics in the field of higher education sustainability such as Tilbury (2004), however, posit that in order for institutions of higher education to meet that mission, there must be a paradigm shift. Tilbury (2004) states that there must be “a change in epistemology, from reductionism towards holism, from objectivism toward subjectivity, and from relativism to rationalism,” (p. 51) that deeper learning is an essential requirement for all at the university and current practices need to be questioned. Scholars from the field are beginning to question how
institutions of higher education will lead the charges of world sustainability if they themselves are not sustainable entities capable of critical inward reflection, change, and growth. In this regard, Cebrian et al., (2013) acknowledge that universities are envisioned as a solution to global challenges, but can also be viewed as a part of the problem. Learning within educational institutions has appeared to be antithetical at times.

Introducing consistent organizational learning practices that are built into the fabric of the institution may be able to play a significant role in allowing institutions to find the solutions that are suitable to their environments, compliment their cultures, and uphold their values, providing a method to continuously create new knowledge and innovative solutions. Organizational learning practices apply to an organization’s ability to effectively engage in both exploration of the external environment and exploitation of current resources to form optimal solutions and maximized efficiency (Levinthal & March; 1981; March, 1991); these practices include systemic problem solving, experimentation, learning from the past, learning from others, and appropriately transferring knowledge throughout the organization (Garvin, 1993). Organizational learning practices may be able to act as a social bridge between the two different ideologies of business and academics, as collective learning ensues through interactive processes that bring people across an institution together to find solutions that work. There is little indication in the literature thus far that organizational learning has been widely used or embraced in higher education institutions, with education databases yielding few results referencing learning organizations or organizational learning in higher education (Bui & Baruch, 2011; Kezar, 2005).

The broader implications of this study are the examination of how organizational learning practices can be used as a means to create new knowledge and develop innovative practices within American higher education institutions that are responsible for turning out America’s future innovators in medicine, science, agriculture, technology, and engineering, among other
fields that fuel global economic competition and the development of the human race. According to the annual global innovation index from 2017, the United States has slipped to number four behind Switzerland, Sweden, and the Netherlands (Dutta, Lanvin, & Wunsch-Vincent, 2017); the United States no longer leads the world in global innovation. Institutions of higher education are responsible for educating the members of the government, scientists, engineers, doctors, U.S. business leaders, and the general American populace; therefore, they must be able to establish a business of competitive, high quality academic programs that are prepared to turnout graduates that are ready for the 21st century global workforce. Organizational learning in higher education is not just about obtaining students and better business functioning to keep the doors open, it can also become a systematic approach that yields innovation and provides the best education to students who will find the cure to cancer, save the world’s oceans, or identify new clean energy sources. Optimal performance and sustainability in American higher education institutions is a requirement to meet those goals.

**Research Problem and Research Questions**

The purpose of this research is to gain new insight into how members of a successful higher education institution are learning to adapt to the dynamic and ever-changing environment. This descriptive case study will examine this context at one successful institution of higher education that has created innovative solutions and experienced exponential financial and student growth in a time where many other colleges and universities are facing existential challenges. The primary question of the research is: “How do organizational members describe the learning system actions as their institution seeks to meet the emerging market changes?”

The following four subquestions assist in guiding the research through the theoretical framework, the Schwandt Organizational Learning Systems Model (OLSM; Schwandt, 1994,
1997), which consists of four subsystems within which learning occurs in nonlinear fashion with cybernetic relationships to its external environment.

1. How do organizational members describe their internal and external environmental interface? (Environmental Interface Subsystem)
2. How do organizational members describe organizational processes, structures, and activities that create new knowledge and innovation? (Action and Reflection Subsystem)
3. How do organizational members describe dissemination and diffusion processes and structures? (Dissemination and Diffusion Subsystem)
4. How do organizational members describe the culture of the institution? (Meaning and Memory Making Subsystem)

**Significance of the Research Questions**

The significance of the research questions lies within the methodology of this study, which seeks to understand a phenomenon from human perspective. Institutions of higher education are infinitely complex organizations that are impacted both by their internal and external environments. The complexity demands open-ended questions that allow for multiple human perspectives that might lead to themes in the findings. Organizational learning is not a linear process (Schwandt, 1997) thereby needing to fully understand all the moving and contributing parts to its existence. The four subquestions provide a framework that helps a participant to hone in on a specific element of the learning process. When all combined together, one can see a picture of organizational culture, context, and processes that contribute to an organization’s successes or failures through an established framework and system.

**Theoretical Framework**

The primary theoretical framework for this dissertation research was the Schwandt Organizational Learning System Model (Parsons, 1951; Schwandt, 1994 1997). This framework
is a sociological systems theory perspective, which examines the collective actions of a social system through four interrelated subsystems of actions. The evolution of that theory into the creation of the model is presented at length in Chapter 2, the literature review. The overarching theory utilized in this study is *open systems theory*. Open systems theory is an extension of general systems theory, which posits that the behavior of a single autonomous element changes when it interacts with another. Open systems exchange energy through matter, people, and information with their external environmental elements (Mele et al., 2010). Open systems theory as it has been applied to organizations by Katz and Kahn (1978) focuses on the relationships between the elements of the organization and the environment for which it is situated on many levels. Open systems are dependent on their external environments, using information received as input that allows the system to process and adapt to its external environment. This theory posits that organizations that are able to efficiently process information about their own specific environment are better able to adapt and shift in contextual conditions (Mele et al., 2010).

Institutions of higher education are open systems that are very dependent on their external environments (Schaffer, 1992).

The model utilized for this study is the Schwandt Organizational Learning Model (OLSM) which is grounded in systems theory and focuses on the social elements of the system in four subsystems that capture the structure and nature of organizations. The four subsystems are (1) Environmental Interface: the ways in which new information is introduced into the organization; (2) Action and Reflection: the activities and actions that create new knowledge; (3) Dissemination and Diffusion: the mechanism for which information is shared within the organization; and (4) Meaning and Memory Making: the formalization and storage of knowledge that creates the values and beliefs within the organization. This model focuses on the social action system’s ability to adapt to its environment through both its performance orientation and
its collective cognitive capacity that influences the way that the collective body learns. Schwandt (1997) posits that an organization’s ability to learn is dependent on its ability to systemically integrate the social aspects of the organization with the objects and processes in their environments; environment being both internal and external.

The OLSM was selected as the model for this study as a result of the focus on the social elements of collective learning, as it is often the culture and social dynamics of an organization that greatly influences its capabilities on many levels. Other organizational models and theories such as those by Crossan, Lane, and White (1999), Nonaka (1994), Senge (1990/2006), and March (1991) among others have been incorporated into the literature review to show alignment in models and theories, and as support for the validity of the OLSM and organizational learning theory at large. These models were not selected as primary models because of their outlying differentials with greater focus on other areas such as individual contributions (Crossan et al., 1999; Nonaka, 1994), greater focus on management theories (Nonaka, 1994; Senge 1990/2006), or keen focus on environmental exploration versus internal exploitation (March, 1991). All of these concepts are important to the system in organizational learning and are all addressed within the literature review to provide synthesis of the work in this field. Both open systems theory and the OLSM are addressed at length in the literature review of this study, as the four subsystems are used as a mechanism to organize themes in the literature across organizational learning scholars, providing additional support for the model and deeper understanding of the phenomena.

**Research Design**

The selected methodology of this research is a descriptive case study, which is suited to studies conducted where there is no clear intervention or single set of outcomes (Creswell, 2013; Merriam, 1991; Yin, 2009). The primary question of the research through qualitative lens, seeks to understand the lived experiences of those who have been a part of this learning experience in
one institution of higher education, which is functioning as the “bounded system” in a qualitative case study (Creswell, 2013). Case studies through qualitative methodology allow for data collection from multiple sources that provide case-based themes, exploring a problem and being able to develop an in-depth understanding of a phenomenon through human experience and perspective, documents, and contextual analysis (Creswell, 2013). Stake (2005) and Yin (2009) concur that the case study approach allows for a more holistic understanding and presentation of a phenomenon, capturing the perspective of those who have lived it. Case studies are best suited to research “how” and “why” questions (Stake, 2005; Yin, 2009) and have been used in the fields of psychology, sociology, political science, anthropology, business, and economics, among others; this methodology is derived of a need to understand a complex social phenomenon (Yin, 2009).

This study will utilize Yin’s (2009, 2018) approach to case study research, which takes a more structured approach through a postpositivist lens. Yin’s (2009, 2018) ontological and epistemological beliefs are such that the researcher should remain detached, neutral, and as independent as possible to what is being studied; greater levels of control, predictability, and rationality are sought through his work, providing greater mechanisms for bias control. Yin (2009, 2018) also supports the use of a theoretical framework to guide the research. This is counter to the works of other researchers and authors, such as Stake’s (2005) approach, which is highly subjective and encourages that the researcher be more actively engaged for longer periods of time with those who are being studied. The biased-laden nature of that work is known and embraced, as it encourages researchers to be a part of the study. This research will take the opposite approach. The methodology of this study is addressed at length in Chapter 3.
Conclusion

This chapter has provided an introduction to the research problem, the significance of the problem, the theoretical framework, and the study methodology. Chapter 2 will expand on the research of the changing nature of the U.S. higher education environment and organizational learning literature, in addition to an in-depth review of the theoretical framework and the Schwandt Organizational Learning Systems model (OLSM). Chapter 3 will review the descriptive case study methodology for this study and appropriate procedures. Chapter 4 will present research data, findings, and themes in the study. Chapter 5 provides an interpretation and analysis of the data with literature, in addition to implications of the findings and suggestions for future research.
Chapter 2: Literature Review

This literature review contains an overview of the dramatically changing landscape that American higher education institutions are facing, which for some presents a real existential threat. In an effort to address these challenges, institutions of higher education should be encouraged to adopt organizational learning practices that can provide the institution with a chance at survival and even a competitive advantage. This is a review of the literature in organizational learning and the empirical research that supports its many benefits to organizations from any industry. This review provides an overview of literature in organizational learning, the Schwandt Organizational Systems Learning Model (OLSM) – which serves as both the theoretical framework for this study and a means to organize the literature into key themes across the field of study – the benefits realized by organizational learning practices, and the existing challenges and threats to institutions of higher education in the United States.

Organizational Learning and the Learning Organization

The literature in organizational learning and the learning organization share various similarities and characteristics, which has led many authors to use the terms interchangeably for years, though some authors have put forth effort into distinguishing the difference that exists between the two (Ortenblad, 2001). The identified theme across the literature that seeks to distinguish the difference is that organizational learning focuses on the process of learning, whereas the learning organization is an ideal form of organization that is actively using these learning processes to their advantage in a state of continuous process improvement, development, and adaption (Ortenblad, 2001). An organization can be learning, without considering itself a learning organization. This literature review seeks to address the habits, culture, and performance of the learning organization as a result of organizational learning practices; shedding light on the overlapping characteristics of the two and addressing the
importance and identity of both. An organization cannot become a learning organization without the use of organizational learning processes and practices, and learning organizations harbor a culture of continued learning for sustainability and growth (Senge, 1990/2006).

A learning organization is an organization that continuously develops its capabilities, allowing for continuous quality improvement and long-term benefits (Garvin, 1993; Hussein et al., 2016; Senge, 1990/2006; Weldy & Gillis, 2010). In a learning organization, employees are continually experimenting with new ways of doing things; creating, acquiring, and transferring knowledge, which is helping their organization adapt to unpredictable environments faster than rivals can (Dodgson, 1993; Garvin, Edmondson, & Gino, 2008; Goh & Ryan, 2008; Lopez, Peon, & Ordas, 2005; Weldy & Gillis, 2010). Learning organizations place emphasis on the contributions of all people at all levels of the organization, seeking to gain their knowledge and learning for organizational benefit (Garvin, 1993; Slater & Narver, 1995; Weldy & Gillis, 2010). A learning organization culture is one in which members of the organization hold a shared assumption that learning is worth investing in and has become the priority of the organization (Dodgson, 1993; Weldy & Gillis, 2010). A learning culture has been proven to influence the growth and development of an organization, through collective knowledge acquisition, and effective interpretation, distribution, and maintenance of that knowledge (Garvin et al., 2008; Hussein et al., 2016). According to Senge’s (1990/2006) seminal work in his book *The Fifth Discipline*, a learning organization is one in which, “Its members continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (p. 3).

Organizational learning are the practices, processes, and acts of learning that allow for the growth of a learning organization. Organizational leaning is a continuous process that results
from the organization’s interactions with both its internal and external environments (Fiol & Lyles, 1985; March, 1991; Schaffer, 1992), and the acquisition and integration of new knowledge that can be translated into more effective organizational action that contributes to better organizational performance (Broekema, Van Kleef, & Steen, 2017; Dodgson, 1993; Fiol & Lyles, 1985; Lopez et al., 2005). Organizational learning is regarded as “the detection and correction of error” (Van Grivsen & Visser, 2011, p. 379), addressing the discrepancies between what the organization seeks to achieve and what they are actually achieving (Smith, 2012).

Though organizational learning and the study of social action systems began in the 1950s (Parsons, 1951), much of the study on organizational learning occurred during the 1990s with all the original models and foundational literature being built in that timeframe (Argyris & Schon, 1996; Crossan et al., 1999; Dodgson, 1993; Easterby-Smith, 1997; Fiol & Lyles, 1985; Garvin, 1993; Huber, 1991; March, 1991; Mirvis, 1996; Nonaka, 1994; Schwandt 1994, 1997; Senge, 1990/2006). These models and concepts in organizational learning have become widely used in the 21st century among organizations that strive for survival in a competitive environment, used as method to gain and maintain a continuous state of advantage, enhanced innovation, improved customer orientation, improved processes, and the implementation of new information systems and business process re-engineering (Armstrong & Foley, 2003; Bapuji & Crossan, 2004; Goh & Ryan, 2008; Lopez et al., 2005; Slater & Narver, 1995). Organizational learning practices help organizations in an unstable environment to overcome their chaotic and changing conditions (Aminbeidokhti et al., 2016; Hanaysha, 2016; Hussein et al., 2016; Lopez et al., 2005). Organizations that adopt learning practices – embedding it in the culture – are able to effectively and collectively use their skills and capabilities to produce and utilize knowledge, transforming the organization and its individuals as they acquire new knowledge and vision (Garvin, 1993). According to Garvin (1993), many institutions of higher education fail to qualify as learning
organizations. Although they are effective at creating and acquiring knowledge, they have been shown to be less effective at actually applying that knowledge to their own activities due to the cultural and structural misalignment that guides their practices.

Learning organizations are able to maintain a competitive advantage in their industries, not through goal attainment and strategic planning, but rather through an understanding of who they are as an organization, how they process information, how they store information, and how they make decisions based on collected environmental feedback. Organizational learning is an intentional and systemic effort by members of the organization and its leadership to continuously scan both their internal and external environments in search of knowledge that will advance their efforts to the next step and keep them there; it is improving their actions through better knowledge and understanding (Fiol & Lyles, 1985). Learning organizations create formal processes that generates this understanding of themselves and their environments; they are continuously collecting, creating, interpreting, and disseminating information to identify and solve problems, come up with new and innovative solutions, gain an awareness of their competition, and improve their employee’s skills (Garvin et al., 2008).

These organizations come to have a deeper understanding of how it is that they learn (Mirvis, 1996). Learning to evaluate what and how one learns was a process discovered in marine mammals who possess a second layer scanning ability. Bateson (1972) and a team of marine mammal specialists discovered that dolphins had a second layer scanning system that monitored how they processed the information that they turned into actions; like a third party watching their thoughts and actions making connections and looking for gaps or errors in the translation process. That second layer scan is telling them if they are processing information correctly. In organizational terms, this might look something like a consultant to organizations who are unable to unbiasedly view their own cultures and actions and evaluate how they have
come to believe what it is that they believe, which are the thoughts that are guiding all of their decisions. Organizations that are able to accomplish the second layer scan are capable of double-loop learning (Argyris & Schon, 1996; Dodgson, 1993; Mirvis, 1996; Van Grinsven & Visser, 2011), which is addressed at length further in this review.

Indeed, as Takacs (2002) points out, one of life’s greatest challenges is for humans to be able to see outside of the bounds of their own perspectives and to understand that the facts as they know them to be have been shaped by their experiences. Those experiences become mental maps in the cognitive process that Weick (1969/1979) refers to as convenient fictions that are created by members of the organization and that are reifying something already known. Weick (1969/1979) explains this process as enactment. Enactment is the process by which people’s actions are unconscientiously contributing to the environment for which they are in and will in turn make people believe that this is just the way things are, creating their own realities. For Weick (1969/1979) the process is more important than the outcome; focusing on how people learn and process their experiences is key.

Leaders can help their organizations form cultures to accomplish a culture of questioning what they know and how they learn. As an example, this was the mindset and strategy used by Harvey Golub, the former CEO of American Express, who was known for his abilities to teach employees to think creatively and out-of-the-box. In order to avoid traps of conventional wisdom, he taught people to not accept something without first scrutinizing it and asking the right questions. In an interview, he has been quoted as stating,

I am far less interested in people having the right answer, than in their thinking about the issues the right way. What criteria do they use? Why do they think the way they do? What alternatives have they considered? What premises do they have? What rocks are they standing on? (Garvin et al., 2008, p. 5)
Golub was creating a culture of learning, where the learning itself mattered more than the answer, because the learning will provide you with the right answer, time and again.

**The Nonlinear Nature of Social Human Systems and Organizational Learning**

The focus of this study is organizational learning, however, there are many related and intertwining concepts that directly tie to effective organizational learning and the acquisition of new knowledge, such as culture and leadership. Those elements must be addressed to have a full understanding of the holistic nature of organizational learning and the atmosphere that is needed for learning to systemically occur within an organization. At any point in time, parts of any organization are capable of learning, in order to reach a status of collective organizational learning and support of the learning organization, the organization at large must be learning together, which requires the acknowledgement of a culture of learning.

Becoming a learning organization requires a culture that supports it. Organizational culture deeply impacts an organization’s ability to learn, and as result, impacts every decision it makes (Kofman & Senge, 1993). Unfortunately, Tierney (1988) points out that leaders and administrators within higher education institutions tend only to have an intuitive grasp on the pulse and cultural conditions within their organizations; many have only a passive awareness of the culture, norms, or codes until something has gone wrong and adverse reactions and relationships have become grossly evident. These leaders then find themselves dealing with culture in an atmosphere of crisis when it is too late to stop the fire. Decisions are then made in an atmosphere of threat and crisis, not calm, consensual adjustment. There is some evidence to suggest, however, that crisis can spur necessary changes needed for high-level learning, such as new leadership, new strategies, or a dramatically altered market (Fiol & Lyles, 1985).

Nevertheless, when organizations develop dysfunctional elements of culture, leaders must be able to surmount their own culture and speed up a process of managed culture change. Culture
creation and change are the essence of leadership – so intricately intertwined – that they should be regarded as two sides of the same coin (Schein & Schein, 2016).

Organizational culture is a critical element of organizational learning and organizations not committed to a learning culture will not achieve its outcomes (Kofman & Senge, 1993). The cognitive maps that govern the thoughts, memories, and learning abilities of an organization are its culture and the means by which everything is done. Though there is growing consensus in the field that learning occurs at individual, group, and organizational level (Bapuji & Crossan, 2004), organizational learning is considered an inherently social dynamic that occurs in interrelated patterns of human interaction (Dodgson, 1993; Schwandt, 1994). When organizations tend to the social dynamics and culture that live within an organization, knowledge creation is possible, using systems thinking methods to enhance organizational learning for strategic planning and development. According to Schwandt (1997) more commonly, organizational strategy development has been predicated on improvement of performance based on the changes of the environment, however, organizations must be able to examine both their ability to perform and collectively learn to achieve growth and sustainability.

Schein’s (2010) accounts and definitions of organizational culture are the social order and the rules of the game by which members of an organization live by, interact within, and share as the basis for social interaction, decision making, and structural foundations (both physically and psychologically). More specifically, culture is an abstract term that carries exceptional power in organizational development, success, and failure because it is capable of operating both inside and outside of our awareness (Schein, 2010). In his view, scholars must focus on less superficial definitions of culture and instead look deeper into more complex, social, and anthropological models that include observed behavioral regularities when people interact, group norms, espoused values, formal philosophy, rules of the game, climate, embedded skills, habits of
thinking, mental models, and/or linguistic paradigms, shared meanings, metaphors, rituals, and symbols.

The culture of the organization explains the social order that provides the “rules” that allow some level of predictability in social behavior, how members of the organization interact with each other, and find shared meanings and a sense of purpose (Schein, 2010). Although organizations do not have brains, organizational memory, mental maps, values, and norms become fixed elements (Asci, Tan, & Altintas, 2016; Fiol & Lyles, 1985). Culture ranges from something that you can see and feel, to something that is deeply embedded and remains in the subconscious of the organization, living in the basic assumptions that underlie daily decision making and organizational functioning. Culture provides stability, but also rigidity in the sense that members of the organization are programmed to how they are supposed to feel or act in a given society, which perpetuates a prescribed social order (Schein & Schein, 2016). That prescribed social order is one of the greatest threats to learning (Kofman & Senge, 1993).

In order for an organization to learn, people must be learning together, described by Schwandt (1997) as collective cognition, wherein learning is occurring through and as a result of human relationships and the processes that they create in combination with the beliefs that they hold (e.g., values and vision) within the organization. Benimson (2005) builds on Schwandt’s (1997) concept of collective cognition, outlining how institutional practices are developed as a result of shared cognitive frames of the institutional participants. A cognitive frame is the lens through which an organization’s members view or understand something collectively. Cognitive frames form conceptual maps that shed light on how problems are defined, what questions are asked for understanding, how information is collected, and what actions are taken. These frames become the collective sensemaking mechanism that are reflections of what people know, think, and believe; they become the rules of reasoning (Benimson, 2005). March (1991) refers to these
beliefs as the organizational code, Schein (2010) refers to this organizational code as its culture. Organizations, through its individuals and on an organizational scale, are able to store knowledge, which are found in their processes, norms, and rules; this knowledge is being accumulated over time, and it learns from its members. Simultaneously, individuals are being socialized and indoctrinated to the current organizational beliefs and systems (Levitt & March, 1988; March, 1991; Mirvis, 1996; Schein, 2010).

Mutual learning leads to congruency of organizational values and beliefs and individual beliefs developing the shared code (March, 1991). The rate of organizational learning is greatly impacted by this mutual learning relationship. With time, the organizational code is being affected by the knowledge and beliefs of its individuals, and although it is less likely that individual beliefs impact other individual’s beliefs, the change in the code will in fact impact the beliefs of other individuals (March, 1991; Schein, 2010). This code or organizational culture are functioning independent of any one individual actor, and are capable of surviving, even in times of considerable individual turnover (Levitt & March, 1988). Contrary to what would seem like conventional wisdom, slower socialization of individuals to an organization’s code allows for a greater chance of equilibrium than will faster socialization (Levinthal & March, 1993; March, 1991). This is particularly true of a code that learns faster than others. The greatest equilibrium has been found when the code learns more rapidly from individuals who are slow to conform to the code, providing greater chance of the formation of new organizational knowledge from sources that have not already conformed. One of the greatest threats to organizational survival is individuals adjusting to the code, before the code can learn from them. Slower socialization leads to improved organizational knowledge (Levinthal & March, 1993; March, 1991).

Organizational learning requires an organization to understand how and why it learns in order to determine if it is learning effectively, thereby making decisions that are capable of
sustaining and growing the organization. Members of the organization must be able to observe the code and understand how the code is being formed and how it is influencing decision making. One way of accomplishing this is through Argyris and Schon’s (1996) concept of double-loop learning. Single-loop learning tends to look at the surface issue and attributes these issues to external forces that are beyond the control of the learner; this type of learning seeks to refocus stability and remove error to the extent possible. Double-loop learning is instead meant to address the underlying causes of a problem in order to make changes to the attitudes, beliefs, or practices that caused the problem in the beginning (Argyris & Schon, 1996; Dodgson, 1993; Mirvis, 1996; Van Grinsven & Visser, 2011). This reflection process causes learners (or organizations) to think about how they are learning. To question how it is that they know what they know, how they came to have those beliefs, and how those beliefs might be impacting their behaviors and decisions.

Senge (1990/2006) also explains this same concept using the terms generative and adaptive learning. Adaptive learning is single-loop learning, where organizations are responding and trying to adapt to their environments within their known capabilities and structures. Generative learning requires a new lens; changing the ways in which they view themselves and the world around them. Senge and Fulmer (1993) add that the systems dynamics perspective parallels the distinction between single- and double-loop learning. The distinction is that one causes change to occur within the current structure, using those methods, whereas the other causes a change in the structure itself. Mirvis (1996) refers to this learning as “re-educative interventions” which allows an organization to open up to new inputs as they take part in learning and to improve learning ability, being able to judge for themselves if their current behaviors are effective or not. Without re-educative interventions, the phrase, “you don’t know what you don’t know” has never been more relevant. Learning organizations must be able to
learn, unlearn, and relearn (Fiol & Lyles, 1985). Unfortunately, there is a general contention that most organizations fail to ever learn on a higher level associated with double-loop or generative learning (Argyris & Schon, 1996; Dodgson, 1993; Senge, 1990/2006).

Mirvis (1996) has found that the gap between processing information and creating knowledge is often significant, stating that “the literature is replete with instances where errors in the analysis, storage, retrieval and reapplication of past experience has led to under- and overgeneralizations of its relevance and to self-fulfilling prophesies” (p. 16), an indication that only single-loop learning is occurring. Botkin, Elmandjra, and Malitza (1979) refer to this as maintenance learning – that most people experience at education institutions – which focuses on trying to find better ways of doing what they already know how to do, rather than asking if what they are doing is the right thing in the first place. Maintenance learning must be tended to for organizational efficiency, as maintenance learning tends to miss changes in the environment and emerging challenges.

It is important to note that changes in organizational behavior are not always evidence of cognitive learning, and to that end, adapting and learning are also two different functions. As outlined by Fiol and Lyles (1985) changes in behavior can occur with no cognitive development, while at the same time, knowledge may be gained without any accompanying changes in behavior. Organizational changes should not instantly be associated with cognitive development, as many incremental changes are reactionary forces that are adaptive in nature. Although learning organizations can and should be able to adapt, the essence of learning is proactive, not reactive.

As a collective process and in practice, Hussein et al., (2016) provide seven key dimensions that characterize learning organization culture: (1) Continuous learning: through creating learning opportunities for everyone in the organization; (2) Dialogue and inquiry:
creating a platform for dialogue, inquiry, and experimentation of the members; (3) Team learning: collaborating to use resources effectively; (4) Empowerment: the ability to produce a shared vision that members of the organization agree on and take part in creating, improving the implementation of the vision; (5) Embedded systems: creating methods that can be systemically utilized so that learning can be continuous and shared; (6) System connection: establishing a comprehensive system of operations to connect organizational actions to the environment; and last (7) Strategic leadership: leaders who are able to think strategically about guiding the organization in new directions. The benefits developed by an organization that embraces a learning culture and utilizes learning practices are vast. Three key benefits woven throughout the literature of organizational learning are competitive advantage and greater financial stability, enhanced innovation, and greater employee productivity and engagement.

**Competitive Advantage and Greater Financial Stability**

According to Senge (1990/2006), organizational learning may be the only source of sustainable competitive advantage. The literature has moved past the question of whether or not learning automatically leads to enhanced performance, to the question of why and how it leads to enhanced performance (Bapuji & Crossan, 2004). Organizational learning literature and dozens of studies on learning organizations are replete with data that has shown that learning organizations are significantly more superior in market and financial performance than even their closest competitors (Goh & Ryan, 2008; Lopez et al., 2005). Smith (2012) found that all industries will experience substantial environmental change (higher education is not exempt) that is influenced by a number of elements, such as technology, competitors, and customers, among other factors. These changes provide a constant pressure for any business to improve in order to maintain viability and survival because there is no customer benefit, service, or product, that cannot be replicated or enhanced by competitors. Organizational learning creates a steady
connection between the organization and their environment and establishes a highly proactive versus reactive behavior (Lopez et al., 2005), which is immensely critical in achieving and maintaining competitive advantage.

According to Levinthal and March (1993) there are two important characteristic features of learning in organizations that produce a competitive advantage. The first is that learning generally increases average performance; those who engage in organizational learning practices create more experienced and trained individuals or groups that generally do better than less experienced ones. Two, learning generally increases reliability; more experienced and trained individuals are more likely to experience fewer surprises because these organizations are utilizing and accumulating experience across various levels of individuals and engage in learning practices. The routinization of this process is powerful in creating collective experience that is converted into improved average performance, with greater reliability and less unknown variability. In their research, Lopez et al., (2005) have found that organizational learning processes help people to pose questions that work against a one-dimensional framework – challenging the system and questioning paradoxes as they occur – allowing companies to gain competitive advantage. Competitive advantage and enhanced performance across the literature is found to be a natural result of organizational learning (Dodgson, 1993; Fiol & Lyles, 1985; Garvin, 1993; Goh & Ryan, 2008; Hanaysha, 2016; Levinthal & March, 1993; Lopez et al., 2005; March, 1991; Senge, 1990/2006).

Enhanced Innovation

Rapidly changing business environments demand a focus on innovation (Sinha, 2016) and a culture and leadership team that support it and encourage behaviors, which lead to its creation (Garud, Gehman, & Kumaraswamy, 2011). Organizational innovation has been described as the development and acceptance of new ideas and behaviors that are able to be
embraced by the whole organization or units within it. Learning strengthens innovative activities and quality results, which are necessary for any organization in a competitive environment (Aminbeidokhti et al., 2016; Liao & Wu, 2010; Smith, 2012). Studies conducted at 3M Corporation – one of the leading U.S. companies in innovation – found that the culture of the company was such that leadership understood that hierarchical and critical behavior suffocated innovation, and that talent at all levels of the organization would need to be utilized in order for the company to produce its best work. One of the most important findings of the 3M studies pertaining to continued innovation was a culture that provided psychological safety to its employees, which is a requirement for experimentation without punishment. That culture led to the company’s best products and developments. Although the company had experienced many failures, they also had many successful experiments that are among the world’s leading products (Garud et al., 2011).

Organizational learning requires a safe and open environment, free of fear or retribution that allows for people to be able to admit error that provides valuable lessons to be learned from (Broekema et al., 2017; Garvin et al., 2008; Kofman & Senge, 1993; Weick & Sutcliffe, 2001). Providing time for and encouragement in experimentation has led to 3M’s long-term growth. For a product development company, innovation is critical, even to the extent that it may have a negative impact on current day-to-day operations. Still, the leadership knew that all the false-starts and dead-ends, and the complex nonlinear innovation journey was necessary for long-term sustainability and market advantage (Garud et al., 2011). Sinha’s (2016) work on balancing organizational innovation and efficiency elaborates further on the need for the top management team (TMT) to have a passion for innovation and to allow for freedom of expression and the opportunity for their employees to experiment and learn new things. In addition, empowering
their employees to make decisions and providing psychological safety builds a trust and a feeling of ownership that encourages innovation (Garvin et al., 2008; Sinha, 2016).

Smith (2012) differentiates between the types of innovation that are a result of first order learning (single-loop) and second order learning (double-loop). Single-loop learning is associated with the expression “learning to innovate,” (p. 6) which focuses on the improvement of products or services and is associated with most organizations operating in both simple and complex contexts. “Innovating to learn,” (p. 6) however, is the opposite and is associated with double-loop learning, wherein the organization is looking outside of the regular business model for opportunities to exploit and grow, seeking to achieve something beyond its current capabilities. The latter is a function of organizational learning and the goal of a learning organization.

Innovation is an inherent result of organizational learning where emphasis is placed on the value of contributions across all levels of the organization and where experimentation outside of their norms (and risk) is valued and considered foundational for success. Of some of the identified learning organizations of the world, many still lead the world in their industries due to high levels of innovation, such as Xerox, AT&T, Honda, British-Petroleum, 3M, GE, and Walmart, among others (Goh & Ryan, 2008). Newer companies such as Apple, IBM, and Google have also all been identified as learning organizations (Bersin, 2012), though academic studies of these companies as learning organizations have yet to emerge.

**Greater Employee Productivity and Engagement**

Organizational learning has been discovered to be a moderator of employee productivity. Hanayshia (2016) found that organizational learning had significantly positive effects on employee productivity in public higher education institutions, as learning is a dynamic process that progresses through individual learning into collective learning. Increased levels of employee
productivity have been tied to increased profit, organizational performance, and greater economic outcomes (Hanaysha, 2016). In a service industry like higher education, human resources are truly the most valuable asset, and customer service depends on their enrichment and morale; organizational learning provides opportunities to engage employees at all levels, producing higher motivation levels that translate to higher productivity levels (Asadi, Ghorbani, & Naderan, 2009; Hanaysha, 2016).

According to Fiol and Lyles (1985) the more formalized and complex the organizational structure, the more the learning process is stifled; learning is enhanced by structures that allow for diffused decision influence and greater employee contribution. Sashkin and Rosenbach (2013) designed an organizational assessment questionnaire based on the work of Harvard sociologist Dr. Talcott Parsons who developed the theory of action, which is also used as the basis for the Schwandt organizational learning systems model. Parson’s (1951) work contains four critical elements that he believed were required for any organization to survive for any substantial length of time: adaption, goal-attainment, integration, and pattern-maintenance. Sashkin and Rosenbach (2013) have re-labeled these four functions as managing change, coordinating team work, achieving goals, and building a strong organizational culture; they added a fifth critical element that has become of increasing importance to higher education institutions: customer orientation. Each of these elements are either supported or hampered by the shared beliefs and values of all members of the organization, which in turn has a profound impact on organizational success or failure. Sashkin and Rosenbach (2013) outline the critical nature of shared beliefs and belief in numbers within an organization. For example, if the majority of the organization’s members believe that they can have little or no impact on their organization, they will not invest time or energy in attempting to do so. If members of the organization do believe that they can have a meaningful impact on the organization they are
more likely to invest their time and efforts, which could lead to a large payoff for the organization. Without that belief, however, it is more likely that they will not even try, which can result in disastrous impact on the organization and its effectiveness (Sashkin & Rosenbach, 2013). An organization’s ability to manage change depends on the level to which people believe that they can impact that change; how well an organization manages change determines how well the organization is able to adapt or influence its environment. Organizations are open systems in that they are influenced by their environments, which has become increasingly more complicated to manage given the vast technological advancement and social changes, making employee engagement and belief all the more relevant (Sashkin & Rosenbach, 2013).

Goal achievement is then impacted by how well aligned the members of the organization are and with the overall goals of the organization and their ability to influence it (Sashkin & Rosenbach, 2013). Performance has been found to be greater when people feel the need to achieve and believe that they can, thus improving performance. The term that the Japanese use for this is “Kaizen,” which is the never-ending search for improvement. The extent to which people are aligned with clear, achievable goals, and find themselves as a means to achieve them, improves the degree to which continuous improvement can be achieved over the status quo (Sashkin & Rosenbach, 2013). In order to achieve alignment of the members within the organization, coordinated teamwork is necessary; ensuring that the coordination of everyone’s efforts are effectively aligned and working toward the same end. To that end, there is also recognizable danger in any organization using hierarchy methods that attempt to organize every action from the top down. As the world grows more complex, it becomes increasingly critical for an organization and its members to be able to effectively improvise and mutually adjust to unforeseen circumstances. The value of teamwork and collaboration is necessary to achieve that end (Sashkin & Rosenbach, 2013).
Organizational Learning – Theories and Themes Across the Literature

There are a variety of organizational learning models produced by a small number of scholars in the field with theories of how learning is organized and created. Though there is no one agreed upon definition or model (Mirvis, 1996), there are themes across the literature that overlap models. There have been calls to create a single framework for organizational learning, which Easterby-Smith (1997) argues against given the various contexts from which organizational learning is studied. The literature in organizational learning spans six different disciplines including psychology and organizational development, management science, sociology and organizational theory, strategy, production management, and cultural anthropology (Easterby-Smith, 1997), thereby using a variety of contexts and ontologies for different purposes. This study is using Schwandt’s (1994, 1997) Organizational Learning Systems Model (OLSM) as a theoretical framework, in addition to a means to organize the literature and the different voices that contribute to these key themes, while further explaining the Schwandt’s (1994, 1997) OLSM.

There are five themes that have been identified across the literature in this study, one for which all organizational learning models are grounded in. The first and potentially most important is the acknowledgement of the system through open systems theory (Katz & Kahn, 1978). The remaining four are organized through the OLSM subsystems: (1) Environmental Interface: the ways in which new information is introduced into the organization; (2) Action and Reflection: the activities and actions that create new knowledge; (3) Dissemination and Diffusion: the mechanism for which information is shared within the organization; and (4) Meaning and Memory Making: the formalization and storage of knowledge that creates the values and beliefs within the organization. This section will first outline open systems theory as the foundation for systems thinking, moving into Parson’s (1951) sociological theory of action...
and social systems as the basis for the model, the key elements, and subsystems of the Schwandt (1994, 1997) OLSM for which this study is utilizing as a theoretical framework, and the use of those subsystems to organize themes in the literature across organizational learning as additional support for the model and further understanding of the phenomena.

**Open Systems Theory**

Open systems theory is an extension of general system theory, which posits that the behavior of a single autonomous element changes when it interacts with another. Open systems exchange energy through matter, people, and information with their external environment elements (Mele et al., 2010). Open systems theory as it has been applied to organizations by Katz and Kahn (1978) focuses on the relationships between the elements of the organization and the environment for which it is situated on many levels. Open systems are dependent on their external environments, using information received as input that allows the system to process and adapt to its external environment. This theory posits that organizations that are able to efficiently process information about their own specific environment are better able to adapt and shift in contextual conditions (Mele et al., 2010). Institutions of higher education are open systems that are very dependent on their external environments (Schaffer, 1992). Figure 1 is a graphic depiction of open systems theory.

Although organizations cannot be understood apart from their environment, they also influence the environment itself; this is especially relevant for higher education institutions that shape the educational landscape of the world. This adds an element from another systems model: viable systems model, which outlines an entity as a system that is able to adapt to its environment – while at the same time are able to cause changes in their environment – that are then processed by the system itself and creates new input for adaptation to changing conditions (Mele et al. 2010); the system learns to change its behavior. Cybernetics represent an interdisciplinary study of the structuration that occurs in systems and their environments, which acknowledges that the system and the environment present different levels of complexity, for which either are not always perceptible to. Schwandt (1994, 1997) updated his OLSM shown in
Figure 3 with cybernetic energy sources to indicate reciprocal influence on the environment by the organization and on the organization by the environment.

As Mirvis (1996) and Senge (1990/2006) suggest, the whole of a system is not reducible to the parts; this is especially applicable to open systems whose parts are not capable of functioning without the others. Systems theory offered the image of organizations as organisms (Mirvis, 1996). Scientific and technical inquiry often teaches humans to study the individual parts of a system, applying that knowledge to the whole, and then studying it together; this is not applicable in open systems theory. Mirvis (1996) identifies this as a narrow reductionist approach that is too often used as the primary method of analysis within organizations. This method can provide technical knowledge, but is not adequately studying the whole system, which in itself is a life of its own that is not reducible to its individual parts. This is perhaps the difference between ecology and the ecosystem. Kofman and Senge (1993) elaborate on the dangers of fragmentation within organizations and note that linear thinking will never solve our most complex problems. Kofman and Senge (1993) state:

Today, fragmentation is the cornerstone of what it means to be a professional, so much so that we call ourselves “specialists.” Accountants worry about the books, operations managers worry about production and inventory, and marketing managers worry about customer base, and nobody worries about the business as a whole. (p. 8)

They continue in stating that so many of the world’s problems stem from not being able to see something holistically. The word health is grounded in the same roots as the word whole, and like people, organizations can get sick and die because their members are addressing only symptoms at any given time and not the underlying causes of the problem (Kofman & Senge, 1993). This behavior is easily built into the daily functioning of an organization because they are based in routines with high hopes for efficiency (Levitt & March, 1988); routines that are
transmitted through socialization, training, education, new comers, personnel turnover, mergers, and acquisitions. It is these systems that can create good health in an organization with learning routines, or it can cause sickness with dangerous programmed behaviors. Viewing organizations as systems allows for understanding that it is the analogous, programmed behavior that can create both routines of “fit” and routines that “do not fit” within the demands of the environment (Mirvis, 1996). The nature of the programming plays a critical role in the interpretation and processing of information and what actions to take. To date, all known organizational learning models and theories are based in systems theories. Senge and Fulmer (1993) posit that systems thinking creates a discipline of being able to see the “big picture” (p. 24), which moves an organization beyond simplistic and short-term assumptions into understanding more deeply both cause and effect.

**Parsons’s Sociological Theory of Action and Social Systems**

According to Parsons (1937), organizations are social systems of action that adapt to their environment as a result of changes that are both thrust upon them and self-inflicted, which emanate from both performance and learning actions. His theory of action is the acknowledgement of the dynamic social influences on organizational change, mixed with the turbulent nature of the environment in which it is situated. At the core of Parsons’s theory is the idea that all elements of an action are invariably organized as systems (Hayes, 1980). His integrative work discusses the nature of the systems behavioral, sociological, psychological, and cultural capacities as important functions of its adaptive capacity. Parsons (1964) clarifies his use of the term adaption as, “an active concern with mastery, or the ability to change the environment to meet the needs of the system, as well as an ability to survive in the face of its unalterable features” (p. 341).
Parsons’s work began with research that he was conducting on small groups with Robert Bales in the early 1950s using his four-function paradigm that has also been referred to as AGIL. According to Parsons (1970), their work concluded with findings that systems of action generally could be exhaustively analyzed in terms of process and structures referable to the solution – simultaneously or in sequence – of the four functional problems that we called ‘adaption,’ ‘system (not unit) goal attainment,’ ‘integration,’ and ’pattern-maintenance and latent tension-management.” (p. 844)

Since that time, his four-function paradigm has become the basic tool for analysis of all action systems, which has been used by Parsons and others to analyze major institutions and other subsystems within society (Hayes, 1980). The premise of Parsons’s theory of action is the establishment of a systematic relationship between organizational member’s actions and their collective ability to adapt to their internal and external environments (Schwandt, 1997). Parsons identifies the primary actions of the collective and breaks them into four subsystems: adaption, goal-attainment, integration, and pattern-maintenance:

Adaption – The actions that serve to establish the relationship between the organization and the external environment. In this subsystem, mechanisms are established to both import the resources needed internally and export information for environmental influence.

Goal-attainment – The actions that define the goals of the system and allow goals to be met with supportive operations.

Integration – Establishes control in the actions, to inhibit deviant behaviors, ensures adequate coordination between the moving parts/units, and reduce or avoid disturbances.

Pattern-maintenance – The creation and support of a positive, motivational climate. This is the culture of the organization and the collectives shared values (Schwandt, 1997).
Parsons (1937) theory of action describes the relationship between the actions of the subsystems as one of mutual exchange between them, without specific points of origin or end (shown in Figure 2). It is a continual, nonlinear process in which both symbolic and tangible objects circulate as both inputs and outputs. As Schwandt (1997) points out, the subsystems and their functions can be applied to individuals, organizations, or societies, in addition to other types of biological or social systems. The model helps to establish patterns of action that provides a better understanding of the dynamics and social nature of collective learning (Schwandt, 1997). Schwandt chose this model to build from, as it provided “a cross disciplinary (sociology, psychology, biology, and anthropology) approach” (Schwandt, 1997, pp. 342-343).

Figure 2. Parsons Theory of Action. Adapted from *Working Papers* by T. Parsons, 1951., Glencoe, IL.: The Free Press.
The Schwandt Organizational Learning Systems Model (OLSM)

![Diagram of the Schwandt OLSM]

*Figure 3. The Organizational Learning System Model, adapted from Schwandt (1994)*

The Schwandt OLSM that was born of Parsonian theory was created with the intention of providing a counterbalance to traditional performance focused organizational theories. Instead, his model focuses on the social action system’s ability to adapt to its environment through both its performance orientation and its collective cognitive capacity that influences the way that the collective body learns. He posits that an organization’s ability to learn is dependent on its ability to systemically integrate the social aspects of the organization with the objects and processes in their environments, environment being both internal and external (Schwandt, 1997).

Schwandt (1997) has found that organizational learning is often reduced to strategic planning, which has remained the dominant process in attempting to manage change (the method of survival in higher education) and has proven to be a process that is no longer able to keep up with the complexities of the environment for a few reasons. He states that strategic planning originates from the mentality of finding a precise or accurate theory for strategic action, as opposed to a more plausible theory, which drives an organizational preoccupation with seeking or measuring change through performance only (market share, productivity, etc.), and
undermines change through performance learning (critical inquiry, discovery, knowledge generation, etc.; p. 338). Another problem associated with strategic planning is the implementation of linear processes with nondynamic variables. Schwandt (1997) calls for the development of new paradigms that would require strategy development to become a process of collective learning, establishing a nonlinear social systems framework that encompasses the dynamic relationships of collective learning, organizational environment, and strategy development. Organizations must be viewed as dynamic social systems that are consistently evolving (Schwandt, 1997). Gone are the days of punctuated equilibrium that so many college and university administrators have relied on for decades.

According to Schwandt and Marquardt (1999), the OLSM was designed based on three assumptions in organizational learning literature and systems theories:

1. Organizations are human entities with irremovable social elements and they are always learning. The learning can be successful, which reflects in the long-term survival of the organization, or it can be unsuccessful, which ultimately leads to the demise of the organization.

2. Organizational learning is a system of human actions. It occurs through patterns, process, and objects, created by humans in systemic fashion.

3. The human system is complex. A theory was selected for a framework that encompassed the psychological, social, and cultural aspects of organizational dynamics. The theory selected was Parsons’s sociological theory of action and social systems.

According to Schwandt and Marquardt (1999) organizational learning is a dynamic and complex process that encompasses the relationships between people, processes, their actions, and the environment. Organizations think and reflect as social entities together. The organizational learning systems model is accounting for this reflection and how that knowledge is created,
gained, circulated and stored throughout the organization for its most effective use; each of the four subsystems support this process. The capture of knowledge through the open interface with the environment – with the effective integration of reflection and organizational action – allows an organization to adapt and learn from its environment (Schwandt & Marquardt, 1999).

There is a focus on the social nature of learning in the OLSM. Unlike independent learning, which has led to linear models describing the process by which individuals learn, the subsystems model has built upon that linear process, acknowledging that learning does not occur in a cyclical linear fashion. Schwandt and Marquardt (1999) provide an example of a linear model, wherein information is either created or obtained, filtered through lens of the organization (meaning its current values, assumptions, etc.), and then transferred throughout the organization to the parties that it is believed to need this information through some communication mechanism. Although the linear model would appear to have some elements of the OLSM, Schwandt and Marquardt (1999) found that learning in an organization does not ever happen in a sequence or a predictable path; in organizations, learning is happening everywhere. Most critically, the linear model fails to acknowledge the social dynamics that are involved in the learning process, which either support or inhibit the learning process at any given stage. The learning system is vulnerable to human behavior such as leadership, trust, human personalities, culture building, structure, and other social forces that are at work within the organization at all times. Because of the complex nature of the human element within the organization, we are assured that organizational learning cannot happen in linear fashion and that human relationships and dynamics matter. There is a sociological paradigm that governs the phenomena of organizational learning.
Organizing Literature Through the OLSM Subsystems

In this section, each of the OLSM subsystems will be examined for further clarity of each major part of the model and its function, in addition to being used as a mechanism to organize concurrent literature across the field of organizational learning.

Environmental Interface

The environmental interface subsystem functions as the informational portal for an organizational learning system (Schwandt, 1997). All forms of life are subject to entropy as a result of challenges with adaption and maintenance of equilibrium with their environment, which is a central concern of organization theorists (Mirvis, 1996). Organizational learning has been found to be both exogenous and endogenous, emanating from both external and internal sources (Bapuji & Crossan, 2004). Organizations and the individuals within them act on input received from their external environments; those actions become the basis for organizational learning and organizational action (Schaffer, 1992). The way that an organization interacts with both its internal and external environment has significant bearing on the ability to effectively create and process new knowledge. The central premise of the seminal work of March (1991) is the concept of exploration of new ideas, possibilities, and innovations, and the exploitation of current knowledge, processes, and known certainties. Exploration entails such concepts as experimentation, risk-taking, flexibility, play, and innovation. Exploitation entails concepts such as efficiency, implementation, production, refinement, and execution (March, 1991). March outlines the need for an organization to continuously strive for balance between the two in order to maintain an equilibrium that is suitable for continued learning, development, and organizational survival.

As adaptive systems, organizations are heavily influenced by their environments, both internal and external. Those who engage in exploration behaviors to the determinant of efficient
exploitation behaviors are likely to experience an imbalance that can lead to the costs of experimentation with little benefits to be realized from it (March, 1991; Sinha, 2016). According to March (1991) these organizations exhibit underdeveloped ideas and little distinctive competence. Conversely, the reverse is also dangerous to an organization that can easily become stuck in suboptimal equilibria as a result of excessive exploitation, but not enough exploration to create balance in sources of knowledge (Sinha, 2016).

Levinthal and March (1993) refer to this as a success trap, whereas Bapuji and Crossan (2004) refer to it as a maturity trap; excessive exploitation has an unintended tendency to drive out exploratory behaviors. The returns of exploitation tend to be more certain and immediate than the returns of exploration. Exploratory experiments are less known and therefore more likely to lead to poorer results in the short-term, though more improved results in the long-term. Exploration leads to improved organizational functioning long-term, but exploitation leads to faster personal gain and therefore easily becomes the preference for time and attention. Furthermore, past exploitation in one domain, makes further exploitation in the same domain more likely and more efficient. This leads organizations to experiencing feelings of short-term gain in exploitation and the sometimes-unfortunate follies of exploration (Levinthal & March, 1981, 1993). As they continue the process and gain competencies in these domains, the opportunity costs of exploration appear to grow, thus leading to the success or competency trap, which can become a self-destructive product of learning (Levinthal & March, 1993). The balance of both is needed as they have been found to serve two different purposes. Exploitation has a tendency to work through problem solving within the internal workings and current processes of the organization. Experimentation, however, has been found to be driven by expanding horizons, change, and new innovation; new knowledge from outside of the organization must be garnered in order to produce new ideas and results (Garvin, 1993).
Trying to find equilibrium between exploration and exploitation is a challenge for many organizations, as not only is a balance between these two competing priorities needed, and there are often scarce resources available for both, which can lead to an organization making both explicit and implicit choices between the two (March, 1991). Levitt and March (1988) outline this challenge in simplistic human terms, in the sense that exploration of new ideas and alternatives are reducing the attention given and the speed with which existing skills are being developed. The same is true that focusing on greater competence in existing procedures will slow the process of experimentation with new ideas and methods; this challenge occurs at the individual, organizational, and social system levels. The success trap concept can also be found in Weick’s (1993) work, wherein he suggests that ambivalence, chaos, and diversity are more effective strategies for organizational survival than assumed purpose, order, and uniformity and that having preconceived notions of what is going to happen or what is supposed to happen could have life-threatening impact on organizations, placing intense limitations on reality and being able to fully understand what is really happening.

The organizational orientation of these two spheres are connected to environmental turbulence and competitive advantage, suggesting that the evolutionary dominance of one over the other is often impacted by the rate of change in the environment and vice versa (March, 1991). Still, the returns in exploitation efforts are far more known to an organization than those that could potentially be yielded by exploration efforts. Certainty and clarity in exploitation efforts are provided with greater speed, which in turn allows for greater speed in adjustment and necessary changes than exploration efforts that are less known, both in processes and results. There is possibility for organizations then to rely too heavily on known exploitation efforts. Because of the adaptive nature of organizations, this exploitation reliance can breed competence in inferior activity that is well known to an organization to the exclusion of a superior activity
that is less known to the organization, and appears to present less unknown risk (Herriott, Levinthal, & March, 1985). Organizations must incorporate and engage in both to be able to effectively respond and learn from both their internal and external environments.

**Action and Reflection**

The action and reflection subsystem represents the activities and actions that create new knowledge. Actions are taken, goals are achieved, and reflection on action fuels learning to improve processes. The action and reflection subsystem is where many of the changes to the code are tested and enacted (Schwandt, 1997). One of the most critical elements of organizational learning across the literature is reflection. Garvin (1993) quotes the famous philosopher, George Santayana, who coined the phrase, “Those who cannot remember the past are condemned to repeat it;” unfortunately many organizations fail to systemically reflect on the past or failed projects to gain insight into lessons learned and valuable knowledge escapes regularly (Garvin, 1993). This does not mean that history is not being written and embedded into the institution’s code, but what is being imbedded is an extremely relevant question, as Levitt and March (1988) point out that an organization’s actions are dependent on its history as it knows it to be.

Organizational routines are often based on its actions and results of the past, more so than its future because of the reflexive adaptive nature (Levitt & March, 1988). Organizations over time spend a considerable amount of energy developing a collective version of history. These interpretations appear in story lines that are broadly shared throughout its members. As a result, one of the more powerful phenomena in organizational change involves redefining history (Levitt & March, 1988), which can allow an organization to learn from both its successes and failures. As Weick (1979) points out, members of an organization “enact” information that is based on and a reflection of their past experiences. Therefore, future actions and what they can
foresee happening is limited by what people have made of previous actions; in this collective action, organizational memory is being formed. This presents a paradoxical challenge for organizations that must reflect on their past, but present and act on innovative strategies for the future, that are unfortunately built of the residue of the past (Levitt & March, 1988). According to Mirvis (1996) organizations must be able to overcome this challenge not by asking people to unlearn past practices, but to learn to organize in new ways, with the requisite variety of people necessary to handle complex problems and complex environments with a diversified gene pool of people and perspectives.

The complication with learning from the past is that history tends to be both individually and relatively collectively interpreted. For example, leaders of organizations tend to attribute their own actions to the successes of the organization, while at the same time attributing failures to the actions of others or external forces, though opposition groups often have the reverse view of the causality of both scenarios. Similarly, advocates of a particular failed program or policy may view its failure as not having enough dedicated resources, whereas other members may view it as incorrect failed policy (Levitt & March, 1988). This indicates that there are disagreements over the history of the organization and therefore different interpretations to be learned from. Although the variation can have positive effects on organizational learning from reflection, it can also be the source of troublesome results. Different personnel and groups within an organization have different objectives and targets, and therefore evaluate the outcomes differently. It is not uncommon for individual decision makers or groups to interpret their objectives differently – in such a way that makes themselves look successful – even when the results significantly miss the mark (Levitt & March, 1988). As long as organizational success continues to be defined by success or failure metrics, these behaviors will persist and may
continue to have detrimental impact on the organization. This behavior is an indication that outcome is more relevant than the learning, and as such, will be of greater priority.

In addition to historical interpretations, Mirvis (1996) notes the difficulty that organizations face in using linear thinking cause and effect maps that are used as both a reflection tool and that often underlay planned change, versus the reality of a very interconnected terrain with greater complexities that people actually encounter in action. This is the inability to recognize the elements of the open system and all that is impacting what is happening in any given action and its results. The rationale behind the action and the interpretation of results and its consequences are often incomplete or misleading, which makes it hard for members of an organization to know what happened and why. Why did it work and why did it not work are the critical questions that need to be addressed and recorded for future learning (Mirvis, 1996).

Mirvis (1996) also notes that one of the elements of open systems that impact results interpretation is the human element, which often ranges from denial, blaming, discounting, and flank protection because of a fear of getting it wrong. It is vicious cycle that emanates from mental models and social systems that presume that when actions are based on knowledge, science, and skill, they will surely turn out right. Kofman and Senge (1993) add that this is both a cultural and structural problem not just within organizations, but in society at large. They posit that the human tendency toward competition leads to people looking to prove that they are right in order to look good. Looking good then becomes more important than being good, and the fear of not looking good is one of the greatest enemies of learning. Organizations have perpetuated this problem by expecting managers or leaders to always have the answer in order to look good, which does not allow for people to comfortably admit that they do not know the answer because it is a sign of weakness. Structural fragmentation within organizations often promotes this competition between departments who should be working together to share information, but
instead are incapable of admitting when something has gone wrong for fear that the other department will blame them. These psychological, cultural, and structural issues that surround fear deeply impact both individual learning and organizational learning.

Organizational learning practices have been proven to help organizations overcome a culture of fear, transforming it instead into a culture of learning without blame, which allows for greater reflection of actions and results. An example provided by Garvin (1993) is Xerox’s six step process that is used by virtually every employee, at every level, for all decisions, all of the time. Employees are trained in specific techniques for researching ideas, collecting information, reaching consensus, analyzing and displaying data, and planning actions. Problems or challenges facing all groups within the organization are worked through in a systemic way that has become a company-wide approach to problem solving and advancement. This allows them to adequately come to and capture ideas that are relevant for future reflection and growth. The design of the organization’s systems are meant to create enriched inquiry for constructive debate, which according to Mirvis (1996) is meant to seek out disturbances proactively and amplify them without personal attachment, which is key to being able to take adequate action and reflect accordingly.

**Dissemination and Diffusion**

The dissemination and diffusion subsystem represents the knowledge transfer requirements that are necessary to connect all elements of learning (Schwandt, 1997). Learning requires adequate generation, collection, interpretation, and dissemination of information (Garvin et al., 2008). Formal and informal mechanisms that propel information and knowledge through the organization range from office chatter to formal training programs. According to Garvin et al. (2008), knowledge must be shared in systemic and defined ways that moves both virtically and laterally throughout the organization, which can happen among individuals, groups, and
throughout the whole organization. The knowledge sharing process is often both internally focused for corrective action or best practices, and externally focused wherein employees are pulling in external information from their environments, such as customer surveys, competitor information, or market information (Huber, 1991). This information that is both internal and external in nature is shared on a built-in, systematic basis that allows for the right people to receive it who need it.

When new knowledge has been acquired, adequate distribution of this knowledge is critical to helping multiple members of the organization know what is it that the organization knows (Broekema et al., 2017; Kofman & Senge, 1993). Breakdowns in communication create learning silos that have the potential to critically harm decision-making processes, and too often organizations are duplicating processes and expending efforts in multiple places. Kofman and Senge (1993) explain how silos become an organizational norm through competition within themselves that break down the appropriate transfer of information, and through the fragmentation of individual departments within an organization. They state that in business, fragmentation often results in walls being built between departments that have become warring fiefdoms that intentionally withhold information from each other. As an example, product designers ignore marketing surveys, manufacturers find a design impossible to produce and make their own “appropriate” changes (p.8), sales people find themselves stuck trying to sell a substandard product that the market does not want, and the departments begin to point fingers at each other.

Fragmentation and competition breed silos among the very people who should all be working toward the same end and desperately need to share information (Garvin et al., 2008). Creating systemic learning processes that are intentionally meant to break down these learning silos are necessary for organizational survival in complex environments where competition is
high. It is critically important for members of the organization to recognize their interdependence; the organization’s success depends on their will to cooperate and share information, and organizations must remove any structural or systematic constraints on knowledge flow (Slater & Narver, 1995). Intentional systems of knowledge sharing are needed to overcome silo behavior. Cultures of intentional learning such as those embraced by Japanese firms, set up structures that are mindful of communication flow to encourage employee’s integrated learning (Dodgson, 1993).

Another example of a system of sharing information is the U.S. Army’s After Action Review, which has been adopted by many companies. This process is a system debriefing on any mission or critical activity wherein four questions are used to help work through what was accomplished and what was not. “What did we set out to do? What actually happened? Why did it happen? What do we do next time?” (Garvin et al., 2008, p. 4). This process allows the unit to reflect on what went right and what went wrong and why, what they should sustain, and what needs to cease. The after action review process is created with all who were involved, which lends a variety of views as to what happened, and contributes to sensemaking within the group. The group format allows for the information to be created, shared, and reflected on together; the learning is collective. This is how organizational memories are formed and the code is made. This code is creating a culture of learning.

**Meaning and Memory Making**

The meaning and memory making subsystem is where knowledge is formalized and stored, which then shapes the values and beliefs within an organization and forms its code (Schwandt, 1997). This subsystem has been described by Schwandt (1997) as the conceptual subsystem made up of collective memories with less physical operational function than the other subsystems, wherein processes are built and carried out. Collective sensemaking is the product of
this subsystem where pattern maintenance occurs (Schwandt & Marquardt, 1999); in a cyclical fashion that feeds the others systems. Herein lies the collective cognitive framework for learning that results from those other subsystems, and that all future decisions will be gleaned from; here the culture becomes the code (Levitt & March, 1988).

The code is written both mentally, within the individuals of the organization, but also in the organizational memory that is maintained despite significant employee turnover (Levitt & March, 1988). The rules of the game, the embedded procedures, the norms, beliefs, and culture are all preserved through systems of socialization, but also in the physical environment of the organization and its technology (Levitt & March, 1988). Documents, files, policies, rule books, operating procedures, software systems, and other physical tools function as archives and organizational memory, in addition to social structures and relationships, experiential knowledge, cultural stories, and other shared beliefs (Levitt & March, 1988).

It is this medium that the organization relies on in order to make sense of its own actions in reflection, but it is also the actions that build this medium (Schwandt & Marquardt, 1999). It is through language, symbols, documents, and procedures that this subsystem communicates with the others. Meaning and memory making is the most influential element of organizational learning and it is the hardest to change because it is the house of the organization’s culture (Schwandt & Marquardt, 2000). It is in this subsystem that organizational learning can be created and maintained in the development of routines that push an institution to dig deeper for answers, to push harder for solutions, to think outside-of-the-box, to inspire new innovations, and to change the way that they think, so that they can improve the way that they do business for long term sustainability.
The Situation in Higher Education

In 2011, a group of leaders from several dozen institutions of higher education met at the Harvard Business School to discuss the massive disruptions that were about to ensue over the next decade as a result of seismic shifts of student populations and their behaviors, the waning middle class, market and industry needs, technological advances, online learning, and public scrutiny from citizens and lawmakers alike regarding the return on investment in college degrees (Selingo, 2016a). These changes are forcing many institutions to rethink their traditional business models and practices in order to remain a viable player in the education market space. This can be a considerable challenge for leaders across the higher education landscape, as the nature of educational institutions tends to move and change at a pace that is now becoming too slow for the environment for which is it situated (The Business of Higher Education, 2017; Denneen & Dretler, 2012; Selingo, 2016a). Some would say that there have been many revolutionary changes that have taken place within any given higher education institution, but in hindsight, these developments have been proven to be quite minuscule in the overall picture of American higher education and the new landscape requires revolutionary jolts (Selingo, 2016a).

Changes in Student Populations, College Enrollment, and the Financial Outlook

According to a 2016 report issued by the Chronicle of Higher Education, with every year the number of high school graduates in the United States declines (Selingo, 2016a). The drop in high school graduates is a result of an aging American population and declining birth rates. According to U.S. census data, for every 100 18-year-olds, there are only 95 4-year-olds. Changes in birth rates and high school graduates are a clear indication of what students and how many of them will be going to traditional colleges in the next decade. The traditional White, middle-class base of high school students across the country is on the sharp decline, whereas the
growth of Hispanic and Asian students will surpass that of both White and Black students (Selingo, 2016a).

The number of U.S. high school graduates peaked in the 2011 academic year and has been on the decline since, with some areas of the country being particularly more barren than others. According to the Western Interstate Commission for Higher Education, the Northeast and the Midwest are projected to experience the steepest declines; this is also a part of the country that has the greatest concentration of traditional institutions (Jaschik, 2018; Selingo, 2016a). The Northeast’s graduating high school class of 2028 is expected to be 10% smaller than the class of 2009 and the Midwest’s class will face even steeper declines of 30% fewer graduates in the same time frame. The West is projected to remain flat with small upticks in 2023-2024. This leaves the South as the only region of the country that is expected to see growth, with the high school class of 2025 being 16% larger than the class of 2009 (Selingo, 2016a). The implications of these declines are already being felt by traditional institutions, and online institutions alike. According to Moran (2016), reports of student enrollment declines have ranged from 5.9% to 11% at 4-year institutions, to as great as 20% in some community colleges. As a result, colleges and universities are trying to offset lowered enrollment by reducing tuition costs, cutting academic programs and excess expenses, laying off faculty and staff, and changing leadership in a serious effort to turn the tides. Still for many institutions – especially smaller nonprofit institutions – those changes are not enough to keep their doors open. Many U.S. institutions are
being forced to shift their strategic plans from expected growth, to coping with decline (Moran, 2016).

Financial analysis within the higher education industry has recently provided grim projections for the financial stability of many institutions. In 2012, Bain & Company reported that one-third of all U.S. colleges and universities had weak financial statements with an unstable fiscal outlook and another quarter of institutions are very close to joining them; the reports were based on equity and expense ratios (Denneen & Dretler, 2012; Moran, 2016; Selingo, 2016a). In 2015, Moody’s Investors Service provided financial ratings on 45 institutions, and all but 10 of those were downgrades. The report indicated that projections of revenue streams for many institutions were not scheduled to recover to the pre-2008 financial crisis status and that many higher education institutions would need make fundamental shifts in operations and strategy moving forward (Moran, 2016). In 2016, a report issued by Parthenon – EY stated that more than 800 institutions faced survival challenges because of their financial inefficiencies and small student body populations (Selingo, 2016a). In 2013, Standards and Poor’s Rating Service also began downgrading credit ratings for many higher education institutions, which has resulted in higher borrowing costs, making recovery a more severe challenge (Moran, 2016).

Institutions used to be able to pass of the cost of rising expenses on to students in the form of higher tuition, but with a shrinking middle class, families cannot afford the increasing bill, regardless of whether or not they are willing to pay for it (Selingo, 2016a). In a study conducted by Price et al., (2016) the top three concerns among community college presidents were trying to maintain access in times of increasing costs, while managing enrollment with lowered state funding, and trying to lower costs without having a negative impact on academic quality. Among the challenges listed for these administrators was lack of funding, outdated technology, lack of financial information and budget flexibility, and increasing levels of debt.
There are no signs in the literature or official census data that indicate that these trends will be reversed, but rather indicate that these challenges will only be heightened. Higher education leaders are finding themselves operating under a new and considerably less financed norm that is forcing many institutions to reconsider nearly everything they have known for decades or potentially face closing their doors (Selingo, 2016a).

**Online Education as a Change of the Times and a Coping Mechanism**

Until 2006, the growth of online education was extremely limited due to the Higher Education Act (HEA) of 1992, which prohibited institutions that offered more than 50% of their courses through distance education (both online and correspondence courses) from getting Title IV financial aid. With the creation and advancement of the Internet in the 1990s, more online courses were developed, largely pushing the retirement of correspondence courses, and leading to the growth of online degree programs and colleges. With this advancement and proliferation of online course development, the Department of Education discontinued the 50% rule for online-only institutions and granted the awarding of federal financial aid for students attending these colleges (Allen & Seaman, 2017). According to Integrated Post-Secondary Education Data System (IPEDS) reporting, by 2014 more than one in four undergraduate students were taking at least one online course for a total of 5,828,826 (28%). Of those 5.8 million students, 2.85 million were taking all of their degree programs online, and 2.97 million were taking some online courses and some face-to-face courses. Counter to popular belief that for-profit colleges enroll the majority of online students (Allen & Seaman, 2017), public institutions hold the largest portion of online students at 72.7% of undergraduates and 38% of graduate students (Deming, Goldin, Katz, & Yuchtman, 2015), though not all of these students are completing their degrees solely online.
Although online education continues to see an overall increase in student enrollment, the number of providers has grown exponentially over the last 5 years and the competition for all institutions seeking these students has been heightened (Online Education Trends Report, 2017; Lederman, 2017). Historically and still largely in the present, traditional institutions recruit the majority of their students from within 100 miles or less radius of the institution. Traditional brick and mortar colleges have historically been able to conduct adequate strategic planning given stable environments of enrollment and projections in high school graduations, however, changes in population trends negatively impact that consistency and reliability. Institutions that are dependent on student tuition must now use other methods of strategic planning in order to remain competitive. Because traditional institutions cannot pick up and move their campuses, the losses of students and revenues are being off-set in two ways: (1) recruitment from other parts of the country that are growing in high school graduates (e.g., the South and the West), and (2) developing online programs to reach students at a distance and in a different age range (Lederman, 2017; Selingo, 2016a).

Historically, the divide between traditional institutions and distance education institutions and the students that they served was stark. Young high school graduates sought the traditional route and adult learners had to take the nontraditional route to accommodate children and careers, which were not obtainable from the seat of a full-time classroom. The two different types of institutions served very different purposes for different ages of people. These lines are now beginning to blur. As technology advances and traditional institutions continue to see declining enrollments in young college-going populations, traditional institutions are going online and adopting competency-based education models to serve new markets of learners. For distance education institutions, this has a mixed effect.
According to Selingo (2016b), as of the late 1990s, online education faced serious legitimacy challenges as the growth of for-profit colleges and that image coincided with growth in online degree programs. A 2011 Pew Research Center survey found that just 29% of American adults believed that online education was of equal value to the traditional classroom. In 2012, however, that began to change when traditional brand name universities like Stanford University, Harvard University, and the Massachusetts Institute of Technology (MIT) began to offer online courses called Massive Open Online Courses (MOOCs). Though MOOCs did not take off like many had speculated, that move opened the flood gates of traditional institutions and online education. As of 2016, institutions such as Harvard University, Georgetown University, Northwestern University, Stanford University, Columbia University, the University of North Carolina, and the University of Arizona – among many others – offer online graduate programs and many undergraduate courses online (Selingo, 2016b). As of 2013, three large public flagship institutions – Penn State University, Colorado State University, and Arizona State University – opened “global campuses” that operate exclusively online for both graduate and undergraduate students (Deming et al., 2015). Traditional colleges provided legitimacy for online education, and they now operate as a competitor to solely online institutions of higher education.

According to Allen and Seaman (2017), of 4,836 degree-granting institutions, 3,354 (69.3%) reported having at least one distance education student. The number of students taking at least one distance education course was up to 29.7% by the fall of 2015, an increase from 25.9% in 2012. Of the students taking online courses in 2015, 14.3% of those students were enrolled in exclusively online programs. These distance education enrollments in 2015 span all institutional types with public institutions commanding the market at 67.8%, private nonprofits at 17.8%, and private for-profits at 14.5%. These numbers undermine the persistent thought that online education is primarily occurring in private for-profit institutions. However, as of 2015,
only 35.7% of students taking courses at public institutions are taking exclusively online courses, whereas private nonprofits have 64.7% of their students taking solely online courses, and for-profits are at 86.5%. According to a 2012 U.S. Treasury Department report, the majority of all students attending for-profit institutions taking exclusively online courses are adult learners and transfer students with prior credit attempts (Allen & Seaman, 2017). Figure 4 presents distance education enrollment statistics.


The growth rates of online education are significant, given the overall decrease in enrollments across all institutional types, however, as shown in Figure 4, online enrollments are also on the decline overall at all institutional types. Rather paradoxically, online institutions were once viewed as a threat to traditional institutions, both in terms of the market of students and educational modality, now however, traditional institutions have joined the online market space and pose a threat to solely online institutions (Selingo, 2016b). Traditional institutions come with name brand recognition and a price tag that is not far from that of nonprofit and for-
profit online degrees that have often been received with negative connotations or reputations. The market of adult learners has now become a large potential market for traditional institutions offering online programs. There are just under 45 million American adults who have some or no college at all (Selingo, 2016a). Both online and traditional institutions are moving into each other’s space for survival, and as an inevitable result of technological change and advancement.

Two indicators of the acceptance and growth in online education is faculty approval and market demand. As of 2014 approximately 71.4% of academic leaders rated online learning outcomes as being equivalent or superior to face-to-face instruction (Deming et al., 2015). In addition, 98% of administrators acknowledged that the demand for online education has increased from previous years, though 60% of those did not intend to change their budgets within the next year to try to meet that need; 31% of 2-year institutions and 43% of 4-year institutions intended to increase their budget for online course development (Online Education Trends Report, 2017). A survey conducted by the Babson Survey Research Group in 2011 of more than 2,500 college and university leaders found that two-thirds of administrators identified an online strategy as critical to their long-term success and existence, yet only 50% of them had online programs built into their strategic plans at that time (Denneen & Dretler, 2012). This is largely driven by the changes in market demand. The vast majority of students enrolled in online programs have chosen to go back to school with their career in mind; 75% were either looking to change careers or enhance their current career standing after completing an online program (Online Education Trends Report, 2017). Colleges and universities are being forced to find mechanisms to serve populations outside of their traditional bases, and online education has been largely driven by reaching out to new markets (e.g., adult learners) and technological advances.

With continued developments in technology and a shrinking student base, the competitive environment for all institutions of higher education will be heightened. Doing business as usual
has not been able to sustain many institutions of higher education that have had to close their doors over the last decade, nor will it move the rest into the future (Denneen & Dretler, 2012; Selingo, 2016a). The past decade has shown us that societal and economic forces have the power to shape the academic landscape, as much if not more so than higher education shaping society. For all institutions, there are formidable expectations to enhance access and academic quality while embracing expensive technological systems, and at the same time having to cut costs (Gumport, 2001; Rich, 2006). The new political economy urges higher education administrators to view these challenges as business problems that can be solved with business solutions (Price et al., 2016; Rich, 2006). In search of the right competitive formula, higher education administrators have turned to the business sector looking for ways to increase revenues and enrollments, cut costs, and provide customer service models that create a competitive advantage (Rich, 2006). There is a need for both new ideas, creativity, and innovation, in addition to being able to increase capacity – doing more with less – through the perfection of daily practices and procedures that allow for maximum efficiency with current resources. Business cannot be business as usual.

A Need for a New Lens

Although higher education institutions are greatly influenced by powerful external forces such as demographics, economics, and political conditions, they are also strongly shaped and influenced by the forces of their culture that emanates from within (Tierney, 1988). According to Schein (2010), “all organizations face two archetypical problems: (1) survival in and adaption to the external environment, and (2) integration of the internal processes to ensure the capacity to continue to survive and adapt” (p. 73). Institutions of higher education are knowledge-based organizations and their success depends on their flexibility, adaptability, and innovation (Coman & Bonciu, 2016). In the current era, the changing environment that surrounds higher education
forces leaders to manage knowledge creation in more effective ways that spurs innovation and creates a competitive advantage (Aminbeidokhti et al., 2016; Coman & Bonciu, 2016). When organizations are unable to keep up with the pace of change in their external environments, organizational decline becomes the result.

According to Moran (2016), organizational decline occurs as a result of environmental change that restricts internal resources, which then leads to pressures to make cutbacks in order to survive and sustain; usually as a result of noticeable shrinkage of market share, assets, profits, or workforce. He notes that organizational decline has also been linked to an organization’s inability to anticipate, recognize, avoid, or adapt to both the internal and external pressures that threaten the organization long term. Staw, Sandelands, and Dutton’s (1981) threat-rigidity hypothesis suggests that the more an organization views the environmental changes as a threat that is not within their control, the more stress and anxiety is produced that negatively impacts the response to the threat. Moran (2016) adds that perceptions of threat tend to make organizations hunker down and become more rigid and turf protective, adding that U.S. higher education institutions have shown to be ill equipped to adequately cope with environmental change, and the typical response of most institutions facing decline has become downsizing, budget cuts, program cuts, and tuition hikes.

These are inadequate responses for institutions that are looking for long-term sustainability and growth. Kofman and Senge (1993) note that these quick fixes and cost-cutting initiatives often take place even though no one believes that it actually addresses the underlying problems, and they seldom do. These are not the reactions of resilient organizations that are capable of learning for sustainability. Definitions of sustainability provided by Smith and Scharicz (2011) include, “the result of activities of an organization, voluntary or governed by law, that demonstrate the ability of the organization to maintain viable its business operations
(including financial viability as appropriate) whilst not negatively impacting any social or ecological systems” (pp. 73-74). Cebrian et al. (2013) define sustainability as a learning process that develops the capacity to challenge existing world views and constructs and creates new knowledge collectively. Literature that spans organizational learning in various contexts concur that the greater the environmental uncertainties, the greater the need for learning (Dodgson, 1993; Van Grinsven & Visser, 2011); some of which go as far as to state that engaging in organizational learning is the only possibility of maintaining a sustainable competitive advantage in complex environments (Schwandt & Marguardt, 1999; Senge, 1990/2006; Slater & Narver, 1995).

Resilient organizations and learning organizations share many of the same qualities. These are organizations that are able to continuously anticipate and be able to adjust and adapt to trends that have the ability to permanently impair their core business; they continuously develop the capacity to change before it becomes desperately obvious that they are being forced to; something that many higher education institutions have failed to do (Moran, 2016). Organizational resilience is the ability to absorb environmental change and navigate crisis without significant losses in organizational effectiveness (Moran, 2016). The mechanisms through which organizational resilience is achieved are akin to those found in organizational learning literature.

Conclusions

As higher education institutions continue to face uncertainty in their environments, rapid and continuous learning will be necessary for institutions to form adaptive responses to their changing markets, which is critical to institutional survival. Institutions with an unwillingness to adapt to the rapid changes of society will result in loss of viability or usefulness in modern society (Gumport, 2001; Price et al., 2016). As outlined by Hussein et al, (2016) academic
excellence involves the development of high-quality education and qualified educators; becoming a learning organization is essential to bringing the right people together, in the right place, at the right time, to exchange information that is relevant and necessary to working together to produce a high-quality product. It is crucial for institutions that strive for academic and business excellence to adopt a learning organization culture and practices for long-term sustainability. Learning at times seems to be an antithetical concept in the operations of educational organizations, especially those which have been in existence for many decades or even a century; asking the question of “how we ourselves are learning” is rarely engaged. The changes of the future will require organizations to not only become more agile, but to be able to be leaders in that change. It is not enough to merely survive or adapt to the environment for American institutions of higher education, they must be leading the change. This dissertation research seeks to understand how one institution is engaging in organizational learning and what others can learn from that.
Chapter 3: Methodology

In order to answer the guiding research questions regarding organizational learning in higher education settings, a qualitative descriptive case study was selected as the best approach for the purpose of this study, utilizing Yin’s (2018) approach to case study research. The selected study site institution has proved to be successful in finding innovative solutions, maintaining a competitive advantage, and securing consistent growth and financial stability during a time of high transition, competition, and market volatility. Studying this institution through the lens of the OLSM model allowed for further understanding of how the institution was able to meet the emerging changes in its market and to discover what learning practices are currently being utilized for success.

This chapter will address the study methodology and its alignment to the model, as well as the paradigm that guides the research, questions, details about the research process employed, to include research site and sample design, data collection approach, the data analysis process, and strategies for trustworthiness.

Research Questions

The purpose of this research is to gain new insight into how members of a successful higher education institution are learning to adapt to the dynamic and ever-changing environment. This descriptive case study examined this context at one successful institution of higher education that has created innovative solutions and experienced exponential financial and student growth in a time where many other colleges and universities are facing existential challenges. The primary question of the research is: “How do organizational members describe the learning system actions as their institution seeks to meet the emerging market changes?”

The following four subquestions assist in guiding the research through the theoretical framework, the Schwandt Organizational Learning Systems Model (OLSM), which consists of
four subsystems within which learning occurs in nonlinear fashion with cybernetic relationships to its external environment.

1. How do organizational members describe their internal and external environmental interface? (Environmental Interface Subsystem)
2. How do organizational members describe organizational processes, structures, and activities that create new knowledge and innovation? (Action and Reflection Subsystem)
3. How do organizational members describe dissemination and diffusion processes and structures? (Dissemination and Diffusion Subsystem)
4. How do organizational members describe the culture of the institution? (Meaning and Memory Making Subsystem)

**Research Paradigm**

Qualitative research is used for deeper exploration of phenomena in which all the variables are not yet known and where information gained from participants helps to create a greater and fuller picture; qualitative research relies on the views of participants (Creswell, 2013). The purpose and questions of the study are thus designed to get the most of the participant response, and responses are often presented in their own words to describe the phenomenon in the findings (Creswell, 2013). This study utilizes a qualitative research method, which falls within the constructivist-interpretivist paradigm that seeks subjective human perspective (Merriam, 1991; Ponterotto, 2005). Paradigms provide consistency in interrelated assumptions about the world that assist in guiding the research and setting the context for the study (Ponterotto, 2005). The constructivist-interpretivist paradigm is derived from multiple disciplines such as anthropology, phenomenology, history, hermeneutics, and symbolic interactionism (Merriam, 1991), which are all built of human experience. According to Ponterotto (2005) constructivism adheres to a relativist position that allows for multiple and yet
equally valid realities based on lived experiences and human subjectivity; reality is created in the mind of the individual. Merriam (1991) concurs and states that reality is not an object, but is instead discovered through the construction of the human mind; different constructs present different realities and perspectives.

The constructivist-interpretivist paradigm can also be understood through the sociological theory known as the symbolic perspective. The symbolic perspective is interpreting and trying to understand phenomena through the lens of subjectivity and the human experience (Hatch & Cunliffe, 2013). This perspective allows the researcher to delve into the human subject’s experience in order to understand the situation as they know it to be; for the experience of those who have lived it is invaluable insight into the many different elements of the reality. The symbolic perspective seeks to understand the different views, in order to see the whole picture and adequately articulate a situation (Hatch & Cunliffe, 2013); this is well aligned to organizational learning and systems thinking, in addition to case study research. Case study research is meant to be able to capture the many varying elements of the phenomenon, even those for which we did not know existed until we embarked on the study. Organizational learning encompasses every element of the system that lives within an organization, an evolutionary ecosystem that changes as its environment changes. In addition, the OLSM has a social action focus, which seeks to understand the human element of collective learning within an organization; therefore, the descriptive case study methodology through the constructivist-interpretivist lens is a well aligned methodology for the questions posed in this study.

Although this case study is an example of the need for subjective ontology and interpretivist epistemology, case study research as a methodology and qualitative work at large is thought by some to have limitations, which should be acknowledged here. As a limitation, the symbolic perspective (and interpretivist-constructivist paradigm) takes into consideration
individual accounts, because of this, Hatch and Cunliffe (2013) warn that there is a danger in using this technique, in that researchers tend to overgeneralize the findings of one group of people, trying to apply those findings to large scale societal phenomena, which may not always be aligned from one situation to another. This is a limitation that must be acknowledged in any form of research, however, in that the same actions may not always end in the same results from one place to another, regardless of methodologies selected. Hatch and Cunliffe (2013) maintain that although some look at subjective work with ridicule and bias, subjective ontology is required to understand the thoughts and feelings of those involved in order to understand the truest context from those perspectives. Interpretivist epistemology helps researchers to make sense of phenomena through those personal experiences – as a collection of accounts – taken up to gain the fullest picture. These methods acknowledge that there is not one answer, there is no right answer, but there is value in knowing everyone’s answer. The constructivist-interpretive paradigm presents a dynamic rather than static view (Merriam, 1991). Perceived limitations of case study methodology are further addressed below.

**Research Methodology – Descriptive Case Study**

The qualitative case study methodology provides the tools needed for the researcher to study complex phenomena within their original contexts (Baxter & Jack, 2008; Creswell, 2007; Merriam, 1998; Yin, 2018). According to Creswell (2007), “case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) through detailed, in-depth data collection involving multiple sources of information (interviews, reports, observation, audio/visual materials, and documents) and reports a case description and case-based themes” (p. 73). This ensures that the case can be studied through multiple lenses and facets for a more complete understanding (Baxter & Jack, 2008). Case studies allow researchers to explore individuals, organizations, institutions, relationships,
and communities, supporting the deconstruction of present phenomena (Yin, 2018). According to Yin (2018) a case study is an empirical method that is useful in investigating contemporary phenomenon, in its real-world context, and where the boundaries of the phenomena are not entirely clear. More specifically, Yin (2018) states that a case study:

- copes with the technically distinctive situation in which there will be many more variables of interest than data points, and one result;
- benefits from the prior development of the theoretical propositions to guide design, data collection, analysis, and as another result;
- relies on multiple sources of evidence, with data needing to converge in a triangulating fashion. (p. 15)

Yin (2018) categorizes case studies as being explanatory, exploratory, or descriptive. A descriptive case study is suitable to this study because the intervention being evaluated does not have a single or clear set of outcomes.

**Perceived Limitations Addressed**

According to Yin (2018), case study research at large has been misunderstood by many because of its popular use in professional work such as journalism and media where empirical procedure is not engaged (Yin, 2018), whereas others in academics or science may discredit it because of its lack of hierarchal structure (e.g., case studies being suited to exploratory phase, survey, or history for descriptive phase, and experiments as the only means to pursue explanatory or causal inquiry). Yin (2018), however presents a highly empirical stance to case study research, and stands apart from his peers in the positivist nature of his stance on case study design, procedures, and validity measures. Although Yin’s work for many years has been aligned to the interpretivist-constructivist paradigm in the sense that qualitative case studies must encompass the voice and experience of those being studied, his methods are highly logical, empirical, and
procedural compared to other known authors in the field such as Stake (1995) and Merriam (1998). Merriam (1998) and Stake (1995) are aligned in letting case study work evolve with the research, supporting the researcher playing a greater role in the study and becoming closer to the content. These two authors also support evolving theories as studies progress with little needed theoretical framework to begin, as it may constrain or influence the findings. Conversely, Yin (2018) recommends including relevant literature and providing theories and even propositions if needed, in order to provide boundaries and more clear connection to the findings. In addition, Yin (2018) takes a highly procedural approach to research design, gathering data, analyzing data, and validating data, urging the use of triangulation and encouraging researchers to make use of six evidentiary sources which include interviews, direct and participant observations, documents, archival records, physical artifacts, and the use of quantitative data in addition if possible.

This study is utilizing Yin’s (2018) approach to case study research and data decoding methods provided by Saldana (2016) for qualitative research. This method was chosen to document the voice of the people, while maintaining the greatest possible level of objectivity on behalf of the researcher in order to present unbiased and uninfluenced research and findings. A descriptive case study is well aligned to the scope of this study and will allow the researcher to present rich and robust data that has been aligned to a theoretical framework.

**Overview of the Research Process**

This dissertation was conducted in five phases, to include an iterative process of data collection and data analysis throughout. The first phase involved the identification of a research site and gaining access to conduct the research. The second phase involved an initial collection of documents to help identify the organizational structure for informing the sample design for the interviews. The third phase involved onsite field research to collect a range of data, including observational data collection and conducting one-on-one and group interviews. The forth phase
involved the data analysis process, to include validation of transcripts with participants and a multi-step analysis process that involved inductive and deductive coding. The fifth phase involved a cross-source and cross-analysis output review to identify themes. The following subsection provides in depth information about the research site and sample design.

**Research Site: Virtual U**

This dissertation sought to identify an American Higher Education Institution that was seeking to develop innovative strategies to meet the changing dynamics in the environment. Although several institutions were initially considered, the researcher selected an institution located in the Northeast that had demonstrated some innovative strategies as evident by their reputation and public documents, and was willing to grant the researcher access. Given the researchers interest in studying organizational learning, identifying a research site where one would likely be able to find the phenomenon is recommended (Patton, 1990). The pseudonym for the institution in this study is Virtual University, referred to throughout this work as Virtual U or VU.

The Higher Education Industry has several categories: (a) public, private, nonprofit, for-profit; (b) small-mid-large size based on student population; (c) urban or rural setting; (d) traditional brick-n-mortar primarily on the ground delivery – versus – multisite with mult-delivery modes – and a primarily online delivery format. The site selected – Virtual U – is a not-for-profit institution of higher education with a home campus located in the Northeast, United States. Virtual U maintains a brick and mortar campus, in addition to a large online division, administered from multiple sites. Over 130,000 of their students are from the online population. Although Virtual U was not the first online delivery institution, it was an early competitor in online courses with development since the 1990s and is now among the institutions with the largest numbers of online students and selection of online degree programs in the United
States. Institutions of comparable stature and/or competition are the University of Phoenix, Western Governors University, Liberty University, Walden University, Arizona State University, and the University of Maryland-University College, though some of these are for-profit institutions and Virtual U is not-for-profit. In addition, any institution that offers online degree programs are now a part of the competition pool of institutions, which continues to challenge the higher education landscape at large.

**Sample Design**

The dissertation research sought to capture member’s perception of the organizational learning actions and therefore a representative sample of members at the headquarters was considered. Specifically, the researcher sought to identify individuals who had understanding of the strategic intent of the organization while also having operational knowledge about the day-to-day practices. Therefore, a purposeful cross-section of employees from the headquarters were identified and recruited to participate in either one-on-one or group interviews. With the exception of one executive level participant, the rest of the participants selected had 4 + years at the institution and many of them served in dual roles, such as administration/faculty, administration/student, or administration/student/faculty.

For confidentiality reasons, years of service and current direct reports at the institution will be noted in a range format. See participant learning vignettes in Appendix F for more participant information. Ten formal interviews, two group interviews, and three informal interviews were conducted for a total of 22 participants. See Table 1.
### Participant Population Data

<table>
<thead>
<tr>
<th>Participant</th>
<th>Years</th>
<th>Hybrid Roles</th>
<th>Oversees/Direct Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6-10</td>
<td>Admin/Faculty</td>
<td>50+</td>
</tr>
<tr>
<td>2</td>
<td>6-10</td>
<td>Admin/Faculty/Student</td>
<td>200+</td>
</tr>
<tr>
<td>3</td>
<td>3-5</td>
<td>Admin</td>
<td>30+</td>
</tr>
<tr>
<td>4</td>
<td>4-6</td>
<td>Admin/Student</td>
<td>5-10</td>
</tr>
<tr>
<td>5</td>
<td>1-3</td>
<td>Admin</td>
<td>8+</td>
</tr>
<tr>
<td>6</td>
<td>12-15</td>
<td>Admin/Faculty</td>
<td>1 -3</td>
</tr>
<tr>
<td>7</td>
<td>3-5</td>
<td>Admin/Faculty</td>
<td>200+</td>
</tr>
<tr>
<td>8</td>
<td>33-36</td>
<td>Admin/Faculty</td>
<td>100+</td>
</tr>
<tr>
<td>9</td>
<td>9-11</td>
<td>Admin/Faculty</td>
<td>2-4</td>
</tr>
<tr>
<td>10</td>
<td>1-3</td>
<td>Admin</td>
<td>140+</td>
</tr>
<tr>
<td>Focus Group 1 Collective (4 p)</td>
<td>5+ years Collectively</td>
<td>Admin/Faculty/Students</td>
<td>200+ collectively</td>
</tr>
<tr>
<td>Focus Group 2 Collective (5 p)</td>
<td>5+ years Collectively</td>
<td>Admin/Faculty/Students</td>
<td>50+ collectively</td>
</tr>
<tr>
<td>Informal Interview P1</td>
<td>2-3 years</td>
<td>Admin/Student</td>
<td>0</td>
</tr>
<tr>
<td>Informal Interview P2</td>
<td>4-5 years</td>
<td>Admin</td>
<td>1</td>
</tr>
<tr>
<td>Informal Interview P3</td>
<td>4-5 years</td>
<td>Admin</td>
<td>0</td>
</tr>
</tbody>
</table>

**Data Collection Methods & Process**

Four primary data collection methods were used: document review, observations, individual interviews, and group interviews to ensure triangulation. With the exception of a
preliminary review of the documents to help inform the sample design, all of the data for the dissertation was collected and then analyzed after the researcher returned from the site visit. The following provides a brief overview of each method and its purpose. See Table 2.

Table 2

*Data Collection*

<table>
<thead>
<tr>
<th>Collection Strategy</th>
<th>Purpose and/or Process</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Interviews</td>
<td>10 formal individual interviews. Semi-structured format. All recorded. All transcribed and verified by participants. 3 informal interviews during campus tours informing observations.</td>
<td>Individual notes, interview transcripts for hand line-coded inductive and deductive analysis.</td>
</tr>
<tr>
<td>Group Interviews</td>
<td>2 group interview sessions: Group 1 – 4 participants Group 2 – 5 participants Both recorded sessions. All transcripts verified by participants.</td>
<td>Consensus building across participants answers. Interview transcripts for hand line-coded inductive and deductive analysis.</td>
</tr>
<tr>
<td>Document Review</td>
<td>Reviewed both internal and external documents from public and private sources provided to the researcher while onsite. Providing insight into history of the institution, future initiatives, policies, procedures, strategic planning, etc.</td>
<td>Identification of internal and external contextual factors that impact various elements of the learning system. Document review contributed to both contextual analysis and deductive analysis.</td>
</tr>
<tr>
<td>Observations</td>
<td>Researcher was granted access to take pictures in multiple buildings, offices, meeting rooms, hallways, cafeterias, etc. Researcher captured study relevant photos of learning practices such as idea walls, professional development materials on learning, and spatial observations that support the learning environment.</td>
<td>Contextual understanding of the culture, atmosphere, structural set up, employee interactions. Contextual analysis was created with both documents and observational data.</td>
</tr>
</tbody>
</table>

Document Review included the collection of publicly available information, (e.g., institutional website, marketing materials, public information on various websites, and internal
documents provided to the researcher while onsite). These documents helped the researcher in several ways. First, the documents helped to understand the organizational structure, which informed the sample design. Second, the documents helped the researcher to understand how the organization was externally portraying its strategic intent via its mission, vision, values, and other marketing materials. Third, the documents helped the researcher understand the nature, content, and platforms for sharing information and engaging its members. The document review along with observations served to inform the contextual analysis discussed below.

Observations were conducted when the researcher went to the site. Two days were spent onsite during business hours. The researcher had been granted access and was able to walk through hallways, offices, floors of cubicles, meeting rooms, lunch rooms, and lobbies. The observations help to inform the situation for the collective learning process and how the aesthetics for the internal environment were set. The researcher collected observational notes in a journal during the visit to the research site. This included captured photos of walls (with strategic planning, institutional facts, idea collection, inspirational pieces, employee information, student information, etc.), office space, promotional materials, professional development materials, spatial design of cubicles, conference rooms, kitchens, and outside building structures.

Interviews were conducted both one-on-one and in group interview sessions. A cross-section of members from administration – some of which served in dual roles of administration/faculty/student – were selected to respond to a series of semistructured questions that explored the nature of their learning processes. Interview questions can be found in Appendix B. Interviews were audio-recorded and the transcriptions sent to participants for validating. In addition, three informal interviews took place with members of the university who were guiding the researcher on tours of various parts of the institution over 2 days. Information from those informal interviews were mostly captured in a journal, though one had some audio
recording, and were nonstructured times to ask questions on specific elements of the environment on the tour, how things were done at the university, social life, employee benefits, and so forth.

Data Analysis Process

Several phases and steps were involved in the data analysis portion of this study. A blend of inductive and deductive approaches were used to uncover learning actions and validation of findings across data collected and analysis methods. The following provides an overview of each step. The first step of data analysis focused on an analysis of the documents and the observations to help inform a contextual analysis of the research site. This analysis consisted of inductive line-coding of the documents and review of the pictures and observational field notes captured at the research site. The second step was interview analysis. In keeping with Saldana’s (2016) formal interview process, interviews were transcribed within 24 hours of the interview taking place to ensure that information remained fresh for correct coding processes and to ensure that study participants were granted time to review the interview transcriptions for accuracy. After the transcription and participant review process, interview analysis commenced. The first phase involved reading each interview and creating a learning vignette that summarized the learning orientation noted according to each participant. Vignettes can be found in Appendix F. The next step consisted of inductive line-coding of the interviews. This process was then repeated for deductive coding and alignment to the OLSM.

Trustworthiness Strategies

Several techniques were used throughout the dissertation research and data analysis to enhance the credibility, reliability, validity, and overall trustworthiness of the dissertation research. These techniques included (a) a research journal – to capture reflective notes during the overall process, while at the research site, analytic memos created during the analysis, and
pictures captured of many elements of the institution; (b) audio-recording of the interviews to ensure capturing of direct quotes; (c) transcription validation that occurred by sending all of the interview participants a copy of their transcript to confirm; (d) inter-rate reliability that occurred when sharing a copy of one of the transcripts to review the coding procedures; (e) triangulation of the sources by interviewing 22 total people (formal and informal, group interview and individual) and triangulation of the methods by using observations, document reviews, interviews, and triangulation of the analysis process by using multiple steps and approaches; (f) saturation was achieved through all interviews, group interviews, and contextual data.

**Study Limitations/Delineators**

The researcher made several choices when designing the study to help scope the study to be manageable and meaningful. The delineators include – only one research site (multiple buildings), only qualitative methods, only one case study conducted at one point in time. Thus, the limitations of the findings include: results reflect one case at one point in time and therefore limits the generalizability of the study.

**Conclusion**

This chapter outlined site information, participant information, and the methods of data collection and analysis that were undertaken in the study, which were conducted using both Yin’s (2018) and Saldana’s (2016) research and analysis techniques. Contextual analysis, inductive analysis, and deductive analysis procedures were explained across the spectrum of data collected. Finally, the researcher addressed measures of validity and reliability of the study.
Chapter 4: Analysis of the Findings

This chapter reports out on the findings from an iterative data analysis process which involved a blend of inductive and deductive approaches. The chapter is organized in four subsections to reflect the four major analysis efforts. First, a contextual analysis was performed integrating insights from document review, observational analysis, and informal member comments during the research site visit. The second subsection reports on the findings from the inductive analysis process which include the development of learning vignettes found in Appendix F and learning clusters developed from cross-source hand-coding of the individual interviews and focus groups interviews. The third section is a deductive analysis, which presents learning themes that emerged from a cross-analysis examination of findings from the contextual analysis, learning vignettes, and learning clusters, which were mapped with the Schwandt Organizational Learning Systems Model framework. The final subsection reports on initial summary insights stemming from the iterative analysis process to craft an initial response to the research questions about how this higher education institution is learning in its dynamically changing environment.

The following subsection reports on the contextual analysis of the research site. The contextual analysis was a compilation of the analysis of the documents from the organization, about the organization, analysis of the observations when the researcher was onsite, pictures captured, and analysis of informal comments captured during the research site visit. This cross-source analysis depicts the public-facing image about how this higher education institution learns as evident by these sources. There were four overall themes that emerged from the contextual analysis – innovation leaders, learner success as the highest priority, and a flat organization of interdependence and analytics.
Contextual Analysis

This study took place at a not-for-profit institution of higher education with a home campus located in the Northeast United States, which also has one of the largest numbers of online students and largest selection of online programs in the United States. Though Virtual U has a physical brick and mortar campus, they are one of the original pioneers in online education and were one of the first institutions to launch online degree programs in the 1990s. From its beginning, VU have been shapeshifters, relentlessly pursuing their external environment in search of new ideas, new technologies, and new products that could transform the lives of their students; providing a relevant, practical, and useful college degree for learners who would otherwise not have been able to get a college degree. Distance and online education opened the doors of possibility for nontraditional and underserved learners in open enrollment formats. The retention rate of Virtual U is currently at 58% for full-time students and 40% for part-time students; retention rates in open enrollment institutions are complicated, however, given the intentional nature of flexibility for adult learners.

In 2019, VU is one of the largest institutions in the United States, serving more than 130,000 learners from every U.S. state and many countries, and seeks to serve more than 300,000 in the next 10 years. The word “learner” should be noted, as it is believed that the word “student” does not capture the holistic nature of what the institution does and everyone that it serves, nor does it capture the nature of the student of the future. VU is known for its ability to constantly shapeshift and reinvent themselves to meet the needs of the students of that time; they are now seeking to ensure that they are ready to meet the needs of the student of 2030 and to that end are aggressively pursuing what the world will look like then. Through multi-industry collaborations, intense research and development efforts, technological experimentation, and an
intense commitment to their learners, VU is planning the path for American higher education’s future.

**Innovation Leader**

Virtual U was found to have an atmosphere that was highly focused on innovation and the future. One of the current primary focuses of the institution is understanding the students and the world of 2030, working toward developing educational programming and technology for that generation now. They are now in the process of investigating in artificial intelligence (AI), virtual realities, simulators, avatars, bots, and the use of other technological advancements for educational purposes that might be the next game changer in both on-site and distance education. In addition, VU has spent the last 2 years upgrading their technological systems, replacing both the learning management system (LMS) and Customer Relationship Management (CRM) system to provide the absolute best student experience out there with the current available technology.

According to the strategic plan:

Preparing for the learner of 2030 – Considering all the challenges facing higher education today, our commitment to challenging the status quo has set us apart. We are the higher education industry disruptor. We are setting the agenda in our industry as a leader in innovation. We are also engaged in studying future trends and forces to enable us to not just survive, but to thrive in an increasingly uncertain environment.

Questions that are being asked by Virtual U and investigated:

1. How might AI and machine learning challenge us to develop the skills and ethics to work in human-machine teams?

2. How might the rise of digital platforms challenge people to fashion their own economic opportunities.
3. How might spectrum identities replace traditional demographics, enable highly personalized services, and change how people manage reputations?

4. How might distributed computing challenge organizations to redesign themselves to maximize human value in a world undergoing rapid change?

Two of the five commitments of the institutional strategic plan are focused on outward knowledge development and innovation:

   Commitment 4: “Deploy transformational technology to support next-generation learning at a global scale.”

   Commitment 5: “Create the capacity and foundation upon which to build the 2030 learning ecosystem.”

In light of those commitments, Virtual U created research and development teams, an entire unit of the institution that is committed to the future and innovation, with state of the art spaces such as the Sand Box, where ideas can be hashed out and actualized in a space that looks like it belongs on the floors of Google in Silicon Valley; complete with modern technological equipment, dry erase walls and tables, projectors with stadium seating made of bean bag chairs, and plenty of modernized spaces for small teams to build on their ideas. The staff are energized by the future commitments in innovation and have created a culture where ideas come from everywhere; from all levels, from all departments, from inside of the university and outside of it. Leadership programs have been designed around systems thinking and creating an environment that ensures that voices can rise from bottom to top for the sake of innovation and the learner.

**Learner Success as the Highest Priority**

There is quite literally nothing more important than the learners and their success at Virtual U. A personalized learner experience, regardless of university size is of the utmost importance to the members of this institution. This topic was covered in every interview and was
evident throughout all data (pictures, documents, etc.). The level of commitment to students reached far beyond helping to enroll students in courses or providing them with tutors for academic success. Commitments to their learners entailed exceptional personalized experiences with highly trained staff, and cases of the institution providing for personal elements of student life – anything that might be a barrier to their success – such as setting up a fund to assist students who were impacted by the government shut down. Every element of life is studied and plans of actions are created to address and assist in those to the greatest extent possible. Virtual U’s mission states:

“Our success is defined by our learner’s success. By relentlessly challenging the status quo and providing the best support in higher education, Virtual University expands access to education by creating high quality, affordable and innovative pathways to meet the unique needs of each and every learner.”

Virtual U’s strategic plan states:

“VU will maintain a learner-first focus where each person feels the faculty and staff’s dedication to his/her success, regardless of how large the university grows. Our first question in starting a new project will always be: How will this help the learners?”

Because of technological advancement, all expectations of customer service in the world have changed, which they believe higher education is not exempt from. One participant noted that the time in which someone has to wait to receive anything that they want has been significantly decreased due to technology such as smart phones, tablets, or drones, and companies such as Google or Amazon that can get you the answer to anything, or something that you need in only seconds or hours. Customer expectations of their experience at a store has in many ways migrated to their expectations of that level of customer care in their institutions of higher education. If someone can order something from Amazon and have it at their house in two days or less, why shouldn’t they have their text books in that time as well? If YouTube has a number that anyone can call 24 hours a day, 7 days a week, why shouldn’t they be able to call
technical support or an academic advisor at a time that is convenient for them and their busy schedules? The participant also noted that higher education has long had cultural problems in calling students customers and in seeing their services as a business; those reservations are nonexistent at VU. There is a recognition that the absolute best quality of care and convenience should be provided to their learners, for whom the term customer is used on a regular basis in meetings and around campus to discuss what is best for them. The acknowledgement of high-quality customer care, products, and services has allowed VU to transcend to a greater level of connection with their learners and the culture there is all about how they can best serve their learners in all elements of their life. To that end, everything from spatial configurations of specific units to the creation of learning and development teams across the institution are very focused on every element of the learner experience.

A Flat Organization of Interdependence and Analytics

Virtual U was found to have a flat organization, where the level of the person’s employment did not seem to affect their contribution. People at all levels of the organization were expected to question, challenge, and bring new ideas to the table. There was an evident psychological safety there, as people felt that they could communicate up and down with leaders and across their peers about anything they needed to. The working space was set up to intentionally to promote a feeling of inclusion, equity, and collaboration, as captured in both observational data and interview comments.

Though one of the campuses has a more traditional setting of a higher education institution, other locations of VU’s campus include seas of cubicles in large open spaces, surrounded by windows and light that create a warm feeling of openness and communication. Most importantly, it creates a feeling of equity as the most senior level leaders also sit in cubicles in their spaces. Leaders with the titles of president, vice president, dean, association dean, and
director are found on the floor with their people in cubicles and in a highly flat and transparent environment akin to a modern tech company. Although few members of the institution maintain offices – such as the president and some of the vice presidents in other buildings – the staff all exude an overall feeling of comfort, equity, transparency, and belonging. Members of the institution refer to the leadership by their first names, talk about their warm personalities, and about the nice things that they do for their staff. One participant explained that one of the presidents is known to walk through the floors of their building with a large snack cart, asking if anyone would like snacks and talking to them about their current projects and ideas. In addition, in many colleges or organizations, one would walk into the lobby or down the halls and see pictures of presidents, past presidents, other significant leadership, and so forth, but at VU, there are pictures of employees with their stories. In nicely displayed, custom made art works, the walls are covered with individual employees, what their interests are, where they come from, what drives them, and the ability for someone to hear them tell their story in audio format by going to a link that is provided on the picture. Regardless of the level, people are acknowledged, heard, and respected on an equal basis. The strategic plan acknowledges this untraditional organizational culture:

“Changes in how organizations function will require a disruption of class hierarchal organizational charts and the emergence of shapeshifting organizations.”

In addition to the multiple departments within the university, Virtual U also has additional structural challenges to overcome given the large difference between the atmosphere of the traditional brick and mortar element, the online element, competency-based education elements (CBE), and other large partnership-based elements. Having large and independently successful elements of the institution can cause fragmentation, inconsistency, and silos if not managed properly. In order to avoid these inevitable pain points, VU’s leadership began a
campaign of interdependence 3 years ago, the *One University* initiative. The strategic plan and all professional development training are now geared toward systems thinking, building teams and coalitions, interdependent leadership, instilling trust and being collaborative, and strategic agility, among many other important elements that will ensure that the university moves together in the same direction. Members of the institution at all levels receive trainings on these competencies in different professional development programs that are geared toward that role.

In order to ensure that all elements of VU are on the same page and tracking their decisions and changes in real-time, data and analytics have never been more important. Reports are run for nearly everything a student does at the university. If something is going wrong, they need to know about it yesterday, not tomorrow. There is a fast-paced culture that exists at the institution as a point of pride in how quickly they can realize a situation is occurring and divert if necessary. This is accomplished through teams of people, interdepartmental communication, and real-time information for accurate decision making.

**Inductive Analysis Insights: Learning Vignettes and Learning Clusters**

The next subsection reports on the findings from the iterative inductive analysis process with the interview and focus group transcripts. The first phase resulted in the production of “Learning Vignettes” which provide a descriptive summary of the overall learning story for each interview session. The second phase involved first-round and second-round hand coding process which resulted in the production of “Learning Clusters.” Each of these two analysis outputs are reviewed below.

**Learning Vignettes**

The first step in the inductive analysis phase of this dissertation involved an in-depth review of the 12 interview transcripts, field notes captured after data collection, and re-listening to the interview recordings. A cross-section of organizational members from administration,
operations, and faculty participated in either one-on-one interviews or a group interview where they described the learning process of their organization. Some of the participants of the study held dual identities as administration/student or administration/faculty, and in some cases, all three. The vignettes are descriptive summaries of each data collection moment relative to the purpose of the dissertation, to understand how members perceived this organization’s learning. Appendix F provides each learning vignette developed for each of the data collection moments from the one-on-one interview and two group sessions. The following subsection reports out on the trends that emerged when analyzing across these 12 learning vignettes.

**Learning Vignette Findings**

The narratives that emerged from all 12 transcripts to formulate these learning vignettes displayed a general sense that this institution was very adaptive to changes in its environment currently and is aggressively pursuing the environment of the future; so as to stay ahead of the coming realities. The intense outward scanning of their environment is noted in every interview. This occurred in multiple ways, through leadership scanning and communication, everyone sharing articles and best practices from a variety of industries, being trained by and learning from other organizations (some in higher education, but mostly outside of it), and creating a unit at the institution whose purpose is to scour every element of their external environment for signs of change and newly forming developments.

The institution was found to be highly driven by the mission to serve their learners and produce the best quality products and services for them. In every interview, the learner experience was underscored and discussed as the most important factor in all that they did. It was the driver of innovation, the driver of their collaboration, and ultimately the purpose for which they existed. That passion permeates the atmosphere and provides a level of motivation that is
unknown to many traditional institutions of higher education. In this case, it is a driving force of employee engagement, positive morale, and purpose.

VU was found to have an intensely collaborative culture, an all-hands-on-deck nature, and a good understanding of their need to be interdependent and collaborative for the sake of the organization and their learners. The importance and frequency of cross-sectional collaboration was a key point in every interview. Many of the participants found this to be a strength of the institution and acknowledged that great lengths had been taken to ensure that there was a culture of collaboration and trust among employees. There was an understanding that they must all be pulling for each other in order to successfully serve their learners. The passion for the learner is intense, and so the will and the want to collaborate and communicate are an important byproduct of that passion, in addition to a clear understanding of successful business practices and systems thinking.

Last, is the analytical approach to ensuring the best decision possible and being able to track real-time information to best assist the learner and to extinguish any such flames that might exist before something else catches fire. Data-driven decision making is built into the culture of the institution. There is a clear need to move quickly in the institution for reasons that support the learner and ultimately to provide competitive advantage, however, moving quickly without the correct information is dangerous and there is an acknowledgment of that fact. Therefore, to the greatest extent possible, studying as many elements of their own actions and the actions of their learners are necessary to ensure an optimal experience and safe continued growth.

Learning Clusters

The second step in the inductive analysis phase of this dissertation involved a blend of coding processes, to include line-by-line coding of the transcripts from the interviews and focus groups, and a cross-coding analysis to develop learning clusters which reflect those codes which
conceptually overlap with each other. The learning clusters reflect a grouping of individual codes. Initially, there were 104 codes across all of the transcripts. After cross-source analysis using the criteria for conceptual overlap (Saldana, 2016), seven code categories were developed to create learning clusters. Table 3 reflects those codes, clusters, and cluster identifiers. The number next to each code is the number of times that particular code was identified across all interviews.

Table 3

Learning Clusters

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Cluster Focus</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committed to the Students</td>
<td>Learner success comes before anything else at Virtual U</td>
<td>Student Centered 45, Student Driven 4</td>
</tr>
<tr>
<td>Committed to the Employees</td>
<td>Employees feel valued, empowered, and supported at Virtual U</td>
<td>Culture of Service to Each Other 1, Culture of Acknowledgement 6, Informal 1, Family 1, Work Life Balance 1, Care for Employees 9, Committed to Diversity and Inclusion 1, Manages Culture 2, Culture of Learning 1, Positive Culture 1, Mistake Forgiveness 1, Mission Aligned 2, Rewarding Environment 2, Highly Engaged 1, Empowered 5, Exciting (environment) 1, Proud 1, Individual Ownership 3, Respect 1, Belief (in org ability) 1, Employee Development 10</td>
</tr>
<tr>
<td>Strong Leadership</td>
<td>Leadership creates a safe, supporting, and encouraging environment for learning</td>
<td>Encouraged by Leadership 3, Leadership Guidance 3, Trust in Leadership 5, Inspiring Leaders 4, Leadership Sharing 2, Strong Leaders 5, Leaders Admit Mistakes 1, Leadership Presence 1</td>
</tr>
<tr>
<td>A Culture of Collaboration</td>
<td>Cross-sectional collaboration is the key to success at Virtual U</td>
<td>Cross-Section Collaboration 26, Positive Tension 2, Shared Decisions 1, Considerate of Others 1, Frequent Communication 1, Chain of Communication 1, Culture of Communication 1, Aligned 3, Possible Silos 1, Balanced 2, Interdependent 2, Culture of Transparency 2, Collaborative 7, Learning Teams 1, Innovation Teams 1, Town Halls 2, Work Groups 1, Upward Communication, 1 Transparent 6</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The Business of Higher Education</td>
<td>There is no question that Virtual U is in the business of higher education and embraces that part of their identity</td>
<td>Business Environment 12, Covered the Market 1, Business Practices 7, Disciplined on Initiatives 1, Quality Products 5, Real Time Saves 3, Analytical 8, Secret Shopping Others 3, Secret Shopping Themselves 1 Student Feedback 1, All Hands-On Deck 4, User Experience 1, Agile 2, Continuous Improvement 1, Experimentation 2, Nimble 1, Entrepreneurial 1, Action Oriented 1, Balanced 1, Managing Change 2, Frequent Surveys 8, Systems Thinking 2, Solicited Feedback 3, Own the Failure 2, Unit by Unit Reflection 5, Personal Level of Care (for customer) 3, Fast Paced 12</td>
</tr>
<tr>
<td>Continuous Improvement</td>
<td>There is an atmosphere of continuous improvement through learning and data driven decisions</td>
<td>Learning from Mistakes 1, Data Driven 7, Accountability 3, Process Improvement 2, Could Reflect More 4, Reflective 5, Non-Traditional 4, Focused 2</td>
</tr>
<tr>
<td>The Future of Higher Education</td>
<td>Virtual U is a shapeshifting organization that is committed to staying at the forefront of higher education through proactive environmental engagement, innovation, and technology</td>
<td>Outward looking 21, Proactive 9, Outside Learning 10, Futuristic 3, Risk Takers 6, Innovative 5, Innovation from all Levels 1, Forward Thinking 3, Outside Training 1, Open Minded 1, Disruptors 1, Creates the Future 1, Continuous Research 1, Relentless Reinvention 1, Shapeshifters 1, Research and Development 5</td>
</tr>
</tbody>
</table>
These narratives provide general descriptive insight of the learning orientation of Virtual U to be forward thinking and innovative, committed to student success, driven through dedication to their employees and their professional development, and by means of business-style analytics for superior results and quality services. Codes with the highest use were student centered (45), cross-sectional collaboration (26), outward looking (21), fast paced (12), business environment (12), outside learning (10), and continuous improvement (10).

**Deductive Analysis to the Schwandt Organizational Learning Systems Model**

The next subsection reports on the findings when the researcher brought together the findings from the contextual analysis (document review and observations), the learning vignettes and learning clusters (interviews and focus groups), and the researcher journal (reflective field notes). As the findings in this section are vast, Table 4 is provided below as a means to organize each learning system theme and learning clusters within it, in this section.
Table 4

Learning System Findings

<table>
<thead>
<tr>
<th>Learning System Themes</th>
<th>Learning Clusters</th>
</tr>
</thead>
</table>
| The External Learning Portal – Adapting to a VUCA World    | • The Leadership Portal - External Focus to Future  
• The People Portal - All Members Attentive to Environment  
• The Structural Portal - A System Designed for Continuous Scanning  
• The Industry Portal - Changing with the Market  
• The Industry Training Portal - Learning from Industry Partners  
• The Competition Portal - Understanding Competitors |
| Learning Though Action & Reflection at Virtual U           | • Business of Higher Education - Response to Market Changes  
• Blending Business and Academics  
• Action through Data - Down to a Science  
• Growing through Mistakes, Taking Risks, and Experimentation  
• Goals and the After-Action Review |
| Learning Though Dissemination and Diffusion and Collaboration at VU | • One University- System Design for Fluid Movement  
• Collaborative Strategic Plan - Ingrained in Everyday Work  
• The Importance of Interdependence & Cross-Sectional Collaboration  
• Continuous Communication - Coordinating Action |
| Meaning Memory at VU – A Culture of Learning               | • Modeling the Way, Starring at the Top - Empowering Learning  
• Employee engagement in ongoing meaning-making  
• Developing a World Class Workforce  
• Workplace Climate - Team, Service, and Integrity  
• Learners at the Center of Everything |

The External Learning Portal – Adapting to a VUCA World

By all accounts of this study, in every source of data, Virtual U was found to be endlessly scanning their external environment. VU placed extreme emphasis on all employees being engaged with both the external environment and their learners. The analysis revealed valuing knowledge from the external environment to be used to create optimal educational products and services for the needs of learners today and in the future. There is a notion in this institution that they exist in a VUCA world that they must be able to survive and be successful in. VUCA is a term coined after the 9/11 terrorist attacks that refers to an ever-changing and unpredictable
world with sometimes immediate disruption. VU is preparing themselves, looking ahead to anticipate those challenges and what those might look like.

“We use the VUCA lens to imagine the challenges and opportunities facing future learners. We are preparing for the Class of 2030, the oldest of whom are part of Generation Z and the youngest of whom do not even have a name for their generation yet. By orienting ourselves around the needs of the Class of 2030, we can strategize and prepare for teaching them in a world dissimilar from the existing higher education landscape.”

There is nothing short of an obsession and a relentless effort to get a head of the times, as if there is a keen awareness that monumental change is coming to the world and higher education as it is known today will not be present 10 years from now. Large portions of the strategic plan are centered around gaining this knowledge and acting on it:

“To remain relevant in an uncertain future, Virtual U must be agile enough to respond, adapt, and transform with the ebbs and flows of forces and challenges beyond our control.”

“However, preparing for future forces could prove more beneficial in the long run despite potential short-term pains. Looking forward, instead of to the present, can position Virtual U to continue its growth trajectory. This could even mean accepting disruption to the existing industry and an immediate loss of enrollment in exchange for possibility of a large enrollment in the long run. We have the opportunity to look at scenarios and be prepared for multiple realities that bridge the gap between concern and hope. We seek to better understand what external forces are most likely to disrupt the lives of learners in the future. We are identifying and monitoring signals, forces, and challenges that are indicative of impending changes that may impact current and future learners.”

**The Leadership Portal – External Focus on the Future**

In this institution, it starts at the top and that example and inspiration cascades to the bottom and into the effort of their services. Multiple participants of this study in addition to others around campus were inspired by the president of the institution and his visionary presence.

“Obviously, our President, is a visionary in the field and is continually thinking about where higher education is heading, and so we have incredible leadership in that way to keep us astute to things that are coming up. The team that he builds I think is also very visionary in that aspect that they're continually looking out as opposed to what we did
today, is not necessarily what we need to be doing tomorrow. That's just unique in our personalities here you know, in terms of who we bring in, and really thinking about who is doing this.”

“The president is always looking ahead and he is tens step head of what is out there. We are always a little bit spaced ahead. We’re right in step with whatever is merging out there in the world of higher ed, and so I have come to trust that.”

“I think here, the culture is such that we are all still trying to keep up with the president, and his leadership team. Because they are brilliant, and visionary, and they can see the future clearer I think, than others.”

“With the president’s leadership, and he's one of these relentless, never sit still, we don't rest on our laurels here. We never say, "hey, look at us, we're the biggest online university in the country, blah blah blah." No. It's always pushing forward to reinvent ourselves, and our VP was at a CRM conference, and he was brought onstage to talk about VU, and the guy interviewing asked a very similar question and he (the VP) goes, "We're always reinventing ourselves because we don't want to get Amazoned." And the guy goes, "Well, there's a lot of universities that don't want to get VUed!”

“Okay so the Change Style Indicator is a simple assessment tool. But it puts people on, it's basically a scale for individuals that are pragmatist that want things to stay the way they are to middle of the road to originators. With the originators being like where new ideas come from, sort of self-explanatory in the name. We are very heavily leaning in the originators, so the idea of bringing new ideas to market... excuse me, heavy in originators in our leadership council. So, the idea of bring new ideas to market or like seeing what is going on in the world, maybe beyond higher education. I know we've worked with Institute for the Future, Bob Johansen's done some collaborative work with the Aspen group and CCL, really trying to understand what is going on outside of higher education, not just within higher education, to help understand how that's gonna inform what the delivery of post-secondary education looks like in the future. I would say that given the sort of like originator nature of that group, they tend to bring a lot of ideas back to the organization.”

This study found that senior level leadership were a source of inspiration and motivational drive to the institution. There was great trust placed in the president and his leadership team, as people stated that the things that he says always come true. They believed him and his team to be authentic in their words and actions, accountable to the goals of the institution, and accountable to them as employees. There was a clear connection that they felt with the leadership team, on a down-to-earth level with them. People called the senior level leaders – including the president – by their first names. Formal rank, title, and status did not seem to be a part of their equation.
The People Portal – All Members Attentive to the Environment

Scanning the external environment is the norm for employees at Virtual U. When prompted about how the institution interacts with the external environment and brings in information, the responses are of expectation, regular practice, and constantly looking to the future. Challenging the status quo is a known value of the institution and people feel expected to challenge that with new ideas and information. Participants described the institution as being very active in their approach to scanning their external environment and thinking into the future.

“I think we're very active. I think if anything this is very, very active. Like I said, you've got the multiple of how information is disseminated and how we do different things, but I think one of the challenges that we've been given is how do we continue to grow? And it kind of goes along with the strategic plan as well and I think that's why we're so active, is that you have to really look at what's going on in the external environment to really understand how you're going to meet that need, how you're going to encourage that growth and stuff.”

“When we were looking at the curriculum and instruction program, one of the things that people were saying, “oh you know this program meets the needs of the students” and I said, “you're right, it does meet the needs of the student, but are you referring to the student now or are you referring to the student down the road?” You know, I said, “because if you're referring to the student down the road, it's not meeting the need.” And I said, “that's where we have to look. We have to look at who is our student going to be not who our student currently is. We can make sure that the program addresses their needs currently, but we also have to look at what they're going to be needing to be able to do.”

“When you think about what’s going on outside, it’s actually the responsibility of everyone in this building to know what’s going on outside. So, there is a constant influx of articles, books, podcasts, videos, interviews; we are getting a constant stream of information from the outside.”

“Then if you start to break it down into the academic sector, which is where I work out of, you have Steve (pseudonym), who's our president of the online stuff, he will disseminate out information, he loves to send out reading articles and stuff, he's an avid reader. He sends out a lot of the articles from higher education, evolution, all those things.”

Not only are the leadership sending out information about what is going on, they are encouraging it and, in some cases, requiring it of employees at all levels of the institution. Leadership at all levels participate in professional development that encourages systems thinking. They are encouraging their employees to share ideas, think of things outside-the-box,
and speak up when there are issues. Whether it be best practices in their fields, challenges to the current system, or greater environmental concerns, the people are engaging their environments in inquisitive ways to improve all that they do.

“He (one of the presidents) regularly says, “There is no room for wallflowers.” You're expected to have a voice, and not just sit and take orders, or not just sit and listen and carry on with your day. You are expected to get involved and actively contribute.”

“A lot of the drive comes from senior leadership, but it's more directional. It's, we need to move in this direction, and they empower the ground-level leadership to come back with proposals and say, "You know what, our LMS is 15 years old, and it's not the consumer-grade experience that we should be providing to our students." So the ground-level leadership is empowered to go and come up with these initiatives and come back to senior leadership for approval.”

“This is the basis of how we operate. People, the employees here are empowered to say, "Hey, I am seeing this huge gap," or, "I am seeing this huge flaw, and here's my proposed solution," and we will pull everybody that needs to have a say in that decision in.”

“The president might be sharing something from the Clayton Christensen Institute on how there won’t be colleges, or half of all colleges will be broke, while the front-line facing workers aren’t sharing that, they are sharing conversations that couple improve managerial relations,” or “ways that you can rethink how to set up a discussion board in the right space, to make it better for students or staff. So there is a level of expectation that everyone in the organization needs to pay some attention to what’s going on outside. It isn’t a written requirement in any job performance, but the expectation is that you’re paying attention, and your sharing back.”

“I get articles almost every day from someone on my teams. Sending it up, “Hey did you see this? Do you know what to do with this? Have we thought about this? The flip side of that is that I am trotting articles that I’m getting around, and I’m sending them back to the teams, saying “Hey, I don’t have time to read this. Could someone digest it for me?” In doing that, I am doing two things. I am setting the expectation that we should read this stuff, and I’m giving team members access to me in a way that feels safer than speaking in a meeting. But what I’m finding is, when I turn that around, when they bring it back to me, they’re bringing it back as a digest, but also, “We could apply this here. this wouldn’t apply here. We have thought about this...” So there is a constant influx of information.”

“Sure. The expectation is that the ideas have to scale. There is an empowerment, that within our realms we can empower people to try things, and test things out. When we think that there's a kernel of an idea that we want to scale, then bringing it up through our project management process to say, "We think there's something to this. Let's load up. Let's go see if we can make this a bigger opportunity than just holding in this one little room.”
It is believed and practiced that ideas and innovation can come from anywhere and everywhere, and from all levels of people within the institution. It is the culture there to capture as many of those ideas as possible to improve every element of the system, no matter the size or importance level (i.e., process improvement, student support, new ideas, etc.). One example of that practice is an idea wall. On one of the walls there is a sign that states “Ideas? – What needs solving? – How can we improve the learning experience? – What’s the next big idea?” There are sticky pads stuck to wall where staff can then come up, get a sticky note and make a suggestion of any kind. On the day of observation, five or so sticky notes were on the wall with suggestions such as improving the user experience with less clicking, intuitive business metrics and dashboard suggestions, addressing issues that beset screen reading, a university wide collection of acronyms, and rows with cubicle numbers to save people time in finding others. When asked, members of leadership on that floor stated that they put the wall up to encourage people to share ideas right when they had them, to be able to get as many good ideas as possible, and encouraged people to put their names on them so that they could go back and talk about the ideas with these people, though it was not a requirement. All the sticky notes that day had names on them. When asked, three randomly selected mid- to lower-level employees about the wall, they confirmed that they liked the wall and many suggestions on the wall had been implemented. There was also complete comfort in leaving their names and wanting someone to come back to them to talk about it and solve the problem or implement the new idea.

In addition to secret shopping other institutions from time to time, many of the full-time staff members of Virtual U are also students or adjunct faculty, and they are secret shopping themselves for process improvement and a deeper understanding of their leaner’s experiences.

“I would say the majority of employees here are also students. So we are experiencing things from the student end and that helps us to keep the student in mind. So, when I sit
down to do an assignment in Brightspace, if I have trouble with something, I think to myself, think of all the other people. So when I come to work and put on my other hat, and have to fix these things, I can see it from the student's side, and I think that's kind of spread throughout the building. I think. So when advisors are dealing with students, they are able to look at it from the student perspective, because they're students themselves.”

“I think it goes hand-in-hand with what I was saying about how a lot of employees are also students, and I think senior leadership recognizes that. They know that there isn't a clear dividing line of, these are people that work for VU, and these are students at VU. I think they understand that we are in tune with our students because we are students.”

Employees are highly encouraged to become students at the institution for free and to take advantage of that benefit. Continuing their education and professional development is a focus and it helps them to understand their learner needs in addition to improvements that may be needed for the courses. Estimations by the focus group members of the number of student employees was “easily 50%-60%.” In addition, one of the executive level leaders of the institution who was interviewed is a student at the institution and has a spouse that takes courses with the institution as well. Using legal names instead of names known at the office, they are able to gauge the institution’s systems, communications, and services from a student perspective and share that information directly to the executive team.

**The Structural Portal – A System Designed for Continuous Scanning**

Virtual U’s emphasis on research and development was revealed in several data sources connected to both people and the physical structure of the buildings. The strategic plan established an innovation center – known as the Sandbox – where a whole unit of personnel focus on research and development for some of the most complex challenges facing higher education, and researching what the world will be like 10 years from now. The Sandbox is a space that was created at the institution to house members of the research and development teams, in addition to being a creative space where some of the institution’s most innovative projects or critical challenges are addressed. The building itself looks like something one would
find in Silicon Valley; walls and tables made of whiteboard, digital screens and projectors everywhere, creative spaces for small teams to work, bean bag stadium seating for presentations, and so forth. The Sandbox is currently researching and planning for the student of 2030 as part of the strategic plan and investigating the use of artificial intelligence.

“What we do is we create a space like the Innovation Center or the Sandbox, where we can do that R and D to really understand, one, what problem is it that we're trying to solve, two obviously is there a solvable solution, three what is the data and the other kinds of things we need to do to help inform that work.”

“That's part of our DNA, which is to actually have that future orientation. So of our five commitments, this is really the long view of higher ed, the long view for VU. It's not just looking out to 2030 or beyond, it's also understanding what are the signals that are telling us, that something is shifting. Someone might say ... here's a great example. Someone might say, hey you know, there's a lot of conversation around AI and machine learning, and VR, AR. Are there implications or better implications for learning or student’s success? We'll experiment with that. In the Sandbox, they'll do a deep dive around research to see what's being said, who's doing what. Then there'll be a piece where we might, as a result of that say, let's test something or let's experiment with something. We may bring in, between our predictive analytics or other kinds of things, we might bring in a small-scale AI process that might focus on can we serve students better using artificial intelligence? If so, and we do no harm, what does that look like? Then we might experiment with it, and if it seems that the data is suggesting yes, then we might scale it up a little bit, a little bit, a little bit. Then we might say, actually you know what, this benefits quite a few, so we'll bring it to scale. The Sandbox will help us in doing that.”

The Sandbox and its research and development teams have been years in the making as a part of the strategic plan of 2018-2023 and the realization that there needed to be a dedicated arm of the institution that was committed to looking out at the world’s changes and remaining at the forefront of that all the time. Members of the institution are convinced – for informed reasons – that higher education in 10 years will not look anything like what it does today, and that they are going to be ahead of what is coming next or even be a part of shaping it.

**The Industry Portal – Changing With the Market**

The university engages the businesses and economy around them in a variety of ways. Partnerships have been developed with businesses across the country to get a thorough understanding of what is currently lacking in their industries and what their projections will be
for the employees and innovations of the future; what fields are emerging and what are the jobs
going to be in 10 years? Goals of the institution are to be intrinsically linked to the industries
around them. To that end, goals include:

“Significantly grow our enrollments through workforce partnerships by understanding
and responding to employer needs.”

“Develop and experiment with course-based and competency-based micro-credentials in
direct response to validated market demand.”

Each degree program is done in collaboration with experts from the fields and academic
course developers to create relevant and meaningful programs that provide the skills of today and
the skills of the future. Members of marketing, accreditation, academics, and other units come
together to create these programs of the future based on what is already available, what can be
done, and what needs to be prioritized. These partnerships have also led to meaningful
employment for their students, partnership, and scholarship opportunities, and a greater
connection to the industries around them. In addition, employees across the institution regularly
attend conferences in their own fields and hold educational and professional memberships.

“We are always listening to the cues from higher ed and now from the greater business
world too.”

“Well, let’s look to our industrial partners and see what they’re doing and bring that in
and see how that works with us. That is happening now. There’s definitely a lot of
learning that is happening from looking at the latest technology and we’re becoming
early adopters of that”

“I think there's multiple ways we're doing that. Certainly attending a lot of conferences,
so, most of our academic team members attend one, two conferences, maybe even more. I
think Julie (pseudonym) probably just did six of them. So, just going out to ensure that
we're kind of hearing about what other universities are doing and who are the subject
matter experts that are being brought in to speak about the needs and bring that
information back. We're pretty deliberate in bringing that information back, and posting it
out to the rest of our team so that they can gain from that knowledge as well so we can
spread it in that way. Our students are working. They're telling us what's going on in their
fields and helping to shape where we bring the programs. As we develop our academic
programs, we bring in our subject matter experts from the fields. They're sitting at the
table with us to inform what's the design of that program.”
“The programs aren't designed based on maybe what our instructors note today. They're based on bringing in industry experts from the field, and sitting down without academic team with a blank slate. What is this program intended to achieve? What's the career outlooks? We bring in marketing career to add to that table to talk about what's happening in that industry, we could offer a program in a certain area, what does it need to cover, what are the topics, and whatever etc. So, that's another way to bring in Rolland, Glisters, and things like that to keep informed as to the RDR is the specialty and receiving communications that way as well. I don't know that it's any one way. It's just ensuring that we're not just focused on what's going on here in this building. We're thinking about what's outside of this building and then having bring it back in.”

Data from the study found that there were multiple ways in which the institution was engaging outside industry to inform the development of course work, understand what they believe the future will be in these areas, find out what students are lacking now, and create employment opportunities for students while they are in school or when they graduate. There is a whole division of the institution that is dedicated to working with industry partners and customizing student’s academic experiences to the needs of those businesses. Participants found their relationship to outside industry to be critical to future development of relevant programs.

The Industry Training Portal – Learning From Industry Partners

Among the goals of the strategic plan are being able to provide the very best customer service and experience to their learners. Examples include:

“Provide the best and most personalized student support in higher education.”

“Offer a differentiated experience enabling us to lock in new learners, new markets, and new models” creating a compelling value proposition.”

“Learn from other industries how to cultivate an ecosystem of innovation and expand our disruptive power into new markets more quickly and effectively.”

Virtual U intently focuses on the first-year experience of students through an analytical lens, studying the patterns and behaviors of students through in-house observation, data, and statistics, in addition to what is externally known about their populations and their backgrounds. Through this study of both the internal and external environments and data points, it was
discovered that students displayed similar challenges to students with disabilities and they sought outside help to make their processes better:

“One of the challenges that we thought we were seeing early on, and we couldn't figure out how to describe it, but for students who come from poverty, or come from disadvantaged educational backgrounds, there's ... They were manifesting with symptoms that we actually thought looked like executive function challenge for students with learning disabilities. So there was procrastination issues, time management, they were overwhelmed. All of the things that you would see show up in a student with a learning disability. Even if they weren't diagnosed with one, or even if they actually have one, same executive function. We brought in Landmark College from Putney, Vermont, which is a school that specializes in students with learning disabilities, and their real goal is to get a student who is coming in with dyslexia, or ADHD, or any of the spectrum, to get them up through the first two years of college so they can transfer to another school where they'll be phenomenally successful. So we've brought them in, and they actually looked at our coaching methodology, for our tutors and our peer coaches, and we re-did our coaching curriculum in their model. So we sent our team off to get trained. We now have that training built in for every new hire. We found that it gave our students about a 30% bump in retention. We took students who, we would have lost, and turned them, and helped them become self-sufficient engaged learners. We did that because we needed the student to get to the bar, not lower the bar.”

In the process of analyzing student patterns and making these discoveries, a robust first year student experience program was designed and implemented to “get students connected to their motivation and to their grit” according to one participant. All students are assigned proactive advisers, coaches, and tutors to ensure that they have the support that they need to be successful, in addition to a first-year course that was specifically designed to teach students how to be good college students (e.g., reaching out to your instructor, time management, learning how to pick important information from readings, reading all the instructions, etc.).

In addition to learning from other institutions of higher education on how best to serve students with specific needs, VU steps up their business acumen and customer service knowledge by intentionally learning from other industries that are the best in those areas. As an example, when they wanted to learn about providing the absolute best customer service, they called the Ritz Carlton.
“There's so many [organizations that they learn from] and I don't know why this one's coming to mind but we went to the Ritz Carlton and we looked at service, what is premiere service? What is outstanding service? How do you treat your people and what do you do to meet those needs at the excellent level? We looked at that for our customer, the student, and we're like, "What is superior service for our student?" So when our students are calling in they're struggling and they're exhausted and they're frustrated with the school and life, we'll send them a care package, our advisors are able to send them a care package. Our level our level of care is phenomenal.”

What is in the care package? Treats (food), notebooks, pens, branded stuffed animals, university swag; there is a whole array of items available to send students. In addition to the Ritz Carlton, the intuition recently worked with Zappos to get a sense of their leadership practices and process improvement. Bringing in information from the external environment about all industries is common practice there. Every participant noted what seems to be a culture of bringing in new ideas, sharing with others, and considering what would work at the institution or not.

**The Competition Portal – Understanding Competitors**

In addition to secret shopping their own services, products, and systems, members of the institution have also done some secret shopping on competitor institutions. Having a large online presence also contributes to misconceptions about being a for-profit institution, and although the institution is not-for-profit and would like to be known as such, they have studied what competitor institutions are doing that might be something to learn from:

“I look at a lot of industries. I look almost anywhere but higher ed. Since I find so few people in higher ed are anywhere near where we are. So, it's really not all that helpful for me to look at higher ed. The places where it's fine for me to look at higher ed is things that are related to are most traditional population. So, if we have a fire on campus.”

“I will say, I think we have learned a lot from the for-profits, but I think when we say that it can misinterpreted. What I actually think is we strive to learn the best practices. So, for-profits did a lot of things to really prey on students, but they also reached a population of students that otherwise didn’t feel like they had a place in higher ed. I think when we did was ask what were the things that they did that helped those students see themselves in higher education? So, let’s do those things. Let's do, if we walk them through a consent form, and have them click on the box, and that means that we can chase down their transcripts, and that means that they don't have to chase down their transcripts. Which if you think about a working parent, having a child, that's a huge hurdle for them to get that. Registers only open, register I don't even know what my register is, they're only open to
four o'clock, I've got a job I've got to pick up my kids. They're not chasing down their transcripts. That's one of the things that the for profits are doing.”

There are many ways in which VU engages the external environment providing many portals for new information to flow into the learning system. The purpose of the environmental interface subsystem is not the pursuit of particular learning goals, but is rather a means to meet and understand environmental changes as they occur over time. This is aligned to VU’s institutional strategic goals, which is to have the greatest understanding of the massive changes that are informing and impacting higher education in America; those changes will dictate their next moves.

**Learning Through Action and Reflection at Virtual U**

The action and reflection subsystem represent the activities and actions that create new knowledge at Virtual U; this includes how and why action are taken, the mechanisms through which goals are achieved, and the reflection on actions that fuel learning to improve future processes. The action and reflection subsystem is where many of the changes to an organization’s code are tested and enacted; through trial and error, through experimenting and studying its consequence. The actions taken in this subsystem include deliberations, meetings, decision-making processes, group interaction, experimentation, and reflections. The behavior of this subsystem focuses on goal achievement in both a performance nature and learning nature. By all accounts of this study, in every source of data, Virtual U was found have a highly collaborative and data-driven environment that brought people together from across the institution to solve problems and create optimal learner experiences with business like acumen. It was evident that VU was in the business of education, where risk and experimentation have become necessary to create the superior products and services that will be necessary to educate learners of the future.
The Business of Higher Education – Response to Market Changes

VU’s environment, culture, and practices are such that education has become a business. There is a unique blend there, which allows learners to be served in the most efficient way possible, while also receiving quality educational services. The thought of education as a business and students as customers has been a challenge that continues to threaten higher education. All sources of data from this study present the use of business practices and a mindset that views their institution as a business that sells high-quality educational services. There is no indication that the term business is a problem, but rather, there is an intentional effort to seek business solutions for learning.

“That transition to being more of a business model started at least more than six years ago, with the president at that time, who didn't have an academic background. He was totally business. And that's how he established the college. And I think from his point of view, was that to create the place that he envisioned, that this was gonna be set up as a business, even though we were also kind of using academic terms. But now has been, you said, that line is blurred about academic business. I think we're kind of a combination of the two.”

“Specifically, to help grow at scale, by the president. And, really, I'd say his vision of treating the college like a business is”

“Right. But I think, too, what's unique about it is that, even though, yes, we're talking about this as a business and our customers and things like that, and I think there's the want to maybe stay at that sort of sterile, removed environment, I think in conjunction with the fact that we operate like a business, our customer, the student, is constantly at the forefront. I can't even explain how constantly it's at the forefront of literally everything that we do, always goes back to, "Is this is the right thing for the student? Are we doing what's right and in the best interest of the students that we're serving?" I think that is where the line between academia and business is really well intersected, cause I don't think everybody could do that.”

“I don't that is a model that most schools could follow. It would either be too much one side or too much to the other, where I feel like we found the balance. And that is putting student first, but doing it in a business- like way.”

“We are more nimble. So, from soup to nuts, it's designed to be business like nimble, and with power at the board and the senior leadership level. As opposed to other higher education institutions where faculty have a lot more power. Campus, the campus unit is
quite different. The faculty are, some of them are tenured and they do have a great deal more power.”

“Some of our most traditional in the on campus might, but even there I'm gonna go with, it's such a student focused place, there's such a sense of, even on campus, it's kind of college for those that didn't think that college was a guarantee. Or didn't think that college was for them. To serve that population you have to extend a hand. You have to reach out. So, I think even if they might not like the idea of customers, they understand the need to embrace them. And service and support to those people. They may not like the word but I think they've bought into the idea. I would say when you look across our adjuncts ... Well, a lot of our adjuncts aren't full-time faculty. A lot of them are professionals working in their industry who just want to do this on the side. So there's a lot of people who just do it, but when you have people who are working for you online who come from other industries, they're often not bothered by the word customer.

**Blending Business and Academics**

The study analysis revealed that Virtual U’s academic and business units are able to work together to effectively coordinate their efforts to produce what academics considered quality programs and what business units considered to be meeting the needs of the market and their customers. It was acknowledged that like many business units and academic departments, a tension can be present in coming to the right solution, but that VU has embraced this tension as a means of keeping them “honest” as one participant noted, to the quality of the curriculum and to the learners. Everything is done in collaboration to ensure that the learner, whom they deemed to be the “North Star” was always getting the best product. This means that admissions, advising, and instructors are included to speak on behalf of the learners and their struggles, in addition to course developers, marketing, and experts in the field outside of the organization, among others, that come together to create a high-quality product (course) with everyone on the same page, and an understanding of how to best support the student. Examples from the data include:

“For example, I know when we're designing our programs, we have our instructional designers sitting at the table to hear from the experts themselves. We have marketing sitting at the table so that they can understand what's important. We're kind of organized by curriculum area, so liberal arts might be one of our curriculum areas in there. Getting with our advisors, who are on the phone all the time with the students to care about the feedback on the programs and many of the students are working in that field. So they kind of bring in that information then that way as well.”
“I think that we do work really closely together. For example, academics and marketing. So we're at the table to decide priorities on which programs we're offering, when we need to update those programs, lots of conversations about in what order do we take up that work. Marketing sits at the table when we are actually deciding the programs. Academics has the privy to spend more time on the contents, and so sometimes you have to work much faster than a traditional college would be in launching new programs. But even still, an academic would like to take a look all around the world. A stellar course, you know. And obviously they can't do that. So advising and ... so our academic group is split into teams. For example, Le Bart's team, so they're continually working with advisors to understand the students, where their challenges with those courses in that area, so I think that's pretty good.”

“I think we've grown to get to know each other, we've grown to get know (marketing), they've gotten to know our programs for the various verticals and stuff that we have here and stuff, but the same time, we've had to get to know what it is that they're trying to accomplish in their sector, because marketing is not only about, as you know, it's not only about advertising a program, there's all the different components to it and stuff. I think it's a mutual collaboration, that's the way I look at it, it's a mutual collaboration where we're constantly learning from each other and I think that's the key.”

“It could eat each other alive. And yet, we have found through that our evolution, that we have ... It's a balance, like almost a teeter-totter. Marketing brings forth program ideas, the big thing to have a viable space in the market, right? You think there's a market here for this. The academic team doesn't have to worry about the market viability. The academic team has to figure out, "Is this something we can competently teach online?" Right? If we think we can teach this online, and marketing thinks there's a good market for it, we could move it forward.”

Multiple data sources allude to the fact that the relationship between business units and academic units is one of importance and collaboration, to ensure that there is a balance between academic needs and best practices in delivery to the learners and the market at large.

Action Through Data – Down to a Science

Findings revealed that Virtual U placed heavy emphasis on data-driven decision making for enhanced accuracy, analytical insight, and greater understanding of all that they do. The commitment to using data is found in the strategic plan, in the organizational value statements, institutional core competencies, in professional development materials available to everyone, and on the signage of the buildings. Institutional materials and the strategic plan state:

“We use data to derive a better understanding of our learners and our institution. Understanding which metrics matter along the learner life cycle is critical. We measure persistence, retention, learner success, learning outcomes, and numerous other metrics.
that provide daily insight to learner-facing teams on how to prioritize goals. Through data analytics, we derive a deeper understanding of the learner experience.”

“Strategic planning will be done through the use of both quantitative and qualitative measures. These may include shorter and more predictive time horizons and design sprints, and use of algorithms, blockchain technology, and quantum computing to accelerate and improve accuracy.”

“Digital twins and simulation tools will enable the creation of alternative versions of our organization for each scenario or reality as organizational operations that can be experienced for days, weeks, or months at a time. In effect, the simulations could create four distinct versions of VU, each attuned to different environmental conditions. Since each of the four scenarios could exist simultaneously somewhere in the world, each alternative organization could be optimized to thrive under prevailing conditions.”

“Exhibit Grit: We are tenacious, persevering, never cut corners, and always maintain a laser focus on the details.”

Using data is now built into the culture of decision-making behavior at the institution and everything from learners not turning in a single paper in a class in a nonpar report, to the composition of the student body in one of 10 created personas, to staff satisfaction, everything is measured and analyzed. The smallest decisions in changing rubrics, to the largest decisions covering creating an entirely new engineering program, are based in hundreds of data points. Computer systems can run thousands of reports with data sets on nearly anything they want to know about in their ecosystem.

“We have weekly student success updates that the deans and team leads act on, along with monitoring rubric misuse, missing grades, grade discrepancies and faculty discussion board activity.”

“We have metrics and KPIs related to success rates, graduation rates, persistence and retention that leadership monitors at the program and vertical level, along with marketing metrics such as melt, leads and program changes by cohort.”

“We have student learning data that is collected from rubrics to assess course and program outcome achievement term over term.”

“If they're not submitting, we know right away from the first week. We can track if they submit anything, if they read an article, if they submit a discussion post…”

“We have faculty performance data to ensure faculty are meeting the requirements of their teaching assignments.”
“We collect and review student satisfaction surveys and course related requests to inform course improvements and curriculum design.”

“We have ten different personas that they went out and they researched our current student base and there's ten personas they came back with that these our typical students, these ten personas and then we market to those ten personas. Might be a military student, and I'm like simplifying this cause these things are like written up in detail of what kinds of things about them, we know everything about them, we have like sheets that cover exactly what the student entails.”

“Something I wanted to add in the conversation is, we're not confused at all about who our students are. They're underserved and underrepresented. So because of that, because we're not trying to mix and match, and we're not trying to be this and that, we stand very firm about the type of school that we are. And because of that and knowing who the student is that's coming in, the training platform for admissions and advising is very tight, but they have that down to a science. And they've considered every possible scenario for the types of students that we're supporting.”

“You know, it's certainly the research that's done. So, you know, we're now putting a ton of money into engineering programs here. We had no engineering programs, and in fact, at the college that we, that we saved the students from, Damon Spencer College (pseudonym), they had an engineering program, and we kind of inherited that. And now we're putting millions, tens of millions of dollars into that program. Because we see it as a demand, a huge demand going forward for engineering students. So that's one example of where the research showed we should be doing this, and so we're doing it. We looked into getting into the high school business, and the research showed we shouldn't, so then we backed out of that.”

The data in this study shows that VU consistently uses data to make informed decisions at every level of the institution for the best learner experience and future planning.

**Growing Through Mistakes, Taking Risks, and Experimentation**

Many participants attributed VU’s success to stepping outside-of-the-box, challenging the status quo, trying new things, and not being afraid to fail. This sentiment runs through interviews, the strategic plan, professional development curriculum, and the overall culture of the institution.

“We're not afraid to break things, and try things, and I don't know, kick things around a little bit. So, there's kind of a sense of not being ... and then we're kind of risk takers. And so, I think that that feeds this general culture. Ultimately, the president always says we're in the business of hope, and I would say that that is probably the strongest thing that builds our culture here.”
“Being risk takers is a part of the DNA and because of that, there is a high tolerance for risk. The president has publicly acknowledged times when “we almost broke the university.””

“The other thing that we can do is we can experiment. We've got a couple of experiments that are running right now that most institutions or organizations, again don't have the capacity to do, but we can structure it in a way that helps us to understand are we doing what we intend to do, is this program or is this experiment really showing results of efficacy and the other things? Is it sustainable, is it driving the outcomes for students or learners or others in the way that it had intended? Then if we get to the point and we realize that yes, then we make a decision as to do we stand it up, do we move it out of experimentation into incubation. And then from incubation, what are the learning? Then do we go from incubation to scale?”

“But, I think there's a lot of forgiveness. Lot of accountability. I mean, if you raise something up, and you're working on an issue, I trust that you're going down that path and that you're going to do it. So, that runs across the board. There's a lot of forgiveness around things like that too. And with that there's still a lot of teamwork around fixing it, as well. It's never like, "Oh, that's not working. You have to fix that yourself.”

“Sometimes, yeah. It kind of depends. Or we roll things out to ... we'll do a pilot group. There's a lot of piloting, testing, trying something with a group of students first, get their feedback, survey. Any kind of big software changes. So, we changed from Blackboard to Brightspace. And that was phased. So, it was done with a pilot group first, what was their feedback? It was done gradually with students for ... so we kind of rolled it out slowly and then asked for feedback from them as we rolled it out. Social media gives you real time feedback at all times.”

Data from this study indicates that people feel psychologically safe enough to try something new and are encouraged to bring up ideas and grow them. This culture has grown out of leadership ensuring that all employees feel empowered to question the system, make decisions to the benefit of the learner, and relentlessly pursue better options. VU is currently in the process of experimenting with artificial intelligence (AI) in an effort to better understand in what ways they can use this technology with their learners and in their business practices. There is a goal to be using virtual assistants, bots, avatars, and multiple-reality simulations as integrated elements of their day-to-day business practices in the near future.

**Goals and the After-Action Review**

There is inconclusive or inconsistent data regarding the reflection on failure at the institution and how those mistakes are processed to learn from in the future. The two sentiments
that run through various interviews are that, one, the institution moves at an exceptionally fast pace (which was acknowledged by all) and that because data is tracked in real-time, they are able to see when something is falling off track and not going as planned, and are therefore able to divert and change directions quickly. This has been referred to as a “real-time saves” in the coding. Therefore, the mission in this case has not failed, but simply changed. There may be little coverage of why it was failing, but simply that it has to be fixed…now. The second sentiment presented is that in fact, on many levels or at least in some units, there are incineration processes or postmortems that are being conducted to extract data out about what went wrong and what can be improved for next time. The following quotes express these two different sentiments.

**Sentiment One – Move at the Speed of Light and Pivot**

“We also move really fast and so there’s a general awareness that we don’t take the time to debrief.”

“Well I'm sure it happens all the time. I think we move so fast that there are things that might not take off that have potential but we're moving at the speed of light. I imagine the way this place works that if somethings failing, we're gonna take what's working, twist it and move on. We'll take a program or an initiative, if it fails, if it's not generating, we don't give it a lot of time, we will pick it up and adjust it and shift.”

“We don't sit with something a long time, so if it's not working, the nature of how we work, we just pivot and we get another team in or we're like "What's not working?”

“I think we move really fast. I don't know that we do as much as we could, reflection wise. I would not be alone in saying that, and I think there's a lot of effort here where we've gone through this, we've gone through a couple of rounds of things where I think, leadership wise, we're kind of hitting the pause button and saying, "Well did we stop and learn enough? Did we have enough reflection?" So there is some efforts to be better at that. Cause I think generally that's an area where we have not been as good as we could be. There's room for improvement there.”

“I think that we move incredibly fast as an organization, it's something that we pride ourselves on and I think that it's like... should you, if you polled around this specific question, this pace of the organization, it's almost a point of pride how fast we work. The flip side of that is the challenge of not having time and space for reflection and being reflective. I think we have reflective individuals that personally have a desire to learn, but I'm not sure if systematically we've put in place a way to be reflective. Now I know some teams will do after action reviews, right, after initiatives. Or pilots to see like "okay, what
worked, what didn't work, what can we improve?” But to say, I have not seen like large post-mortems on initiatives that have not gone the way that they should go. And we really don't even have a team necessarily with that as they’re charge to lead, if that makes sense.”

Sentiment Two – Reflection Is the Norm

“"I think there's always reflection on all the projects, no matter if it's failure or success. And I think it's always, "okay, what could we have done better? What could we have done differently? What didn't work? What worked? “And I don't think there's a difference between the failure or success in this case. Again, there's always that reflective piece at the end where everybody is candid, and everybody's truthful, and they say what happened and then what they felt. We've done that. Even with our reputation, we've done that. We went back to everybody and it's like, "okay, what worked? What didn't work? What shouldn't we have done different?” We did. I think all of the big projects have that incorporated in their plan. I can't tell you about smaller things, because everybody has a smaller thing happening, but I don't know. Yep, there's plenty of reflection.”

“I talked about experimentation, incubation, and all of that, there's constant assessment that's happening with that. One of the things that we actually build into the process are these timelines with benchmarks. And they may move a little bit for us to gain clarity on what, if any, success we've made. One of the things that you'll actually see in the decision chart is if the answer is yes, then it hits this trajectory which is. is it scalable. If our answer if no, that it's not working, we actually have an incinerator. But here's what we do, we'll put it in that incinerator. And in that incinerator, what we're doing is we're trying to extrapolate everything that we can so that we understand what was successful, what was failure, but more importantly what can we learn from what that product, process, or thing was, and then we burn it. We actually create a process to end or cease and desist, or whatever you want to call it, to actually eliminate that so that it's not still there.”

“We will spend what we call deep dives, which is you get chunks of time heavily facilitated to incinerate something because we want to pull ... it's just like that lemon or that orange, you're trying to squeeze every bit of juice out of there so that you know that you've got the most out of it that you possibly can get before you throw it away.”

“I think at a small scale certainly. Something in IT goes wrong, we do a post mortem on that. You know, what went wrong and why, and you know, how do we keep it from happening again? But at the university level, I don't know.”

There are two clearly different sentiments that run through the organization as to if there is adequate or systemically consistent after-action review processes. This may differ greatly on a unit to unit basis, or what constitutes “reflection” may vary from one person to another. There is indication that reflection is occurring in parts of the institution.

Study findings indicate that Virtual U is an action-oriented institution that makes decisions for their business based in data with the best interest of the learners and the future of
the university in mind at all times. The concept of being a business is not an adverse thought, but instead has been attributed to the large-scale success of the institution. Risk is an acceptable factor when trying to accomplish the goals of the strategic plan and the mission of the institution; there is a culture of learning, the constant monitoring of data, and high-risk tolerance. Data on reflection efforts for future learning indicates inconsistencies in those processes from one unit to another.

**Learning Through Dissemination and Diffusion and Collaboration at VU**

All sources of data from this study indicate strong dissemination and diffusion efforts of mass communications, collaborative strategic planning, regular practices of cross-sectional collaboration as a best practice for daily work and major initiatives, and a culture of inclusion of units, personnel at all levels, and thoughts and ideas. From stand-up meetings and morning scrums across projects and solicited feedback on large initiatives, to major town hall meetings on the strategic plan and meeting goals, there is a clear understanding that everyone must be on the same page at all times. The left hand must know what the right hand is doing, and in order to be successful the first time, it is critical to ensure that everyone who needs to be at the table is present.

The strategic plan addresses professional development curriculum for all levels, and other official materials explicitly address the need to ensure that members of the institution work across boundaries, vertically and horizontally, to ensure success in their efforts to provide the very best learner experience and exceptional outcomes. Some of these documented sentiments include:

“Empower our people to work across boundaries effectively and drive higher levels of direction, alignment and commitment.”

“Changes in how organizations function will require a disruption of classic hierarchal organizational charts and the emergence of shapeshifting organizations.”
“Build a framework to empower decision-making for learner facing roles.”

**One University – System Design and Fluid Movement**

The One University initiative that began in 2015 was an effort to ensure that all elements of the institution were moving together, toward one mission, and supporting each other in their interdependent efforts. Given the fragmented nature of a traditional brick and mortar campus, a large online division, and a Competency Based Education (CBE) division, institutional leadership felt the need to ensure that everyone was pulling in the same direction and had a clear understanding that all elements of the institution were necessary, interdependent, and responsible for ensuring the success of the overall university. The nature of each division serves a very different purpose, and in some cases, different populations, which makes it easy for those elements to operate in bubbles outside of each other’s presence, which could result in further fragmentation and deterioration of the whole. As a result, the One University initiative was born to ensure that everyone was pulling in the same direction, creating a positive and consistent experience for learners, and long-term success. Professional development initiatives have been centered around the One University concept, bringing people of all levels together regularly for training on how to ensure that they are working across their boundaries in collaboration for the best result.

“In order to achieve a rapid scale, sort of like the disruptors dilemma, right? The global campus was then COCE was really sort of just given free reign to do what it will do unencumbered by like the requirements of university administration support. Or the university college. So it really 1. I thought allowed us to do some great stuff, but 2. Resulted in a really independent culture where like university campus at its college did its thing, COCE did its thing, like never the twins shall meet sort of stuff. And I think that our leadership team, I think very rightly in my perspective, realized that for us to achieve our next evolution and scale, we are really going to have to be more inter-dependent and not so siloed in our business units. And that is where the One University initiative was born. Out of this idea that we need to as a culture, be far more inter-dependent than independent. So there's been work, right, to advance that, the competencies, the One University core values. So I think that the Pinnacle is another example that purposely cohorts that are based of individuals that are across the university, across business units. Um, Peak is another evolution of that. So I think that as we are working to become a
more inter-dependent culture, it's gonna take time. You can't turn a crew ship or a battle ship around overnight.”

“And individuals who are rewarded and gained leadership positions based on being exceptional in an independent environment are now operating in an environment that is shifting to inter-dependency and where you have to sort of slow down to speed up and make sure that everyone that's supposed to be at the table is at the table before decisions are made and you get down the road and realize that you have to back up to get the right people on board again. I think that we are in the process of evolving our systems and processes and really our mindsets, which to me is the biggest thing right? Shifting mindsets to being a more inter-dependent one university frame, I think our leadership team has it, right, they've been talking about this for a couple of years and the process of working with CCL (Center for Creative Leadership) and developing a strategic plan. But for the people the level below them and certainly below that, we are charged now with operationalizing the idea of being more inter-dependent. It's really, I think, it's hard to get to the place where you say we have to be more inter-dependent, but once the decision is made at the leadership council level, it's very easy to say "Okay we're going to be more inter-dependent.”

“In our past, the colleges were more distinct, so there is planning going on for the online college, and then there's planning going on for the more traditional campus. And it was kind of more separate and they had their individual strategic plans. As our students are now shifting between, they don't just take online, they don't just go on campus, they take a mix now. So as our students are shifting, we know, we're getting to be more aligned together, so the planning also mirrors that. So it's a more collaborative effort.”

Data from the study shows that Virtual U is making a concentrated effort to ensure that all units are working together and not in isolation, or even against each other. There are 27 One University core competencies that all professional development trainings have been built around, which are centered in ensuring that everyone is considering the entire system and working together to make sure it is successful.

**Collaborative Strategic Planning**

The current strategic plan is the culmination of more than two years of work and many contributions from staff at all levels across the institution. It is not a document that is created as a matter of formal practice, but is a document that is viewed and discussed daily. In this institution, people put the elements of the strategic plan on what people refer to as “white sheets,” in addition to their unit goals that are aligned to all elements of that strategic plan on “blue sheets,” in each of their cubicles. On every floor, in the sea of cubicles, there are white sheets and blue
sheets; there is the strategic plan. When asked if it was a requirement to hang them, multiple participants confirmed that it was not a requirement, but rather a regular practice so that they could reference these commitments and their goals regularly. All that is done is aligned to the plan for the learners. The plan was put together in various phases over two years. At different stages of its development, a number of people were involved in its creation from top to bottom.

The process is noted by multiple participants below.

“The way the president works is ... every ... he doesn't do anything as a dictator, you know, he always involves people. So strategic plan wise, it was sending out a notice saying we're about to embark on this journey, our last strategic plan was 2013, and it's time to come up with a new one. Raise your hand if you want to get involved, we're gonna form work groups, and each work group will take a different piece of the plan, and we'll develop it that way. So that's how he does things.”

“The strategic plan is worked on by teams of leaders across the university at all levels, which includes executive levels leaders, senior level leaders, middle management leaders. Things are very transparent here.”

“As they're creating that strategic plan, they are sharing it out with us, you know and when I mean sharing it out, I mean sharing it all the way down, you know what I mean? It's being shared and they do through that either the town hall meetings or the ... what do you call it ... the retreats, they have as well. They've done it, a lot of times, it's when they'll show drafts of it, you know what I mean?”

“So yeah. You had your voices there from advising and admissions and everything and I call it a retreat, this year it was a single day thing, but we were all in the same room together and going through when the strategically draft of the strategic plan was presented and stuff. And so yeah, everybody's voice was there, people were able to ask questions and stuff and so yeah, it was well represented and stuff and then my presumption would be that they then took a lot of that information and I would say they went back to their groups and then had the discussion because that's what happened with us, you know what I mean?”

“I think everybody has that belief that they are part of the strategic plan, they are part of the success of the strategic plan, that they are what their efforts put forth and stuff like that.”

The strategic plan went through many iterations and processes where the feedback of everyone at the institution was solicited and where leaders led thoughtful conversations around the commitments of the strategic plan, and how they would bring it to life in their own units. Data from this study including formal interviews and informal conversations indicated that all
the study participants and other members of the institution felt included in the process of creating that plan and were highly bought into what the commitments and goals were.

**The Importance of Interdependence and Cross-Sectional Collaboration**

Information sharing at the university was considered vital by all members who were interviewed. Participants agreed that this was a strong suit of Virtual U, which was to bring the right people to the table from various units and levels of personnel to ensure that the best result came from their collaborations and efforts. The strategic plan, professional development curriculum, and other documents at the institution highlight the need understand their interdependence and interoperability.

“Virtual U’s leadership strategy is based on the ideas of interoperability and interdependence as the foundation for driving scalable, innovative growth in alignment with the mission and the vision. With this model, initiatives and tasks are “pulled up” based on urgency, and the key to success is the ability to be agile and responsive and to apply resources where needed. Doing so means operating and functioning cross-collaboratively and in ways that promote learner success.”

“During VU’s time of exponential growth, the university was best served by developing an independent model where departments and entire business units were free to work among themselves to build their models. Now, in a time of sustaining growth and planning for the future, VU is building an interdependent model where shared exploration and the emergence of new perspectives are critical to surveying the existing landscape and making projections for the future. VU aims to incorporate agility and optimization across the university as part of its interdependent model.”

Cross-sectional collaboration was acknowledged as being important to all study participants and was considered to be a strength of the institution. The spatial configurations of multiple buildings were carefully considered to promote a culture of communication and transparency. In multiple buildings, leadership sat among their personnel in cubicles and there were floors of people in open spatial configurations. Some buildings had no offices, only meeting rooms for everyone to utilize, with the exception of the university president, who maintained an extraordinarily plain office with doors that remained open all the time. Spatial configurations provided many creative places for small teams to have stand-up meetings and morning scrums, which have become a
best practice of people across the institution that meet every morning or a few days a week to work on projects and stay on the same page. One of the focus group interviews during this study occurred during a morning scrum meeting.

“As far as working across collaborations and stuff like that, yeah without a doubt that's needed and if you just, I mean for example, just what's needed to accomplish a development? If you just look at what is needed to accomplish the development, you've got individuals from the learning sciences teams, you've got individuals from the learning resources teams, you have individuals from recruiting, you have individuals from marketing, you have individuals from academics, advising, all of these various entities are there. So you have to work across each one of these departments and stuff and it's not only about, okay we're having a meeting and make sure all the stakeholders are together and stuff. That's not it. What it is, is like, if I'm looking to develop a course, I want to make sure that that course is going to be able to really meet the student need, not only academically, but I want to make sure it's marketable. So I'm gonna go down, I'm gonna have those conversations with marketing and vice versa, they're gonna want to find out how they're best gonna market it. I'm gonna also want to connect with advising to make sure that they have an understanding as to what direction we're going so that they can support the student. So when the student comes in, that they're gonna be successful in this course. So I mean it's not a one and done type of conversation, you're constantly revolving around, going to various departments and stuff.”

“It's intense. It's fast paced. It's creative. It's very interdependent, lots of working with many different people all the time, you never feel alone when working on something, I feel like I can reach out to any part of the organization. It's accessible.”

“We have working groups that specifically have many different stakeholders, representatives as possible. I’m working on a large initiative right now that’s grounded in the team that I manage, but I have about 12-15 different operational groups across the campuses that meet bi-weekly.”

“We cannot have silos, we just can’t. I would say that when we’re effective and successful it’s because we haven’t had silos. I’m sure there are from time to time silos, and we do our best to sort of break those down and keep them open.”

“It’s really important because anything that we do can tax another area and any mistake we make is usually because we haven’t thought about who needs to be at the table and then figuring out how that can have a ripple effect.”

“It's something that they're doing more and more. I see it happening more and more where they're pulling different people throughout the organization and there's a project that needs to get done and you come together and you work together; so the hierarchy's taken away.”

“The structure of this building was set up to encourage communication. You will see, we have open space and that was intentional. That everybody, you know, our chief academic officer is in open cube. And that's very intentional to foster communication. We have
conference rooms with doors, you know, but otherwise it's very open. You can see that on every floor. And that was a very conscious decision when we first moved in here, and that was a tough transition for some who came over from a more traditional academic campus. We had lots of conversations about doors and no doors and all that, but in the end, it helps to foster communication and collaboration when different teams have easy access.”

“You'll see, about 18 months we converted from a waterfall methodology to an agile methodology with our product development course design. So, you'll see each of the teams. So like, there is a daily scrum for the cyber security program that we are developing. Daily scrum for some of our CPE programs that we are developing. So, while it is hierarchical, like we have one as a team, there are project-based scrums. And those, we can get you in some of those if that is something that you are interested in to zero in how those work. But, it's proven to be a great technique to increase communication across teams, to get on the same page, to make sure that we're all aligned. As the folks in the room will tell you, priorities change overnight. And so, coming in the next morning and being able to sit down and say, "Hey, got this email last night. This is now a top priority." While it is kind of frustrating, it is important that we are able to connect as a team.”

“So we have a traditional hierarchy org chart. We have that. But lines on a chart don't mean anything around here. Meaning I can walk into anybody's office, anywhere on campus or anywhere in the university, and I don't even know them. I can just walk in and say, "Hi, do you have a minute? I have a question for you.”

Because of the cultural nature of cross-collaboration at the institution, large projects such as a change in the learning management system (LMS) a year ago and an impending change of the customer relationship management system (CRM), scheduled to launch just 3 days after the study site visit completion, have been described as “impressive” and “a nonevent.” The change of major enterprise operations systems in any organization are known by various consulting firms to take several years to complete. The staff at VU changed their LMS and their entire course offerings on it in just 4 months.

“The biggest compliment was, it was a non-event. When we flipped the switch, a year ago November, last November, it was a non-event. It went so well. The planning, the implementation, was done so well, in a very tight time frame. It was a non-event.”

“That's the way it is here. And the president calls this a shape shifting organization, I don't know if you've heard that term yet here or not. So that's how he looks at it. You organize to accomplish something, and you change to organize to accomplish the next thing, etc. It doesn't matter where you fit in the organization. And a good example of that is Bright Space. We said we're gonna implement Bright Space in four months, which people, you know, at Bright Space said you can't do that. And we said, hold my beer and
watch! We pulled the people from the right parts of the organization, put them together, and said this will get done in four months. And it did. And it was successful.”

“I think it was organized chaos. But, it worked very well. I think there was a good plan for it. I think that everybody across the university understood that we need this. This is what we need. This is something that, if we have this and it doesn't work, we can't actually deliver our product, we can't actually help our students.”

The CRM change is expected to be a very large and a potentially eventful event, considering the nature of what the system does. The institution had a goal of rolling out the new CRM in less than one year. VU hired what was referred to as “an army of 40 consultants” from Deloitte to work side by side with their own personnel, start to finish to make it happen. Reactions to that change were consistently one of preparedness, understanding, and an “all-hands-on-deck” mentality from participants. When asked about predictions of how the CRM change will go – would it be a non-event as well? – to a leader in the IT department, the response was:

“No, because it its very complex. There’re so many integrations, systems feeding systems, timing is critical. But everybody who’s directly involved in the project day-to-day has a lot of confidence. There’ll be hiccups. We all expect that. That’s normal. And we’re all prepared to respond to them immediately. We're gonna have everybody onsite that's normally not onsite to be prepared, from simple, "Hey my login's not working" to "Hey, the data's not showing up over here when it's supposed to. Some integration thing is wrong" to getting Sales Force on the line immediately if we need them. We're just prepared for anything that can go wrong.”

“When something needs to get done, people come together, leave their egos at the door, and get things done.”

Cross-sectional collaboration is a standard practice that has allowed Virtual U to manage change well and to overcome many adverse effects that are almost always a result of significant institutional changes. There is a focus on high-speed change management and being agile within the professional development training that various levels of personnel attend, which has been strengthened with the role out of the new strategic plan.
Continuous Communication – Coordinating Action

Ensuring that everyone is on the same page is critical at Virtual U. Information is constantly flowing from the top, including information about the outside environment and changes that are relevant to the institution’s future, in addition to the internal strategic initiatives and projects, what the progress is, and how people should continue to move forward. There are multiple channels of communication from the president of the institution, via mass e-mail, web streaming video, and townhall meetings, but there is also an expectation and a culture of communication from the leadership to their people to ensure that people at all levels are equipped with the right information and able to ask questions about the direction or details in the operations.

“Then of course, once a month we have a town hall meeting and just like you would have a regular town hall, everybody's there and it's a report out as to what's going on at VU and the key is that those internal pieces right there help to keep us informed as to what we're doing as a university, what needs we're addressing, what it is that we're trying to accomplish and stuff. So that's one level of communication.”

“It depends, it's a lot more, the town hall itself will be more information sharing than it would be asking for input from clients. It's usually updating us about what's coming or update of what we've done and what's coming, quarterly results, term results, things like that. Where we're struggling, where we wanna go, goals we have things like that. The president probably comes I wanna say three or four times a year. He gives a big strategic overview of what's happening in the next five years, it kind of blows our minds, like wow.”

“At my level, I’m hearing it from the president, Amy and Steve (pseudonyms), who is the president of the global campus. My manager is on his team. It’s up to me to make sure that my folks that directly report to me know about this, and then I would encourage them to share theirs. And so, it’s a whole shared on-down-and-around thing.”

VU has taken great strides in ensuring that everything about their internal functioning creates a highly collaborative environment where everyone is working toward the same end, which is staying dedicated to their commitments to their learners, providing the highest quality programming through academic development, technological advancement, and industry
relations. In order to ensure that people remain dedicated to that mission, VU ensures that their employees are a part of creating those goals and commitments by including them in the process of strategic planning, and empowering them to find creative ways to bring those commitments to life through their own ideas and developments. A culture of empowering their people is evident.

Meaning and Memory Making at VU – A Culture of Learning

The findings across sources data sources reveal a family-like culture in which meaningful interactions and ongoing sensemaking are valued. The institution is highly dedicated, not only to its learners, but also to each other. All participants noted exceptional leadership that empowers them, making them feel valued and important in their work. Leadership were found to be highly committed to the professional development of their employees, ensuring that they had the right competencies and skills to grow as people and best serve their learners. Both the leadership and all members of the institution were found to “walk the talk” in their dedication to their learners. There is an intense focus on providing the absolute best experience and educational services to learners, and a clear understanding of the difference that they were making in their lives. That understanding continues to provide a passion that propels the institution forward.

Modeling the Way, Starting at the Top – Empowering Learning

In every interview and interaction with members of the institution while onsite, it was evident that the people believed in their leadership and the leadership believed in them. There was a strong admiration and trust in the president of the institution for whom so many people credit with their successes and unmatched ambition in the higher education space.

“I think every employee here would follow him through the gates of hell.”

“He's pretty incredible, he's amazing actually. He inspires us right from the top, he inspires people feeling so invested in developing and being innovative and being focused on the student, and really paying attention and looking around. What is the best way to do things? And don't think you need to do things exactly how they're being done today. We don't wanna increase costs, we wanna make it affordable for students. Having access to higher education is one of our number one goals. So how do we make it innovative, how
do we make it world class, how do we make it affordable? We've got to keep thinking about that.”

“People love James (pseudonym), they love him, oh absolutely. He's so inspiring.”

“I have great trust having been here 10 years and seeing the information and the direction that he wants us to go in.”

“I admire James (pseudonym) for him constantly changing, never ... never stopping. I always teased ... everybody that I say, "James’ is gonna recruit students from Mars next." Because that's, you know, where he'll go. Because he loves to travel. He's talked to Jeff Bezos about higher ed, with what Amazon is thinking of doing. There's rumors that they're gonna get into higher ed.”

The president’s office on multiple campuses is plain, nothing extraordinary, a few pictures of learners on the walls, a desk and chair, a computer, conference table and projector, white board, and TV screen (the necessary technologies), but they largely look as though someone either has not completely moved in or does not really care about making a statement with their office, the latter of the two are what those around the university attested to.

VU’s president is not the only inspiring or encouraging member of leadership, however. Multiple participants spoke very highly of their leaders without being questioned in that regard. Structurally, senior level leadership sit among their subordinates at the institution in cubicles. Although some in leadership (such as some of the vice presidents and the president) maintain offices, the rest of the senior level leaders of all departments work in cubicles among their people, in an environment of open communication and collaboration. It was noted that many of these leaders could be found in jeans and a sweater, and all of them were referred to by their first name by everyone, including the president himself. One of the presidents of one division is known to randomly walk the sea of cubicles with a large snack cart, feeding his people and talking to them about projects and other matters. It was noted that leaders had an expectation there that everyone would participate and their voices would be heard. People from the ground up felt empowered to be a part of solutions and to lend their professional knowledge to the conversation.
“He (the president of global campus) regularly says, "There is no room for wallflowers." You're expected to have a voice, and not just sit and take orders, or not just sit and listen and carry on with your day. You are expected to get involved and actively contribute.”

“Actually, one of the first times I saw it done really, really well was with the LMS transition, where we had work streams. And what a work stream will allow us to do is to pull in all of the different players from all of the different parts of the university that are going to be impacted by something. And we're focusing on one specific area. So that's where, to your point, everyone gets to have their voice and make sure that their voice and their thoughts are heard. And I think ... I came in around the same time, and I agree. When I first ... oh my God, when I first came in it was almost intimidatingly so. Like you're really put in the position where you are the expert in your field, you are trusted to be the person who knows how to do X job, and so you're left to do it, and lend your voice to that conversation. And they will come to you and ask you ... still, I can't even ... our senior leadership comes to us literally all the time and asks us, "What about this," and "Can you get this for me?" And "Where should we be moving with this?" and I've never, ever worked in a place where that's been the case. Where senior leadership wasn't just making decisions- in a silo, and not reaching down. Because they recognize that we're the ones with boots on the ground, we're the ones who are gonna be able to add the richness to that conversation that it needs. It’s like everything I have ever studied about change management, yea, that’s the way VU does it here.”

“It’s not just like your empowered to come up with ideas, you should come up with ideas! You're a contributor.”

“A lot of the drive comes from senior leadership, but it's more directional. It's, we need to move in this direction, and they empower the ground-level leadership to come back with proposals and say, "You know what, our LMS is 15 years old, and it's not the consumer-grade experience that we should be providing to our students." So the ground-level leadership is empowered to go and come up with these initiatives and come back to senior leadership for approval.”

“This is the basis of how we operate. People, the employees here are empowered to say, "Hey, I am seeing this huge gap," or, "I seeing this huge flaw, and here's my proposed solution," and we will pull everybody that needs to have a say in that decision in.”

“Our academic retreat theme from two years ago was: “A Leaders in Every Seat” and I think that speaks to that fact that people know that the best way to get real, right, and correct information about something, is to go to the people who know it best.”

**Employee Engagement in Ongoing Meaning-Making**

The strategic plan and values statements focuses as much on the value and development of their people, as they do on the learners. There is a realization that in order to provide best-in-
class services, you will need to employ world class talent and foster an atmosphere that is supportive of both. The strategic plan includes commitments to their people, their development, and a creating a culture of belonging.

“We will hire and cultivate people who are committed to our mission and vision, and who understand and reflect our learners. We will provide training and professional development opportunities and promote leadership literacies. We prioritize culture-building among our employees.”

Foundation Building Initiatives:

“Utilize Total Rewards Platform – Build a diverse and culturally competent workforce in a pervasive culture of belonging.”

The culture at VU is one of employee recognition and acknowledgement, which ranges from personal events such as birthdays, or college graduations, to acknowledgment for a job well done on projects, and continued encouragement through gatherings. There are regular shout-outs or call-outs for positive work on a weekly basis that go in the newsletters, which go out to the whole campus, blast e-mails from leadership to everyone or to their units, and TVs around the university that display acknowledgements for good work and good things happening around campus. All participants described an atmosphere in which people felt cared about, acknowledged for good work, and taken care of.

“They don't. We all have bought into the culture, I think that starts at the top with James (president pseudonym). And we, and it's not lip service, the fact that everything we do is for our students. People live it, create it, believe in it. And that's a reward in itself. And there is also, you know, having grown like we have, and doing all the fun things we do, that's a reward right there. But all that aside, there are bonus programs and ... you know, great employee benefits here, and that kind of stuff. But you know, people aren't doing it for rewards.”

“We're talking about probably like three years ago, they gave everybody out a stipend. It was based on a growth achievement that wasn't expected and so they said, and letters went out to everybody, this is a one-time thing, it was something small but it was nice and everybody got a little bit of a bonus.”

“They'll do retreats and stuff, different things. I've been moved from team to team, I'm like one of those rogue people, one of my previous supervisors and stuff would take us
out to dinner on almost like a quarterly basis. Let's go out to dinner, you guys are doing a great job, here you go.”

“So, we do a lot of potlucks, and we have a monthly engagement meeting here in academics. Each team does something a little bit different but all kind of similar. So in academics, we have monthly employee engagement, and so the entire team goes to, we have three very, very large conference rooms so it can fit the entire team. And, we have photos up, you know, birthdays and anniversaries, and babies and things like that, and just got to keep connected. And then also news that's going on, if there's somebody should email, celebrated you know, somebody just got their PhD, you know, we'll do that. Food, a lot of food here. A lot of potlucks and things like that to encourage that. We try different things. We'll bring an ice cream truck and put in the parking lot you know, and just encourage.”

“We have goofy things like we have, Lisa (pseudonym) will tell you about this, she does top hats and tiaras, what she does is she has a weekly letter that she sends out to her team, there's about 200 of us and she will talk about the people that deserve the top hats and tiaras, the one that have done something outstanding this week, it's a weekly thing to talk acknowledgments.”

“I'm just trying to think of things like we have monthly employee appreciation days. Last month we had cocoa and cookies and the month before we had pie and hot cider so they put everybody's up on the screen, it's their birthday or something important happened to them like they graduated, had a baby or something so all the employees that have something going on that month, and we just socialize and have treats.”

Retreats are a regular practice in many units to acknowledge the good work that employees have been doing in their units, coming together to share in learning, create presentations, have guest speakers, and celebrate together.

“I feel like we're always going on a boat trip somewhere. We just went on this boat and it was like 200 people, all academics and we learned about, they had a lunch and they told us about the goals and they told us about the initiatives for the upcoming year and then we took a boat ride.”

“Yeah we just did that a couple months ago. We went up to the most beautiful hotel, we went for three days in the mountains, Mount Washington Hotel, is that right? That huge hotel. We went up there for three days and we had a retreat and it was just gorgeous.”

Employees are acknowledged and cared for in other ways as well, such as work from home days for high performing advisors, coaches, and other roles. There are also untold statements in the workspaces, kitchens and bathrooms of many of the buildings. Large full-service kitchens are provided for employees to bring breakfast or lunch from home to cook onsite, with many
communal coffee machines and appliances. One employee noted during a tour that she can leave anything out on her desk, expensive or not, and know that nothing will ever go missing; there was a community of trust and respect among their staff. There were gender neutral restrooms available, displaying diversity and inclusion efforts, which was noted to be of particular importance recently, as the university is about to roll out its first ever diversity and inclusion strategic plan, focused solely on that effort.

**Developing a World Class Workforce**

The findings revealed that Virtual U is invested in attracting, developing, and retaining top-notch employees as stated in their strategic plan and evident in interview responses. In their effort to provide best-in-class service, they have been equally invested in developing their providers. Strategic plan commitments include:

“Commitment 3: Attract, develop and retain world-class talent to deliver on our mission”

“Build and deploy an integrated talent development strategy that ensures our people have the skills, competencies, knowledge and mindsets necessary to lead and excel in a shapeshifting organization.”

“Promote a culture of employee engagement through active listening, continuous feedback, ongoing coaching and open communication.”

As a result of that commitment and ensuring that all employees were provided with opportunities of growth and development, the institution significantly invested in talent development to ensure that their One University Core Competencies could be met in order to reach their goals and uphold the remaining four commitments. An entire unit was created to oversee this commitment. This study included participants from the newly formed talent development unit.

“So, I would say first as like a frame from our perspective that a year ago you would not be having this conversation with me and that team that I'm currently the lead of would have like 2.2 people on it. And we currently have 8.6. So there's been a significant investment in talent development. I think that is a recognition during the process of the authoring of the current strategic plan that an investment in the development of our talent is gonna be critical to our achieving our next stage of growth, as we go on our journey to
300,000. So, the programs that we are offering today, I think are an evolution off of what they could offer with such restrained capacity, or limited capacity, but we are definitely in the process of expanding and innovating around that work.”

“I think that historically, at least in the leadership development world, there has been, there was such a light capacity within the organization because it was so undermanned, understaffed, that there was a ton of contracting that occurred, right? So AMA, American Management Association, was brought in for trainings. The Table Group, which shows five dysfunctions of a team, was brought in for training. There was a lot of contracting with just multiple independent contractors to come in for like point in time learnings.”

With the new strategic plan and commitments, a professional development program has been designed for every tier of leadership and the beginnings of the individual contributor program are currently underway. These programs ensure that the One University Core Competencies are met at each level. Among the 27 One University Core Competencies that are built into the leadership development programs across the spectrum and individual contributors include interdependent leadership, systems thinking, design thinking, growth mindset, building high performance teams, building coalitions, strategic agility, managing and measuring work, and building high performance teams, among other critical tasks and concepts that are designed to move the university forward. The Pinnacle Program is a 1-year program for strategic leaders across VU to come together to receive trainings, but also to work together to solve “wicked” problems, while working together with other leaders across every element of the institution. The Peak program is a 6-month program for mid-tier leaders, and the Elevate Program is currently in testing and development for more than 2,400 individual contributors.

“The thinking competency is the overarching competency at the growing team level, that mid-tier level actually is systems thinking. So there's a whole session inside of that that's built around systems thinking and Peak. There's an understanding that people have a greater system thinking mindset that they're building through that... when they're in the growing team, uh, tier, that they should be building upon, but they have a foundation of it by the time they get to the growing tier. I would say that the wicked problems tend to be system wide problems and ones that are gonna require people having more of a systems thinking approach.”
Participants of the study felt that there were endless opportunities available to them for professional development and felt that it was impossible not to grow while at VU given the serious focus on learning and development. Every participant of the study spoke to the culture of training and having that support for development at all times.

“Yeah, I'm gonna talk about the training aspects of things. We have a lot of internal training departments. Each department has their own internal teaching and learning areas and things like that. We have the Center for Online Learning and Teaching, COLT, which oversees the faculty training aspects of things. But from the putting-students-first mentality and all of those types of things, and you're asking, do we attend trainings, do we attend places where we're hearing about that, I think this more than any other job I've ever had provides so much training, it's crazy.”

“The professional development that is available here for us is so vast and encouraged, that it's ... and high quality, that it's impossible not to grow while you're working here. And so that's really fantastic.”

“So, they're different for every level, there's the beginner level, the mid-level, and the senior leadership level, and it's things like communication, change management, being a leader, agile. Like, all of these different things that are not necessarily always officially looked at. We look at them in an official capacity. So, all of the trainings that we have available on our learning center are supportive of those competencies. If you identify a competency in which an employee needs improvement, you literally go to the site and say, "Here are all the trainings that you can do that will help you in this area.”

“So, there's opportunities, yes, to keep your skills current, but also if you're missing something, and we want you to go to the next level, or my boss says, "I need you to do this, here's some training." I had just sent some information about a book that one of my teams reviewed, and it got approved. It was like, "Well, yeah, that just makes sense. Let's pay for it.”

In addition to learning that is offered through formal professional development opportunities, there is also team-level learning that is occurring in some parts of the institution, where there are teams of people whose full-time position it is to create learning and development opportunities that are specific to their job functions. This is particularly prevalent in areas that are learner facing to assist with process improvement, customer service perfection, best practices in call centers, and so forth.
“There is at the team level, like those learning and development teams that live at the team level, the student experience team where student advising falls under actually has a fairly robust learning and development team that's made up of both subject matter experts, learning development individuals, and their quality assurance team. So the quality assurance team goes through, they monitor multiple, multiple calls. And they leverage those as coaching opportunities to help individuals who have learned while doing. So from their actual experience as opposed to pulling them out into an artificial learning experience, they're actually using those as coaching tools to help people get better, advisors get better at their calls. They also have two programs there, one is the leadership learning series which is really just focused more, they call it the leadership learning series, but it's for the managers or leaders at the student experience level that's focused on them building their capacities and capabilities within student experience. And they have an Emerging Leaders program, which is sort of a mix of some leadership stuff, but really helping them to become the individual contributors that are seem high potential to become stronger advisors and on a path towards being a team leader within that world.”

All forms of data from this study indicates that VU is dedicated to growing their people from the bottom up and to ensuring that there is every opportunity for learning. Whether it be formal leadership programs, professional development series, the development of learning teams, PMP certifying more than 150 of their employees, or simply providing tables of books of recommended readings on leadership, process improvements, or the changes coming in higher education, there is a clear and dedicated effort to having an educated workforce.

Work Place Climate – Team, Service, Integrity

The findings reveal that Virtual U is committed to their workforce climate, which is explicitly evident through their buildings, communications, and how they work together. In observations, it was noticed that on every floor of multiple buildings, and in many different rooms on those floors, there are the same mission, vision, values, brand behaviors, and culture signs that are highly branded and nicely displayed. Nearly everywhere you go, these signs are hanging. A previous formal practice at the institution that became largely informal, was to have new employees sign any one or more of these statements on the wall as a commitment of sorts to those parts of their institutional identity. Now, however, any employee can walk up to these signs
and sign them at any time, as what appears to be an endorsement of what is on the sign. Of the five signs, the sign that has the most signatures on every floor is the culture sign. Which reads:

Our Culture:

- We believe in the power of education to transform lives
- Do what is best for our students, individually and collectively
- Act with integrity
- Use data to inform our strategy, decisions and action
- Win as a team and hold ourselves accountable for results
- Are open, honest, direct, and respectful
- Take pride in what we do and enjoy doing it
- Always strive to be better

When asked why that sign was signed more so than others, some people stated that they didn’t know, but that it was an interesting observation and likely a clear sign that they all bought into the culture there and supported it. There were some signatures on the others signs, but the culture sign in almost all locations had twice as many signatures or more. The management of their culture is something that the leadership of VU has taken seriously. The institution has been recognized as one of the best colleges to work for by the Chronicle of Higher Education for over 10 years, which is identified by surveying the employees of the institution annually. All of study participants were proud of this fact and brought it up in their interviews. Some of the acknowledgements from that survey were for collaborative governance, confidence in senior leadership, and respect and appreciation, among other important elements of organizational life. Not all will be listed here for the sake of identity protection for the institution.

Though the data shows that climate and culture have always been on the forefront of the institution, there is now an investment in programming to monitor that status and always have a finger on the pulse, unit by unit, and institution wide. Peakon, one of the world’s leading platforms in measuring employee engagement has been used by the university’s human resources department for the last year or two to understand the institution at large and where they fare in employee engagement, but also to narrow down data by the unit to help unit leaders know where
they stand with data from surveying their employees regarding climate, morale, and engagement, etc.

**Learners Are at the Center of Everything**

The findings reveal that academic success of their student learners permeates both how their work is conducted, how they’re organized, how they’re trained, and how they’re rewarded. There is a running joke that many participants noted about “drinking the Kool-aide;” the commitment to students Kool-aide, that is. Every piece of data in this study found that VU’s learners are at the center of everything they do and that their commitments to them as people, as learners, and as future alumni of the institution comes before literally anything else there. It was as if learners were the heartbeat of the institution; the thing that drove everyone passionately forward into a mission of perfection for them. They were the unifying force, the humanity in why they existed. Everything revolves around providing the very best experience and academic products to the students. The first and second commitment of the strategic plan are commitments to this:

“Commitment 1. Deliver a broad portfolio of high demand credentials leading to meaningful work and purposeful lives.”

“Commitment 2: Provide the best and most personalized student support in higher education.”

“VU will maintain a learner-first focus where each person feel the faculty and staff’s dedication to his/her success, regardless of how large the university grows. Our first question is starting a new project will always be: How will this help the learners?”

One of the values:

“Exude Passion: We are passionate about our mission, learner success, and our employees, and it shows in all we do.”

As if it were etched in stone (and it probably is somewhere at one of the locations), every piece of material, all the documents observed, all the décor in the buildings, and all the personal
accounts through interviews, found that people were committed to their learners and providing the absolute best in class experience for them.

“The internal environment is focused on just one thing – the success of our students. This permeates the entire internal environment and is living by every employee every day”

“That's this really powerful, uniting factor. That you just can't deny. That creates a really positive and strong culture. I always ask when I go on an interview, "Well, why VU" And if they're answer isn't something about helping students achieve their dreams, helping people, the power of education, then they're not it.”

“No, they didn't buy into the positive. They kind of bristled at that, or they were too focused on bureaucracy and process. Nah, they don't make it here. They should have a love of hope ... you have to be here for the right reasons. And god, are people here for the right reasons.”

“And you can move and put a new student in place in record speed when it's done for students. When it's about giving them a better experience. I think it really, truly is rooted in a whole community of people who are like, "I'm allowed to do this. I have a latitude to raise this up as a concern, or bring this to leadership, because I'm seeing it as a problem that is facing students.”

“I mean we are unbelievably focused on the student, more so than any other higher ed organization I've ever been around, honestly. We look at their financial concerns, we look at their education concerns, we look at their access to educational concerns, we look at their learning disabilities. It's this shift from the student needs to meet the school's criteria and it's more our school looks at how do we meet the student's criteria, it's a complete shift. I think that's why we innovate and I think that's why we are growing, because we're really hearing the students, they're struggling for access.”

Providing the highest level of customer support is one of the highest priorities at Virtual U. The student advising and coaching models at Virtual U are highly proactive through data tracking and analytics on nearly all elements of student behavior. If a student has not turned in an assignment, instructors reach out, but advisors are notified through reporting and are able to contact the student immediately to find out what kind of support they need. There is a running joke among those in the student services departments that at any given time, their students are “just one flat tire away from dropping out;” particularly with the online learners who are most commonly adults and underserved populations with jobs, children, and my other life stresses.
Though it’s a joke, the staff there take that notion very seriously and work very quickly to realize when a student needs extra support. Advisors and coaches are then able to work with students to provide encouragement, a plan of action, and help with removing barriers that might be hindering their success if possible. Student support services are able to mail students care packages for encouragement and support with candy, notebooks, pens, paper, and Virtual U swag (key chains, pens, mouse pads, etc). There are more than 500 academic advisors at the college that work on different teams for different students (e.g., military, disability, graduate, etc.), who proactively reach out to students that may be struggling in a course, to get them enrolled in new courses, to assist students with time management concerns, and to help them stay on track with their college goals. Academic coaches are also assigned to students to help them academically, with their papers and work throughout the degree program. Coaches help students to determine their learning styles, how they best learn, and what strategies they can use to be successful. Online tutors are also available to all students for any course in Virtual U’s offerings.

In addition to a superior customer service experience and academic support, VU maintains the principle that higher education should be affordable to the masses. For that reason, the institution has not raised tuition in 5 years and the business model is designed around keeping costs low for students in every regard. As an example, the book store is not a profit center as it is for many institutions. It was noted that many institutions collected upwards of 50% of the revenue from items sold in their book stores including text books and educational material. In this institution, all profits are redirected into lowering the cost at the bookstore for students to purchase access codes or any type of learning materials. The institution does not collect any money from the bookstore, but instead has told the bookstore to use those funds as a means to keep costs more affordable to students and to provide them with the absolute lowest price on products. The academic departments then worked with the financial aid department to ensure that
students had vouchers prior to aid funds being dispersed to them, so that a student could purchase anything that they needed in the bookstore, prior to classes starting. They had a 98% adoption rate of all of their bookstore resources (instead of students going somewhere else to purchase materials). Because of this, the institution was able to leverage those numbers with the bookstore to get the absolute best rate possible for students. In doing so, they were able to drive down the costs of books or other course materials from about $180 per course, to the average of $60 per course now. In addition, with few exceptions, courses are built with many free learning resources that are embedded, and in most courses the materials that they need are all digital. One participant stated that this decision was made because, “we knew it was the right thing for our students.”

Virtual U is committed to their learners in ways that are outside of their academic realm and are explained as removing barriers for students, such as setting up a one-million-dollar fund for students who were impacted by the government shut down.

“It's not a tagline. It's not hokey. It's really like, if you are doing something for a student, you almost have the ability to move mountains here. One example is we just setup a fund to support students who are federal government employees. Or spouses, or dependents of federal employees cause they're not getting paychecks. And that stemmed from simply hearing from our students, "My FASFA's coming in, I've gotten my Pell Grant dollars, but I don't know how I'm gonna pay rent because I didn't get my paycheck. I don't know how I'm gonna pay my utility bill. I don't know how I'm gonna feed my kids." And it was really student driven. And literally within 24 hours it was decided that we were gonna do this, we were gonna setup a fund to support them. The communication was written while the processes were being developed in terms of application forms online and what kind of documentation, we were gonna need, and whatever. And then in three days it was out. That is the idea, that is rooted in who we are. It's this idea of removing barriers, right?”

Other examples included flying an IT person out to a student in the hospital who did not have the right technology to access their classes and be successful, or the president traveling out of state to personally deliver a diploma to a student in their 90s who had just graduated. Comments such as, “you can move mountains for students” does not seem to just be a catch phrase. There were examples where that nearly happened. That level of commitment to their learners seems to be
unprecedented in higher education and certainly remains one of the institution’s most impressive qualities. Learning at the institution is driven by asking themselves, how can we make this exceptional for our learners, now and in the future?

**Summary of Findings**

This subsection reports out on the macro-level themes that emerged from the contextual analysis, inductive analysis, and deductive analysis process relative to the purpose of this dissertation research, which was to gain new insight into how members of a successful higher education institution are learning to adapt to the dynamic and ever-changing environment.

**Relentless Scanning and Connection to the Environment**

One of the most evident ways in which Virtual U learns is through the many different structural and cultural mechanisms that are in place that support or even require external environmental engagement and learning. Among these mechanisms are a culture that breeds questioning, curiosity, experimentation, open communication, interdependence, and empowerment of the employees in those regards. The structural context is powered by the cultural context, which is to state that cultural practices at VU have informed the structural elements, such as creating an innovation center as a result of a culture of innovation, or designing the structural space of buildings to support a flat organizational cultural of enhanced cross-sectional communication and inquiry. Through these mechanisms of cultural practice and structural being, VU is able to garner the information needed from their environment in order to learn, adapt, and possibly influence change to their environment through cybernetic influence.

Brining in new knowledge is critical to understanding the changing nature of the environment, which at present time, is vastly turbulent and erupting with changes that a traditional higher education culture is unable to keep pace with. There is a false perception in
higher education as an industry that they are the creators of knowledge, when in fact the world has changed in ways that have surpassed the product that many institutions are still producing. Not only is this evident in outdated courses and academic materials found at many institutions, but it is also evident in the negative attitudes that exist in considering students customers and higher education a business. The world around higher education is consumer driven, the behavior of humans now is such that we want something and we want it yesterday. Technology has largely changed psychological behaviors in humans and our expectations of how simple and quick anything in our lives should be. This technology has also changed the way in which people bring in their own knowledge and how quickly they can get it, which has turned the concept of the tenured professor and holder of the knowledge upside down, and is something that many institutions are still grappling with. VU is not in denial about these facts. There is a determination to not be overcome by a VUCA world. They have a relentless commitment to understanding human nature, behavioral patterns, technological advancement, industrial changes, population changes, economic changes, political changes, and anything and everything in their external environment. Like most with a growth mindset and any knowledge of Aristotle, “The more that you know, the more you know that you don’t know.” Virtual U is convinced that they don’t know and that they need to keep searching for the answers that are still out there.

**Experimentation**

Another way in which Virtual U learns is through experimentation in small settings, through pilots, and incubation phases, giving themselves the privacy and the space to deeply understand and dissect elements of how the experiment is going in phases. Depending on how any of the experimentations or pilots move along, more funds or resources are often dedicated to them to see if it is possible to bring something to scale and to determine if it is in the best interest of their learners or the business long-term to do so. One of the examples of the most recent
experimentations is with artificial intelligence (AI). Testing the uses of various forms of AI in the Sandbox with their research and development teams are underway to figure out what ways it might be best put to use. There is also aims to utilize digital virtual assistants, bots, avatars, and digital worlds. There is a goal to run multireality simulations to create distinctly different realities given controlled changes for simulated environmental change; this is change management on steroids. Experimenting allows for understandings and new ways of doing things that may be unconventional, and for that reason, may be the next disruptor in higher education.

**Cross-Sectional Collaboration**

Virtual U learns through frequent cross-sectional communication and collaboration. When organizations experience silos or multiple departments on different pages, it can often be the case that their efforts are working against each other in their own organization. Communication to their customer can be greatly inconsistent, causing damage to the brand overall. Virtual U’s strength in cross-sectional collaboration allows for the left hand to know what the right hand is doing all the time, and to learn from what each of the hands has to offer. Bringing multiple people to the table allows for multiple versions of the “facts” to be present from different perspectives or realities; everyone sees, understands, and thinks of something differently. Diversity in people and thoughts at the table allows for greater consideration of all available options. Diversity in thought also overrides group-think, which is dangerous to organizational learning. VU’s culture of collaboration, safe, and open communication creates superior results. Cross-sectional collaboration can also serve as a means of double-loop learning, where the system is checking itself. This will be covered further in Chapter 5.
Learning Through Performance Data

Virtual U is driven by performance data and is committed to using data to derive a better understanding of every element of their business and student life. Many institutions also claim to make data-driven decisions; at this stage in its technological existence, however, it has simply become a catch phrase that organizations seem to use and yet it does not seem to make a difference.

The difference at VU is their understanding of which metrics matter, by having a clearer picture of their entire ecosystem and by relentlessly questioning every element of that system. This ties back to the need to have a thorough understanding of all the moving parts within the organization and any unconventional factors that may be found within the environment. If inadequate environmental scanning is occurring, or inadequate collaborations within large and complex organizations is occurring, the phrase, “you don’t even know what you don’t know” is the reality that the organization will operate in. To the greatest extent possible through thousands of data points, collaboration, and external engagement Virtual U operates with a clearer understanding of their internal and external environments. The data that they are pulling and constantly consulting is vast and relevant because other elements of the organization and the environment are informing it. Data at VU is also evaluated frequently so that decisions or interventions can be made in real time. If a student is not doing well in a course on Monday – they will know that by Wednesday – and adequate inventions can be applied. If a project is not producing as it had promised, changes in real-time can allow the organization to move in a different direction quickly. Data both drives performance and learning at VU.

Summary

Chapter 4 presented the findings of this study through contextual, inductive, and deductive analysis methods and presented key themes across the data. The final chapter
interprets the findings from the field research, draws conclusions of the study, and provides implications for future research, theory, and practice.
Chapter 5: Conclusions and Implications

This dissertation explored Virtual U’s organizational learning system amidst a change in the higher education landscape. A descriptive case study using multiple methods of analysis and data points enabled the researcher to examine the organizational learning system patterns associated with how Virtual U was interacting with its external environment, how Virtual U was reflecting upon its strategic goals and actions, how Virtual U is structured to coordinate activity and sharing knowledge about it’s changing environment, and how Virtual U’s culture affects how the organizational members understand when, how, and why they need to change to meet the evolving needs of their students and market. Three concluding statements represent the overall summary insight from this dissertation research: (1) Virtual U’s ability to operate as an ambidextrous organization enabled ongoing adjustments; (2) Virtual U’s cross-sectional collaboration served as a mechanism for double-loop learning to enable collective reflection and action; and (3) Virtual U’s adaptive learning culture reinforced their collective values of learners needs first.

This chapter discusses the interpretations of the findings, draws conclusions of the study, and provides implications for future research, theory, and practice. The first section reports on the interpretations of the findings relative to the overarching research question and subquestions. The second section reports on concluding statements from the dissertation research relative to broader organizational learning theory. The third section shares implications for theory, future research, and practice. The final section shares the researcher’s reflections on the dissertation journey relative to scholar-practitioner identity and role as a change agent.

Interpretation of Findings: Answers to the Research Questions

The over-arching research question sought to understand how organizational members describe their organizational learning system. The findings revealed that Virtual U’s dynamic
social system reflects a relative balance of learning and performance actions. Findings revealed evidence of learning actions in terms of how Virtual U is seeking to anticipate future market needs. Virtual U is being intentional to reflect on their organizational goals, Virtual U has designed a structure to enable knowledge sharing practices, and Virtual U’s learning culture supports development of its employees and overall business. Findings revealed evidence of performance actions with specific attention to capturing market share by pricing it’s education product to ensure increased enrollments, by using performance metrics, which provides immediate data on student or faculty activity, by grounding its goals in fiscal performance measures via enrollment and student satisfaction, and finally reinforcing performance orientation with rewards and recognition programs centered on student satisfaction and enrollments. This relative balance of performance and learning is consistent with the organizational learning systems theory (Parson, 1951; Schwandt, 1994 1997). The premise of this theory is that organizations as social systems have the inherent capacity for performance and learning; and that the four subsystems of actions are functional prerequisites for the system to adapt to their environment. Virtual U’s findings reveal their organizational members articulated both learning actions and performance actions for their system, although the focus on this dissertation was on the learning system. The next subsections provide further delineation of the findings organized around the four research subquestions which parallel each of the four learning subsystems of actions.

The first research subquestion focused on the Environmental Interface Learning Subsystem and how organizational members describe their actions associated with interfacing with their external environment. The environmental interface subsystem functions as the informational portal for an organizational learning system (Schwandt, 1997). The focus of the subsystem is external as it connects the learning system to everything in its external
environment. According to Schwandt (1997), “The conceptual basis for this subsystem is one of intake and output, therefore, actions center around the mechanisms that the system uses to secure, filter, and expel information and knowledge, in both proactive and reactive modes” (p. 345). This subsystem is effective for the pursuit of information for specific goals, but is most intended as a mechanism for understanding the complexity and changes to the environment overtime.

This study found Virtual U to have a highly proactive level of intentional engagement with their external environment. Mechanisms of engagement included leadership focus, encouragement, and requirment of external scanning as a cultural practice; the people of the institution then become a mechanism in those efforts. Other mechanisms include the structural integrity of the institution, which encompasses everything from the research and development units, to the learning and development teams, and creative spaces such as the Sandbox. This also includes the open nature of their work spaces, which were created to provide maximum levels of communication, collaboration, and a flat organizational culture that supports questioning, experimentation, and strategic inquiry. The collective cognition at work there is a strong reason for their learning and will be addressed further below.

Additional mechanisms included industry partnerships and collaborations that provide an insight into the changing nature of the world around them and the information needed to make the most accurate decisions for future program and product development. Outside trainings from other industries such as those with specialties with specific populations, customer service, hospitality, process improvement, and other business development specialties that provide regular insight as to the changes of consumer behavior, decision-making thought processes, the needs of specific populations, and many other areas where Virtual U feels the need to have a finger on the pulse. At VU, the environmental subsystem is highly engaged. All pieces of data
indicated a deep cultural belief in being connected to the environment to better the institution and the lives of their learners.

The second research sub-question focused on the *Action and Reflection Learning Subsystem* and how organizational members describe their actions associated with interfacing with their internal and external environment. The action and reflection subsystem represents the activities and actions that create new knowledge. Actions are taken, goals are achieved, and reflection on action fuels learning to improve processes. The action and reflection subsystem is where many of the changes to the code are tested and enacted. The actions taken in this subsystem include deliberations, meetings, decision-making processes, group interaction, experimentation, and reflections (Schwandt, 1997). The behavior of this system focuses on goal achievement in both a performance nature and learning nature. According to Schwandt (1997), the action-reflection subsystem is the prerequisite function of goal attainment, as it creates the environment and pathways for the learning system to meet its goals; these are goals of both performance and learning. Virtual U was found to have a highly collaborative and data-driven environment that brought people together from across the institution to solve problems and create optimal learner experiences with business like acumen. It was evident that VU was in the business of education, where risk and experimentation have become required to create the superior products and services that will be necessary to educate learners of the future.

Virtual U’s hyper focused evaluation of performance data served the purposes of both goal attainment in performance and learning. VU was found to be highly ambidextrous in that way, which will be addressed at length in Virtual U’s learning system section below. Though there were inconsistent findings with reflection practices across the institution, there is an indication that many parts of the institution track data intently to have the greatest understanding of what is occurring, both for purposes of reflection and future decision making, but also for on-
the-spot adjustments and changes in course if necessary. VU works at what many participants referred to as “the speed of light,” believing that they could accomplish that on-the-spot change only because of how much data they tracked and how often. If something is not working, they will not sit on it for any length of time, which was why there were inconsistencies in reflection data. However, employees there all felt empowered in watching that data and being able to raise the red flag if something was going wrong; there was an expectation there that they should. All pieces of data from this study indicate that VU is an action-oriented institution that makes decisions for their business based in data with the intent to meet their goals and make accurate decisions around that now and in the future.

The third research sub-question focused on the *Dissemination and Diffusion Learning Subsystem*. Also known as the structuring subsystem, the dissemination and diffusion subsystem represents the knowledge transfer requirements that are necessary to connect all elements of learning through communicating, networking, coordinating, and any social actions that support the movement of information throughout the organization (Schwandt, 1997). Dissemination efforts are more formal and direct in nature with intentional effort to share information and knowledge, whereas diffusion efforts are more informal, social, and cultural. This subsystem is the structuration process that is more than just the structure of the organization, but encompasses the patterns of being and doing, through the organizational structure, policies, and processes that result from the social dynamic (Schwandt, 1997).

All sources of data from this study indicate strong dissemination and diffusion efforts of mass communications, collaborative strategic planning, regular practices of cross-sectional collaboration as a best practice for daily work and major initiatives, and a culture of inclusion of units, personnel at all levels, and thoughts and ideas. From stand-up meetings and morning scrums across projects and solicited feedback on large initiatives, to major town hall meetings on
the strategic plan and meeting goals, there is a clear understanding that everyone must be on the same page at all times. The left hand must know what the right hand is doing, and in order to be successful the first time, it is critical to ensure that everyone who needs to be at the table is present.

One of Virtual U’s greatest strengths and sources of learning is through their cross-sectional collaboration efforts – both formally and informally – it is in the fabric of the culture. The institution had – like many organizations experiencing fast growth – become very complex and fragmented over the years. In earlier stages of this university’s existence and growth, it made sense to run operations in one division, in complete isolation of another, hoping that one would not hold the other back. By 2015 it was realized, however, that the method of independence would become the factor that would hold them all back. There was a realization that each division, although serving distinctly different purposes, all complimented each other and that there were critical reasons for all of them to be moving in the same direction, and appreciative of their differences and contributions to the full picture. With that, the One University initiative was born and the level of cross-sectional communication and collaboration was enhanced tenfold. Cross-sectional collaboration as a learning mechanism will be addressed further in this chapter under the Virtual U Learning System section. VU has taken great strides in ensuring that everything about their internal functioning creates a highly collaborative environment where everyone is working toward the same end.

The fourth research subquestion focuses on the *Meaning and Memory Making Learning subsystem*. The meaning and memory making subsystem is where knowledge is formalized and stored, which then shapes the values and beliefs within an organization and forms its code (Schwandt, 1997). This subsystem has been described by Schwandt (1997) as the conceptual subsystem made up of collective memories with less physical operational function than the other
systems, where processes are built and carried out. Collective sensemaking is the product of this subsystem where pattern maintenance occurs (Schwandt & Marquardt, 1999). It is this medium that the organization relies on in order to make sense of its own actions in reflection, but it is also the actions that build this medium (Schwandt & Marquardt, 1999). It is through language, symbols, documents, and procedures that this subsystem communicates with the others. Meaning and memory making is the most influential elements of organizational learning and it is the hardest to change because it is the house of the organization’s culture (Schwandt & Marquardt, 1999). It is in this subsystem that organizational learning can be created and maintained in the development of routines that push an institution to dig deeper for answers, to push harder for solutions, to think outside-of-the-box, to inspire new innovations, and to change the way that they think, so that they can improve the way that they do business for long-term sustainability.

The data in this study indicates a few strong dominant cultures (1) a student-centered culture (2) a culture of learning and innovation, and (3) a family-like (clan) culture. Other strong cultural elements include a fast-paced, business environment that was driven by data, all of which are imbedded into the culture of the institution. Participants of the study put learners before anything. Both the leadership and all members of the institution were found to “walk the talk” in their dedication to their learners. There is an intense focus on providing the absolute best experience and educational services to learners, and a clear understanding of the difference that they were making in their lives. That understanding continues to provide a passion that propels the institution forward.

There was also a strong family-like culture, where everyone was pulling for each other. The institution is highly dedicated – not only to its learners – but also to each other. All participants noted exceptional leadership that empowers them, making them feel valued and important in their work. Leadership was found to be highly committed to the professional
development of their employees, ensuring that they had the right competencies and skills to grow as people and best serve their learners. That culture also fed into the culture of innovation. The university core competencies that are taught in the various professional development offerings across the institution were all in place to provide training on creating an environment of open minds, friendly communicators, fierce questioners, a growth mindset, systems thinking, and thinking outside-the-box.

Summary of Alignment to the OLSM

The OLSM is an organizational learning systems model that details the interconnected elements that make up a system of learning. There is no start point or ending point to the system, nor is it a prescribed or linear model with check boxes. The OLSM is a collective cognition framework that largely lives within the people who are a part of it. The actions of the collective are aligned to the model in a way that either supports learning through healthy elements aligned to the subsystems and their interchange medias, or inhibits learning with gaps in the system or breaks in the collective cognition. Virtual U displays many elements of a healthy collective cognition that moves fluidly through the subsystems, creating an environment of continuous learning and growth. As a result, they have experienced competitive advantage, increased financial stability, enhanced innovation, and greater employee engagement and productivity, all of which have been associated with organizational learning.

The next section draws conclusions for this dissertation. Three concluding statements were identified through the second phase of the interpretation process when the researcher examined patterns across the four learning system systems findings as articulated above. These concluding statements move beyond the theoretical framework to incorporate other organizational learning literature explored in Chapter 2.
Discussion of Virtual U’s Learning Systems

The following section draws conclusions for this descriptive case study of Virtual U. These concluding statements emerged from the second phase of the interpretation process after the responses to the research questions were formulated. These concluding statements move beyond the theoretical framework to incorporate other organizational learning literature explored in Chapter 2 and connect with the findings from Chapter 4. Three concluding statements are discussed below.

Concluding Statement # 1 – Virtual U’s Ability to Operate as an Ambidextrous Organization Enabled On-Going Adjustments

In the course of this study and the examination of all data sources, it was discovered that Virtual U is an ambidextrous organization in its ability to learn and perform at the same time – a talent that many organizations struggle to achieve (March, 1991). The way that an organization interacts with both its internal and external environment has significant bearing on the ability to effectively create and process new knowledge. The central premise of the seminal work of March (1991) is the concept of exploration of new ideas, possibilities, and innovations, and the exploitation of current knowledge, processes, and known certainties. Exploration entails such concepts as experimentation, risk-taking, flexibility, play, and innovation. Exploitation entails concepts such as efficiency, implementation, production, refinement, and execution (March, 1991). March (1991) outlines the need for an organization to continuously strive for balance between the two in order to maintain an equilibrium that is suitable for continued learning, development, and organizational survival.

As adaptive systems, organizations are heavily influenced by their environments, both internal and external. Those who engage in exploration behaviors to the determinant of efficient exploitation behaviors are likely to experience an imbalance that can lead to the costs of
experimentation with little benefits to be realized from it (March, 1991; Sinha, 2016). According to March (1991) these organizations exhibit underdeveloped ideas and little distinctive competence. Conversely, the reverse is also dangerous to an organization that can easily become stuck in suboptimal equilibria as a result of excessive exploitation, but not enough exploration to create balance in sources of knowledge (Sinha, 2016). Levinthal and March (1993) refer to this as a success trap, whereas Bapuji and Crossan (2004) refer to it as a maturity trap; excessive exploitation has an unintended tendency to drive out exploratory behaviors. The returns of exploitation tend to be more certain and immediate than the returns of exploration. Exploratory experiments are less known therefore more likely to lead to poorer results in the short-term, though more improved results in the long-term. Exploration leads to improved organizational functioning long-term, but exploitation leads to faster personal gain and therefore easily becomes the preference for time and attention.

According to all the data of this study, Virtual U is ambidextrous in their ability to balance both exploration and exploitation efforts. There is a keen awareness of how important both elements are to the delicate balance of inward and outward focus. There is also an intense concentration and equal investment in both elements, as evidenced by the commitments of the strategic plan, accounts of participants, and clear financial and psychological investment of efforts that drive both exploration of new ideas and innovation, and the absolute maximization of their internal resources, people, and systems. Examples include a very large investment in the Innovation Center – the Sandbox – and teams of research and development personnel for exploration and innovation purposes, in addition to other large investments in an enhanced professional development and training unit. That department went from 2.5 people and outsourced trainings, to a team of 8.6 people and a significantly larger training budget to ensure the success of their One University core competencies, which are focused on teaching their
people to work collaboratively, efficiently, and in relentless pursuit of new information that can improve their product and processes. Other examples include investment in current student and staff facing technology systems – the LMS and the CRM – which are an exploitation effort for improved processes and better results – while at the same time – beginning the experimentation of the use of artificial intelligence and virtual realities in small settings with hopes for large future initiatives with such. It is evident to university leadership and personnel that in order to provide the highest quality service to leaners, their internal processes must be on point. It is also evident that the world around them is changing significantly and they know that there is a need to stay at the forefront of those changes in order to provide the most innovative and relevant products and services to their learners. There are multiple examples in which there is equal investment in both exploration and exploitation efforts.

The second way in which Virtual U is ambidextrous is in their ability to perform and learn at the same time. According to Schwandt (1997) more commonly, organizational strategy development has been predicated on improvement of performance based on the changes of the environment, however, organizations must be able to examine both their ability to perform and collectively learn to achieve growth and sustainability. In their case, Virtual U is not seeing improvement based on favorable environmental changes; literally everything in their external environment is swallowing institutions and closing their doors, including changes in populations, lack of affordability for higher education, an improved economy with low unemployment rates, a very saturated market place, increased numbers of institutions with online offerings, international student rates slowing down, and so forth. There are a number of reasons why the current environment would not work in their favor, yet their performance has increased and they have maintained a considerable competitive advantage. This can be attributed to the notion of being able to balance both learning and performance at the same time. VU’s fast-paced, data-driven
culture has created an environment of studying thousands of data points throughout the university in real-time, being able to reflect on that reporting and data, and make changes as needed in an adequate and competitive time frame. This information drives both current performance and becomes a jumping off point for future decisions. This capability provides considerable competitive advantage in a number of ways. It can take some institutions years to realize that programs are failing or services are inadequate, and years to act on it. Performance matters! Processing data in collaboration with other units of the institution allows the institution at large to reflect and learn collectively, which leads to the next critical finding – cross-sectional collaboration as a means of double-loop learning.

**Concluding Statement # 2 – Virtual U’s Cross-Sectional Collaboration Served as a Mechanism for Double-Loop Learning to Enable Collective Reflection and Action**

One of Virtual U’s greatest strengths and sources of learning is through their cross-sectional collaboration efforts, both formally and informally; it is in the fabric of the culture. The OLSM is a social action model with importance placed on collective cognition (Schwandt, 1997). Human relationships and behaviors are critical to the success of an organization’s ability to learn. According to Garvin et al., (2008), knowledge must be shared in systemic and defined ways that moves both virtically and laterally throughout the organization, which can happen among individuals, groups, and throughout the whole organization. The knowledge sharing process is often both internally focused for corrective action or best practices, and externally focused wherein employees are pulling in external information from their environments, such as customer surveys, competitor information, or market information (Huber, 1991). This information, both internal and external in nature that is shared in a built-in systematic basis, allows for the right people to receive it who need it.
Breakdowns in communication create learning silos that have the potential to critically harm decision-making processes, and too often organizations are duplicating processes and expending efforts in multiple places. Kofman and Senge (1993) explain how silos become an organizational norm through competition within themselves that break down the appropriate transfer of information and through the fragmentation of individual departments within an organization. They state that in business, fragmentation often results in “walls” being built between departments that have become warring fiefdoms that intentionally withhold information from each other. Fragmentation and competition breed silos among the very people who should all be working toward the same end (Garvin et al., 2008).

Virtual U has created systemic learning processes that are intentionally meant to break down these learning silos and are necessary for organizational survival in complex environments where competition is high. It is critically important for members of the organization to recognize their interdependence; the organization’s success depends on their will to cooperate and share information, and organizations must remove any structural or systematic constraints on knowledge flow (Slater & Narver, 1995). Intentional systems of knowledge sharing have been created to overcome silo behavior. In order for organizational learning to occur, people must be learning together, described by Schwandt (1997) as “collective cognition,” wherein learning is occurring through and as a result of human relationships and the processes that they create in combination with the beliefs that they hold (e.g., values and vision) within the organization.

Organizational learning requires an organization to understand how and why it learns in order to determine if it is learning effectively, thereby making decisions that are capable of sustaining and growing the organization. Members of the organization must be able to observe the code and understand how the code is being formed and how it is influencing decision making. One way of accomplishing this is through Argyris and Schon’s (1996) concept of
double-loop learning. Single-loop learning tends to look at the surface issue and attributes these issues to external forces that are beyond the control of the learner; this type of learning seeks to refocus stability and remove error to the extent possible. Double-loop learning is instead meant to address the underlying causes of a problem in order to make changes to the attitudes, beliefs, or practices that caused the problem in the beginning (Argyris & Schon, 1996; Dodgson, 1993; Mirvis, 1996; Van Grinsven & Visser, 2011). This reflection process causes learners (or organizations) to think about how they are learning; to question how it is that they know what they know, how they came to have those beliefs, and how those beliefs might be impacting their behaviors and decisions. Senge (1990/2006) also explains this same concept using the terms generative and adaptive learning. Adaptive learning is single-loop learning, where organizations are responding and trying to adapt to their environments within their known capabilities and structures. Generative learning requires a new lens; changing the ways in which they view themselves and the world around them. Senge and Fulmer (1993) add that the systems dynamics perspective parallels the distinction between single- and double-loop learning. The distinction is that one causes change to occur within the current structure, using those methods, whereas the other causes a change in the structure itself.

Virtual U was found to be an organization that intensely values working across unit lines, both laterally and vertically within the organization to ensure that the best decisions are made by having the right people at the table to contribute what they know the facts to be, and what their thoughts are on it; the institution’s culture is very flat in that way. Everyone at the table comes with a different angle and a different lens, and they are expected to speak from that lens with all of the professional knowledge that they have. Projects at VU are accomplished at lightening speed, but still manage to be carried out correctly, because of the data driven and agile nature of their teams, and the ability to question and be candid about the project without offending anyone.
As a result, their own processes allow for multilayer scanning that is akin to a double-loop learning concept where members of the organization are questioning how it is that they are learning and why it is that they are making those decisions (based on what knowledge)? This culture at VU is consistent, encouraged, and being strengthened with considerable amounts of professional development that focuses on systems thinking, interdependent leadership, building high performance teams, building coalitions, and strategic agility, which were carefully thought out as a mechanism to enhancing communication across organizational lines, by considering the whole, and by “triangulating perspectives when assessing situations.” The culture of Virtual U’s collective cognition is one that tells themselves to keep looking for the answers. Their culture is of learning and of not knowing. Many organizations fail to ever learn on a higher level that is associated with double-loop learning (Argyris & Schon, 1996; Dodgson, 1993; Senge, 1990/2006), which leads to the next critical finding – culture matters in organizational learning.

**Concluding Statement # 3 – Virtual U’s Adaptive Learning Culture Reinforced Their Collective Values of Student’s Needs First**

Through all data points in this study, Virtual U’s culture was found to be a culture of learning. Through relentless scanning and questioning for new ideas and innovations, through the quest of constant process improvement, through professional development centered in learning and knowledge seeking, and through intense cross-sectional collaborations, Virtual U is culturally focused on trying to learn. Organizational culture is a critical element of organizational learning and organizations not committed to a learning culture will not achieve its outcomes (Kofman & Senge, 1993). The cognitive maps that govern the thoughts, memories, and learning abilities of an organization are its culture and the means by which everything is done. Though there is growing consensus in the field that learning occurs at individual, group, and organizational level (Bapuji & Crossan, 2004), organizational learning is considered an
inherently social dynamic that occurs in interrelated patterns of human interaction (Dodgson, 1993; Schwandt, 1994, 1997).

Becoming a learning organization requires a culture that supports it. Organizational culture deeply impacts an organization's ability to learn, and as result, impacts every decision it makes (Kofman & Senge, 1993). As relevant now as it was then, Tierney (1988) points out that leaders and administrators within higher education institutions tend only to have an intuitive grasp on the pulse and cultural conditions within their organizations; many have only a passive awareness of the culture, norms, or codes until something has gone wrong and adverse reactions and relationships have become grossly evident. These leaders then find themselves dealing with culture in an atmosphere of crisis when it is too late to stop the fire. At Virtual U, the leadership play an active role in shaping the culture and are strongly connected to the pulse of their employees. As a result, they are able to take a proactive stance in all that they do; they create the proactive culture of learning, which in turn improves climate and morale in cyclical fashion.

Mirvis (1996) notes that one of the elements of open systems that impact results interpretation is the human element, which often ranges from denial, blaming, discounting, and flank protection because of a fear of getting it wrong. It is vicious cycle that emanates from mental models and social systems that presume that when actions are based on knowledge, science, and skill, they will surely turn out right. Kofman and Senge (1993) add that this is both a cultural and structural problem not just within organizations, but in society at large. They posit that the human tendency toward competition leads to people looking to prove that they are right in order to look good. Looking good then becomes more important than being good, and the fear of not looking good is one of the greatest enemies of learning. Organizations have perpetuated this problem by expecting managers or leaders to always have the answer in order to look good, which does not allow for people to comfortably admit that they do not know the answer because
it is a sign of weakness. Structural fragmentation within organizations often promotes this competition between departments who should be working together to share information, but instead are incapable of admitting when something has gone wrong for fear that the other department will blame them. These psychological, cultural, and structural issues that surround fear deeply impact both individual learning and organizational learning.

The design of the organization’s systems are meant to create enriched inquiry for constructive debate, which according to Mirvis (1996) is meant to seek out disturbances proactively and amplify them without personal attachment, which is key to being able to take adequate action and reflect accordingly. Virtual U’s system is being intentionally designed as such, where the culture is that no one is allowed to think that they have all of the answers. A growth mindset is trained and encouraged, which teaches members that they do not know everything, it is okay to be questioned, and it is a strength in their ability to do so and fix something together. Participants of the study noted that there was no culture of blame, but rather there was a culture of all-hands-on deck and to just fix the problem together. It was also evident that there was a culture of high psychological safety, where people felt like they could speak out and raise the red flag if needed, without repercussions. In addition, there seemed to be no evidence of ingratiated behavior. Tourish (2005) outlines the importance of understanding the impacts of both the automatic vigilance effect and the ingratiation effect on organizational success. The automatic vigilance effect is the concept that, in general, people are suspicious of any feedback and therefore receive it as an attack on their decisions or cherished beliefs and will disregard it. The ingratiation effect outlines when members of the organization become reluctant to share critical or counter information of any kind with their managers because of fear of career damage and loss of standing, and instead over exaggerate their level of agreement with their management’s ideas; the effects of both are existentially dangerous to organizations, but is more
common than not in many of them (Tourish, 2005). The data of this study indicated the opposite effects at Virtual U, which were that people were encouraged to share critical feedback up the chain and were praised for doing so.

Concluding Statement Summary

Virtual U displays a culture and practices aligned to organizational learning literature in many capacities, some of which are rare to the average organization and certainly to the average higher education institution, such as double-loop learning, balancing exploration and exploitation efforts that provide equilibrium, sustainability, and competitive advantage, and being able to perform and learn at the same time. These are unique talents individually, an amalgamation of such is exceptionally rare. The benefits of organizational learning include competitive advantage and greater financial stability, innovation, and greater employee engagement and productivity, among other benefits; Virtual U enjoys these benefits now. The next section discusses the implications of the dissertation’s conclusion to theory, future research, and practice.

Implications for Theory, Future Research, and Practice

This section discusses the implications of this dissertation research to theory development, to future research, and to practice. Each of these three areas of implications will be discussed below. The implications for practice emerge as an important subsection as our doctoral program focused on transforming practice and our roles as change agents.

Implications for Theory

This case study described the learning orientation of an institution of higher education from a variety of internal and external data points. The Schwandt Organizational Learning Systems Model was used to guide the research to gain a better understanding of the learning orientation from a learning systems perspective. The Schwandt Organizational Learning Systems Model was selected for this study because it is grounded in systems theory and focuses on the
social elements of the system in four subsystems that capture the structure and nature of organizations. The four subsystems are (1) Environmental Interface: the ways in which new information is introduced into the organization; (2) Action and Reflection: the activities and actions that create new knowledge; (3) Dissemination and Diffusion: the mechanism for which information is shared within the organization; and (4) Meaning and Memory Making: the formalization and storage of knowledge that creates the values and beliefs within the organization. This model focuses on the social action system’s ability to adapt to its environment through both its performance orientation and its collective cognitive capacity that influences the way that the collective body learns. Schwandt (1997) posits that an organization’s ability to learn is dependent on its ability to systemically integrate the social aspects of the organization with the objects and processes in their environments, environment being both internal and external. The OLSM with a social action focus and collective cognition framework aided this research by describing the interdependent nature of relationships between individuals and their systemic actions and practices that create the organizational learning system. This aspect speaks most to the central research question: “How do organizational members describe the learning system actions as their institution seeks to meet the emerging market changes?” because it captures it from a social action and collective cognition viewpoint. In using this model, the significance of healthy social dynamics within an organization were evident to it being able to optimally function in any of the four subsystems, and was ultimately found to be the source of the interchange medias that connected all the pieces. The human element and those dynamic relationship matter.
Implications for Future Research

This study provided several opportunities for future research. Conducing this study in a quantitative or mixed methods format may allow for more voices to be heard across the institution, drawing conclusions from both survey data in a quantitative survey, while still capturing the personal sentiments in interviews. The nature of this topic, using the OLSM as a model, is meant to capture the human element and its sentiment; qualitative data is valuable here. The study could also be conducted in a similar fashion using a different organizational learning model.

A comparative multisite case study using the OLSM as a model could be helpful in comparing institutional learning practices, how well those are engaged, cultural alignment, and what the current standing of the institution is financially, competitively, and culturally, in addition to its innovation posture and change posture. Using an organizational learning model to evaluate the behavior of a failing institution against a successful institution may provide valuable information on where the specific gaps are and what the result of those gaps can be. Last, there is a small handful of institutions that are similar to this study site institution in nature, design, and program offerings; conducting this study at one of those institutions may also yield other valuable insights for organizational learning in higher education institutions.

Implications for Professional Practice

Higher education today exists in a turbulent environment with changes that are occurring far beyond their current influence or control. Population shifts, changes in market trends, technological advances, increased competition, consumer culture, and a skeptical public that is questioning the value of higher education at large are all challenging the foundations of American higher education institutions. Business in higher education as it has always been conducted with hierarchy cultures, traditional pedagogies, the structural designs of classrooms,
chairs, and textbooks with the tenured professor, in many ways is becoming or has already become the outdated status quo. The vast changes in technology and the population challenges alone are enough to rock the core of institutions who have done the same thing and held the same practices for decades. Because of changes in technology, the marketplace has become vastly flooded, and institutions that never worried about competition are now aware of their lack of environmental immunity, some of whom are already struggling to keep their doors open (Allen & Seaman, 2017; The Business of Higher Education, 2017; Moran, 2016; Price et al., 2016; Schirrin, 2016; Selingo, 2016a). What this means for higher education is that as their environment changes, so must they. This study provided insights on important factors that drive learning within an organization. Recommendations based on the data of this study and organizational learning literature are presented here.

**To the Leaders**

One of the most important findings from this study was the impact that leadership had on an organization’s ability to learn. Leaders that encourage the voices of their people and actually hear them are critically important to an organization’s growth, and ultimately its survival (Tourish, 2005). From the very top of the institution, the president sets a tone that everyone’s voice is valued, that leadership comes from everywhere, that everyone is responsible for thinking outside-of-the-box, and providing unconventional solutions to the most complex problems. The people of this institution felt deeply empowered by the president, his leadership team, and their immediate supervisors, all of whom regarded them as professionals in their fields with valuable knowledge. It is important that leadership in all institutions embrace a leadership style that empowers their people to provide answers and solutions from various perspectives; it is critical to organizational learning and survival.
Learning organizations place emphasis on the contributions of all people at all levels of the organization, seeking to gain their knowledge and learning for organizational benefit (Garvin, 1993; Slater & Narver, 1995; Weldy & Gillis, 2010). Leaders should also have the courage to listen and to follow if necessary. The automatic vigilance effect and the ingratiation effect are very real challenges that strangle an organization’s ability to learn. Tourish (2005) tells us that in years of organizational consulting, almost always the lower- and mid-levels had a clear understanding of what went wrong as it was happening. Because of poor leadership – for self-preservation – they kept their heads down, said nothing and did nothing. In other examples where people were brave enough to disagree, it did not always end well for them and it set the example for others to do nothing.

Leaders who are not open to hearing voices of critical feedback and dissent are condemning their organizations. Not only are the red flag mechanisms gone, but so too are the lines of knowledge, creativity, and passion. Leaders must have the courage to seek the voices beneath them and actually hear what they have to say. Those voices provide valuable insight into the internal processes of the institution and are the extension of their student’s voices. Steve Jobs once said, “It doesn’t make sense to hire smart people and then tell them what to do; we hire smart people so they can tell us what to do.” The leadership at this institution lived by that premise and should be studied and replicated, as they were a driving force of learning. They set the example in what they wanted others to do (e.g., sharing outside knowledge, communicating across organizational lines, encouraging the whole, empowering the voices of all of their people, and challenging the status quo, etc.). Learning organizations place emphasis on the contributions of all people at all levels of the organization, seeking to gain their knowledge and learning for organizational benefit (Garvin, 1993; Slater & Narver, 1995; Weldy & Gillis, 2010).
Flatten the Organization for Enhanced Collaboration

Another critical finding in this study was the flat culture of the institution, which again, was empowering to people at all levels of the institution and provided superior channels of communication and collaboration. In many buildings, there were seas of cubicles; everyone from the administrative assistants to literally the president of a division were sitting in cubicles together. This set up built closer relationships across unit lines that enhanced both formal and informal communication and knowledge transfer. People also felt empowered to be able to speak to whomever they needed, laterally and vertically. Cross-sectional communication and collaboration was found to be critical to organizational learning.

This structural set-up is not common to the average institution of higher education where the leadership maintain large offices with windows and their subordinates can be found in cubicles that may also be very separate from other parts of the institution for whom their communication with is critical. This traditional set-up has supported both physical and conceptual models of hierarchy and separation of people by rank. To that end, there is recognizable danger in any organization using hierarchy methods that attempt to organize every action from the top down. As the world grows more complex, it becomes increasingly critical for an organization and its members to be able to effectively improvise and mutually adjust to unforeseen circumstances. The value of teamwork and collaboration is necessary to achieve that end (Sashkin & Rosenbach, 2013). Creating a flat organizational culture and work environment can be considerably helpful in team building and knowledge transfer efforts.

Equal Investment in Exploration and Exploitation Efforts

One of the most important findings of this study was the balance of both exploration and exploitation efforts. Although many organizations are busy trying to scan their external environment for answers and making investments in potentially costly outside endeavors, this
comes at the expense of their own internal investments on systems and professional development that are equally important to learning, growth, and the bottom-line. Conversely, others may be invested in their internal systems, but are not doing enough to engage their external environment for new sources of information and drivers of innovation. The institution must be able to perform and learn at the same time, which includes elements of both internal and external knowledge acquisition and use. According to Garvin (1993), many institutions of higher education fail to qualify as learning organizations. Although they are effective at creating and acquiring knowledge, they have been shown to be less effective at actually applying that knowledge to their own activities due to the cultural and structural misalignment that guides their practices. Critical reflection on failing organizational status and initiatives is a part of this process. As was the case in this study, it would benefit institutions to reflect on their current successes and failures to ensure that there is a greater understanding of what is going right and what is going wrong in the system and why. An evaluation of the institution’s exploration and exploitation efforts could be helpful in understanding an existing imbalance.

**Using an Organizational Learning Model**

Using an organizational learning model to determine gaps in the system could be helpful in starting to address organizational pain points. After using a model to determine where the organization stands, introducing the use of basic organizational learning practices can be helpful in adjusting the culture of the institution to one that is suitable to fostering learning. Organizational learning practices help organizations in an unstable environment to overcome their chaotic and changing conditions (Aminbeidokht et al., 2016; Hanaysha, 2016; Hussein et al., 2016; Lopez et al., 2005). Organizations that adopt learning practices – embedding it in the culture – are able to effectively and collectively use their skills and capabilities to produce and utilize knowledge, transforming the organization and its individuals as they acquire new
knowledge and vision (Garvin, 1993). Institutions should begin with a thorough understanding of an organizational learning model and how well their institution is aligned as a means to start a transformational process.

**Reflections of a Scholar Practitioner**

This doctoral program has had a profound impact on my life and has taught me to see the world through a wholistic and systemic lens. This program has provided me with new passions and interests in life through that lens. The world we live in exists in systems, and the interconnectedness of everything in it was not was evident to me until this program. This program and this dissertation have challenged me to see both micro and macro versions of our system and their impact, which has been profoundly important to my identity as a scholar practitioner. My knowledge of organizational behavior and its many elements (e.g., leadership, culture, systems thinking, decision making, change management, etc.) have grown in ways that I could not have understood without embarking on this journey. I am eternally grateful for this experience and the knowledge I carry forward.

**Concluding Remarks**

In this study, the researcher gained an understanding of the cultural context, structures, and processes that allow for organizational learning to occur in the higher education environment. The literature review provided vast insight into the many important elements of the system and how each element impacts the learning system as a whole. Through a descriptive case study methodology, data was collected about the institution through its public facing persona such as the website, promotional materials, filmed speeches, and articles of evaluation regarding the institution and its public standing. Internal data was then collected through individual interviews, group interviews, informal conversation, internal documents provided, and site observations. Using an organizational learning model, the wholistic nature of this
organization and its internal functioning was captured to understand its alignment with each element of the model, providing insights into the institution’s ability to learn. It was found that this institution has a culture and context that provide the space for organizational learning to occur allowing for adaptability and competitive advantage in volatile market conditions. Using organizational learning practices, Virtual U was found to be capable of balancing and enhancing both their internal process and systems capacity, while also maintaining an ability to scan and engage their external environment simultaneously. Their collective cognition was one that provided a mechanism of double-loop learning, providing another layer of understanding as to how they learn. Last, their adaptive learning culture and structural context were found to be one that provided intense learner focus and superior production toward that end. Several recommendations and opportunities for further research were provided.
References


Appendix A

Letter to Participants Requesting Participation in Research

Dear institutional study participant,

My name is Noelle Kendrick, and I am a doctoral student at Northeastern University under the guidance of Dr. Margaret Gorman. I am preparing to conduct research for my dissertation and would like to invite you to take part in my study. Specifically, I am looking to interview members across your institution to get a better understanding of the environment and culture of your institution as it applies to organizational learning practices and innovation during this challenging time for higher education institutions.

The title of my study is Organizational learning in higher education: Exploring one institution’s efforts to meet the emerging changes in the higher education landscape.

Exploration of this issue is crucial at this time, as I am sure you are aware that many institutions are facing existential challenges given the changing nature of the population, technology, public expectations of higher education, and the higher education landscape at large. Your institution, amidst all these challenges has been innovative and prosperous, leading the way in many respects in American higher education. I would like to have a greater understanding of the context, culture, structures, and practices that allow for this innovation to occur. This research may play a critical role in helping other institutions to understand the nature of organizational learning practices in higher education. Business as usual can no longer be the practice of higher education in this changing environment. Your participation in this study will help me contribute to the limited research conducted on organizational learning in higher education.

To conduct this study, I will be asking participants to dedicate 60 minutes for one interview about their experiences or 90 minutes for participants in a group interview. The interview will be conducted in-person, in a location, and a time convenient for you or via an online video conferencing platform. Group interviews will take place in a private and secure environment designated by the institution. During the interview and group interviews, I will ask participants to answer a series of questions about their experiences with various factors in your organization such as communication, culture, knowledge sharing, innovation, etc. After the individual interviews are transcribed, participants will have the opportunity to review their transcript for accuracy and clarification. Group interview participants will not be able to review transcripts given the group structure. Nominal group technique will be used in the group interview, where consensus is sought among participants during the group interview session, and individual feedback is also shared.

Your participation in this study is voluntary. Additionally, your participation in this study is strictly confidential, and your identity will not be disclosed. My advisor and I will be the only individuals to know of your involvement. Although there are no foreseeable risks or discomforts to you for taking part in this study, you may withdraw at any time or refuse to answer any question.
By participating in this study, your experiences and input may help other institutions of higher education understand the importance of organization learning and its benefits. Consequently, a summary of the research findings and excerpts from each participant’s interview will be published in my dissertation. These results may also be used in future scholarly publications and presentations.

Although a select number of participants will be used for this study, I ask that you please consider participating in this study. If you are comfortable with the purpose of this study and are willing to participate, please let me know at kendrick.n@husky.neu.edu or call 910-689-7613.

Thank you for your consideration.

Noelle Kendrick
Doctoral Candidate
College of Professional Studies
Northeastern University
Appendix B

Interview Protocol Form and Student Questionnaire

Participant Information

Institution: ________________________________________________

Interviewee (Title and Name): ______________________________________

Interviewer: _____________________________________________________

Date: _____________________________________

Location of Interview: ______________________________________

Introduction

Hello! My name is Noelle Kendrick, I am a doctoral student at Northeastern University conducting a research study. Thank you very much for taking time out of your extremely busy schedule to speak with me. You have been chosen to participate in this research study because you have been recognized as someone who has valuable training and experience to share with the academic community in regards to your role at your institution.

This research project focuses on the attitudes, perceptions, and experiences of institutional members as it pertains to the context, culture, and structures that support a learning environment.

Again, I appreciate your time, cooperation, and effort in agreeing to participate in this study. This is the final phase of my doctoral studies and this research is the culmination of my interests involving organizational learning in higher education. Before we begin, I want to reassure you that all of the study participants will remain anonymous and participation is completely voluntary. Also, a thorough review of these consent forms will be conducted.

(Review and sign Northeastern University Consent Forms)

Because your responses are important and I want to make sure to capture everything you say, I would like to audio record each of our interviews. Do I have your permission to record this interview? I will also be taking written notes during the interview. I can assure you that all responses will remain confidential and only a pseudonym will be used when quoting from the transcripts. My adviser and I will be the only people privy to the tapes, which will be destroyed after they are transcribed. To meet our human subjects’ requirements at the university, you must sign the form I have with me. To briefly summarize what is in this document, it states that: (1) all information will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) we do not intend to inflict any harm. Do you have any questions about the interview process or this form?

The interview process will consist of three separate interviews, which will provide both the researcher and participant time and opportunity to become familiar and comfortable with each other and the interview process. Each interview will last about 60 minutes or group interview
about 90 minutes. During the interviews, several questions and conversation points will be covered. If, at any time, you’re uncomfortable with a question or need me to re-phrase, please feel free to let me know. Do you have any questions before we begin?

Interview Questions

- A lot is being written today about the disruption of Higher Education with emerging technology, declining enrollments, and migration to online. How does your institution keep abreast with all these changes? Who’s doing the gathering of information and how’s that information being made sense of or shared within the organization?
  - If you were to characterize this organization’s attention to the external environment, how would you describe it (more passive, active, follower, leader).
  - If you were to characterize the institution’s internal environment, how would you describe it?

- Virtual U’s new strategic plan (2018-2023) has five diversified commitments that it seeks to achieve; Can you share with me how this plan was developed, who was involved, and how was it communicated across the institution?
  - If/when/how does this institution review, revise, revisit it’s strategic priorities? Who’s involved?
  - If you were to reflect on the nature of the strategic priorities and how day-to-day life occurs at the institution, what features would you say are more prevalent— is it more about developing and innovating or about market share and enrollment goals?

- Can you share with me a little about the organizational structure, in particular how information about strategic priorities is shared or discussed? If/when there’s change needed, how is that information shared/discussed? If/when collaboration across units (academic/operational) if/how does that happen?

- Given the changing nature of the market and educational delivery/pedagogy changes, how would characterize the relationship between academic units and business units at the institution? Have there been times when those bodies are at odds and if so, what has been done to help overcome those challenges?

- What prompts the institution to make changes to services or products offered to students?

- How does the institution address and reflect on failed initiatives? Who is involved in that process and how is that information shared? How do these failures impact future decision-making at the institution?

- In thinking about how this institution cues its employees about what’s important, what are the HR rewards in place to reinforce what the institution values? If/how do you feel there’s cue for learning-from-mistakes, collaborating with others, or fostering development?
• How does the institution gauge climate and morale? If there are ever any concerns, how are those concerns addressed?

• What are the top five words that come to mind when you think about the culture of this institution?

**Interview closing statement**

Thank you, this concludes the series of interviews for this study.

If I come across a need to ask any follow-up questions, which would most likely only be the case if I needed clarification to one of your responses, would it be alright for me to contact you? Would you prefer I contact you via e-mail or telephone?

Sometime over the next month, I will e-mail you a copy of the verbatim transcripts. If you choose, you will be given one week to review the information and provide me with any feedback, alterations, or corrections of the data. Can you please confirm the e-mail address you would like the information to be sent to?

And once this dissertation is complete, which will most likely be in 3 to 6 months from now, would you like an electronic copy of the document?

Do you have any questions for me?

Thanks again for your participation in this study!
Appendix C

Informed Consent Form

Northeastern University, College of Professional Studies

Name of Investigator(s): Dr. Margaret Gorman (Principal Investigator) & Noelle Kendrick (Student Researcher)

Title of Project: Emerging Technology: Organizational learning in higher education: Exploring one institution’s efforts to meet the emerging changes in the higher education landscape.

Informed Consent to Participate in a Research Study

We are inviting you to take part in a research study. This form will tell you about the study, but the researcher, Noelle Kendrick, will explain it to you first. You may ask any questions that you have. When you are ready to make a decision, you may tell the researcher if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, the researcher will ask you to sign this statement and will give you a copy to keep.

Why is this research study being done?

The purpose of this dissertation research is to gain insight into the culture, context and structures that allow for organizational learning to occur in the higher education environment.

Why am I being asked to take part in this research study?

We are asking you to take part in this research study because the institution that you work at has been largely successful in a highly turbulent space in higher education. Your position and experiences in that position are relevant to understanding the culture, context, and structures that promote organizational learning. Your institution currently serves as a model for others and the researcher would like to know more about environment within it as it applies to organizational learning models.

What will I be asked to do?

If you decide to take part in this study, you will be asked to participate in either one semi-structured interview or one group interview to describe your experiences with the culture, learning practices, and structures of your organization. Each interview will be about 60 minutes in length and discussion groups may last up to 90 minutes. The interviews will be face-to-face or through an online video conferencing platform. You retain the right to decline answering any questions at any time. With your permission, the interview will be recorded with a digital voice recorder and saved as an MP3 file for later transcription by a confidential third party, Rev. Following the transcription, the transcription will be sent to you to check for accuracy and clarification.

How much of my time will it take?
Each interview will last approximately 60 minutes, each group interview will last approximately 90 minutes. Participants will be asked to do one or the other, but not both.

**Will there be any risk or discomfort to me?**

There is no foreseeable risk to you for taking part in this study. However, if you do encounter discomfort, please alert the researcher of the issue and it can be addressed.

**Will I benefit by being in this research?**

There will be no direct benefit to you for taking part in the study. However, the information exchanged during the interview may assist future institutions of higher education in understanding what factors are impacting their learning orientations and therefore long-term sustainability.

**Who will see the information about me?**

Your part in this study will be confidential. Only the researchers of this study will see the information about you. No reports or publications will use information that can identify you in any way or any individual as being part of this project. The researcher will take every precaution to keep all information confidential. Research data is used only for reporting of the findings. Pseudonyms will be used for interviewees to protect identity and the university will not be disclosed. The research will only describe characteristics of the university. Audiotapes, transcriptions, and other identifying information will be kept in a personal locked cabinet and on a secure personal computer accessible only to the student researcher. All recordings and transcripts will be maintained by the student researcher until the thesis has been approved. Afterwards, all transcripts, recordings, and data files will be destroyed.

In rare instances, authorized people may request to see research information about you and other people in this study. This is done only to be sure that the research is done properly. We would only permit people who are authorized by organizations such as the Northeastern University Institutional Review Board to see this information.

**What will happen if I suffer any harm from this research?**

No special arrangements will be made for compensation solely because of your participation in this research.

**Can I stop my participation in this study?**

Your participation in this research is completely voluntary. You do not have to participate if you do not want to and you can refuse to answer any question. Even if you begin the study, you may quit at any time. At any point in time, you may withdraw from this study without explanation, penalty or consequences of any kind. Your participation or nonparticipation will not affect your relationship with Northeastern University or any other organization.

**Who can I contact if I have questions or problems?**
If you have any questions about this study, please feel free to contact the Student Researcher, Noelle Kendrick, at 910-689-7613 or by email at Kendrick.n@husky.neu.edu. You may also contact the Principal Investigator, Dr. Margaret Gorman, at 202-425-7111 or by email at m.kirchoff@northeastern.edu.

**Who can I contact about my rights as a participant?**

If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617-373-4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

**Will I be paid for my participation?**

No.

You can keep this form for your files.
Appedix D
IRB Application Approval

Northeastern
Notification of IRB Action
Date: December 3, 2018
IRB #: CPS18-11-22
Principal Investigator(s): Margaret Delaney Gorman
Noelle Kendrick
Department: Doctor of Education
College of Professional Studies
Address: 20 Belvidere
Northeastern University
Title of Project: Organizational Learning in Higher Education: Exploring One Institution’s Efforts to Meet the Emerging Changes of the Higher Education Landscape
Participating Sites: approval forthcoming
Informed Consent: One (1) unsigned consent

As per CFR 45 46.117(c)(2) signed consent is being withheld as the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required.

DHHS Review Category: Expedited #6, #7
Monitoring Interval: 12 months
Approval Expiration Date: DECEMBER 2, 2019

Investigator’s Responsibilities:
1. Informed consent form bearing the IRB approval stamp must be used when recruiting participants into the study.
2. The investigator must notify IRB immediately of unexpected adverse reactions, or new information that may alter our perception of the benefit-risk ratio.
3. Study procedures and files are subject to audit any time.
4. Any modifications of the protocol or the informed consent as the study progresses must be reviewed and approved by this committee prior to being instituted.
5. Continuing Review Approval for the proposal should be requested at least one month prior to the expiration date above.
6. This approval applies to the protection of human subjects only. It does not apply to any other university approvals that may be necessary.

C. Randall Colvin, Ph.D, Chair
Northeastern University Institutional Review Board
Regina, Director
Human Subject Research Protection

Northeastern University FWA #4630
Appendix E
NIH Human Subject Training Certificate of Completion

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Noelle Kendrick successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 01/07/2018.

Certification Number: 2589147.
APPENDIX F

Participant One Learning Vignette

Participant One is identified as someone who has been at the institution for 6-10 years and oversees academic departments with upwards of 50 employees. Participant One shares the dual role of adjunct faculty and administration, in addition to taking one or more graduate courses at the institution.

Participant One is encouraged and inspired by the leadership and the direction that the institution is moving. The overall tone of the interview was positive, futuristic, and student centered. Participant One describes the learning orientation of the institution to be on the forefront of what is happening in higher education and the global market in general; looking outward at the major changes in the world and how the institution can leverage those new developments to provide the best student experience and the most relevant education. Providing a “transformational education” was important.

Participant One as keenly aware of the challenges that organizations can have if all the right people are not at the table when decisions are made, and acknowledged that this had happened before, but it was something that has improved quite a bit after experiencing previous setbacks. In general, the practice across the college was to ensure that the right people were included in the process to ensure that a project was done right the first time, and with consideration of people in different positions and levels who might be better able to explain the student or systems perspective. Participant One believed the atmosphere of the university to be highly transparent, collaborative, fast-paced, innovative, and very student centered.

Participant Two Learning Vignette

Participant Two identified as someone who has been at the institution 6-10 years and oversees academic departments that include student facing personnel, some adjunct faculty, and onsite administrative staff of more than 200 employees on the team. Participant Two has also
served in the role as adjunct faculty and participates in graduate courses at the institution as a student.

Participant Two was clearly inspired by the mission and leadership at the institution and was very dedicated to their team and student success. Passion for the mission of serving and educating students that have really struggled to be successful in a college classroom was evident in the interview. It was not just about students graduating, however, it was a sincere care by the institution for students such as keeping the costs of textbooks and classes low, personally reaching out to students that are going through harsh life circumstances to help them stay on track, members of the college sending gift packages to students to help them stay motivated and connected to their college, and ensuring that the academic bar was set to a standard that meant something meaningful for the students degree in the end. Participant Two was committed to raising students to the bar, not lowering the bar.

Participant Two constantly encourages the team to do better, to bring suggestions, to be sharing information with each other from their outside environment about things that they should be considering and trying at the institution. There was a very analytical nature about the way that the team analyzed data on every element of student life to come up with ways to be serve the students.

The learning orientation summarized from this interview is proactive, caring, analytical, and reflective.

**Participant Three Learning Vignette**

Participant Three has been at the institution between one and four years, and oversees more than 30 people in an academic and student support capacity. This participant noted that he/she had worked at three other institutions of higher education and none of them were
committed to students like this one. The other institutions were traditional institutions that made
the students mold to them; in this case, they are molding to the student’s needs in many ways.

Participant Three describes the institution as very fast paced, interdependent, creative,
and student centered. There was an excitement in the interview when talking about how to the
institution gets creative with helping students reach their goals. This was something that was
taken very seriously, as the study of students and everything about them was critical to this unit.
The interdependent nature of the institution’s culture was addressed through the explanation of
how so many units come together to ultimately provide the very best solutions to students; it
should also be noted that the very best solution was the only kind of solution. Therefore, how
those solutions came about was important. The answer to this is everywhere. Ideas and
innovation come from everywhere. Leaders shared outside information – from the industry and
outside of it – with their staff on a regular basis and encouraged conversation and questions
around it. Staff would share ideas with their leaders regularly about process improvement,
student solutions, and anything that helped get the mission accomplished. The institution’s
culture was explained as fast-paced, creative, all hands-on-deck, and a make it happen mentality.

Participant Three had a “no doubts” ora about them. There was no doubt that the
institution was going to reach its strategic plan goals and be serving over 300,000 students by
2030.

**Participant Four Learning Vignette**

Participant Four has been at the institution 4-6 years and oversees 7-10 employees within
the communications area of the institution. This participant has worked with higher education
institutions for over twelve years in an indirect capacity that is related to their current position at
the institution. Because of the role, Participant Four has studied many colleges and the
challenges that they are facing.
Participant Four describes the institution as incredibly student centered; everything they do revolves around making anything and everything better for the students. The climate and culture there was described as one where everyone is pulling for each other and everyone is pulling for the students. It was a place of transparency, trust, and support. Participant Four also noted that it was a place where they were not afraid to take risks or break their own system in trying to figure out what the best solution is. There is a forgiving atmosphere there, where risk is acceptable and if things are not going as planned, a pivot will occur. It was noted, however, that the institution could do a better job of reflecting on failed initiatives or having more conversation around why things went wrong before moving on.

Participant Four believed that the cross-sectional collaboration, strong leadership team, strong student-centered culture, and commitment to quality were among the driving factors of success for the institution. Being aware of what is happening on the outside is key and staying ahead of the game for the absolute best customer experience was necessary and a strength at the institution.

**Participant Five Learning Vignette**

Participant Five has been at the institution 1-3 years and oversees between 8-12 employees within the professional development area at the institution.

Participant Five describes the institution as highly committed to the mission and the five commitments that are laid out in the strategic plan. From their perspective, everything that their unit does is aligned to the strategic plan and trying to ensure that the entire college has the competencies that they need to get there. Participant Five also describes the leadership as very innovative, originators that are constantly scanning the external environment to guide where the institution needs to go in terms of changes in the world on the largest scale.
Participant Five acknowledges that while the institution could reflect more, the agile nature of being able to pick and move or change direction quickly is a point of pride for the institution and something that contributes to their success, though at times could be a detriment. The inter-dependent nature of the institution and the knowledge sharing that comes with that is a strength at the institution.

**Participant Six Learning Vignette**

Participant Six has been at the institution between 10-15 years and has recently transitioned into their current role within the academic professional development area and is currently overseeing one employee, though their history at the institution and in management is vast.

Participant Six describes the institution as outward looking, collaborative, and analytical in many ways. Their belief is that the institution is providing the right trainings, culture, and atmosphere of support for people at all levels to learn about and engage in systems thinking. There was an acknowledgement that collaboration across the institution, systems thinking, entrepreneurial mindset and student success are among the important driving factors of institutional success. There is also a culture of employee acknowledgement and care that brings people together and makes the atmosphere a positive place to work.

**Participant Seven Learning Vignette**

Participant Seven had been at the institution between 3-5 years and currently oversees more than 200 people in an academic position. Participant Seven is also serving in the dual role of adjunct faculty at the institution.

Participant Seven describes the institution as very collaborative. Everything from the strategic plan to course development happens with the input of many people and they consider cross-sectional collaboration to be a strength of the institution. Often, people from all levels and
all units are included in important decisions and have their voice heard before final plans or
decisions are made. In their experience, the institution has examples where they have owned
their failures and admitted that they needed to take a step back and ensure that something does
not go wrong again. Because of these historic examples, the institution is more careful with
having the right people at the table at the right time. The institution is driven by the students and
the staff, which is evident in the culture. College leadership have created a culture of
acknowledgement for staff and the staff are all committed to the students.

Participant Seven describes the institution’s learning orientation as one that is outward
looking, driven by the mission, and connected through good knowledge sharing practices and
communication between teams/units.

**Participant Eight Learning Vignette**

Participant 8 has been at the institution between 33 and 36 years and oversees several
direct reports and about 100 total employees in the Information Technology area of the
institution. Participant Eight is also serving in the dual role of institutional administration and
adjunct faculty.

Participant Eight describes the institution as outward looking, very innovative, student
focused, with incredible leadership, having an all-hands-on-deck collaborative mentality, and a
pride in their fast-paced ability to make even the most complicated of projects become a success
in record time such as the LMS and the CRM. There was an unwavering confidence in the
leadership and their ability to correctly guide the organization, in addition to an admiration for
them as people. There was clear confidence in the research and development efforts that were
occurring and the use of good data to make decisions that were really in the best interest of the
institution long-term.
The atmosphere was described as a family environment where people are coming together and helping other people, both for professional collaboration reasons, but also for personal reasons such as deaths in the family or illness. The environment was also noted to be completely driven by learner success; the culture there revolved around it, people truly believed in it, and that was all the reward that was needed – serving their learners.

**Participant Nine Learning Vignette**

Participant Nine has been at the institution between 9 and 11 years oversees currently oversees two employees in an academic and accreditation area of the institution. Participant Nine also serves in the dual role of institutional administration and adjunct faculty.

Participant Nine describes the institution as ever-evolving and outward looking for the sake of the learners, who are the north star. Much of their thoughts came from the perspective of “that depends on what unit you are in or what your job is.” There was also an acknowledgement of some strengths of the university, like collaboration or reflection, but stated many times that no one is ever perfect and even though they likely have far less silos than others, they would not claim them to be non-existent there at all. Still, when people needed to come together to have a good understanding of something or make a project come to life, the employees always worked across their lines well.

Participant Nine believed that the institution did go through processes of reflection on both successful and failed initiatives at a higher level, but was unsure about the smaller unit reflections. Participant Nine was careful not to speak in terms that were too broad, and generally followed with information about it depending on the unit or from their experience. One thing that was spoken about more broadly was the respect for the president of the institution and the leadership team. The president is known by everyone at the college to be visionary, authentic,
down-to-earth, and always walks the talk of anything he says. The institution places deep trust in him and is inspired by him.

**Participant Ten Learning Vignette**

Participant Ten has been at the institution between 1 and 3 years, and oversees between 140-160 people in an executive level leadership position at the institution.

Participant Ten described the institution as being highly thoughtful around innovation and understanding the future of higher education and the atmosphere for which the institution is situated in. There was a deeper focus on understanding the environment and looking for ways to have real-time information – ques from the environment – that would help to make the correct decisions before these changes to the environment even occurred. In that light, the institution is significantly investing in research and development; not just to understand the learner of 2030, but also to understand major shifts in the environment. Artificial intelligence was mentioned as an example of some in-house experimentation occurring in their innovation lab – the Sandbox – where as a result of ques from the environment, they feel a need to start testing it and figuring out how they can use it or bring it to scale.

The learning orientation as described by Participant Ten is outward looking, using consultants, undergoing trainings with other industries, upgrading technology, investing in research and development efforts and looking for alternative ways to educate the world.

**Group One Learning Vignette**

Group One participants have been at the institution more than five years collectively, and oversee more than 200 employees collectively. Group One participants serve in a variety of combinations of dual roles such as administration, students, and faculty.

The participants in this group interview describe the institution as very active in engaging both their employees and their external environment as a source of information and learning.
There was an acknowledgement of how often and how well the leadership of the institution empowered their employees at all levels across the organization to contribute and bring knowledge to the conversation. Group members felt that the leadership respected them, believed that they were the experts in their fields, and expected them to actively contribute knowledge to all processes and projects. There was constant encouragement to be looking for information outside of the institution and an expectation that this information would be shared.

The group describes all actions of the institution as being driven by learner success and all things being centered around that. There is an on-going effort to learn how best to support the learner and provide the highest level of customer care. There was no problem at all referring to the learners as customers, and there was collective acknowledgement that the global campus was intentionally set up like a business, bringing in leadership with business backgrounds that would develop the institution in that regard. Some of the members also stated that being learners themselves gave them the chance to experience what their learners experienced, and therefore were able to bring that knowledge to their administration to make changes and improvements as needed.

Group participants collectively agreed that Virtual U was an innovative, fast paced environment, that empowered employees to provide feedback from the ground-level to the top of the institution. The institution was considered to be flat and highly inclusive. Decisions were either data driven decisions, or decisions that were supported because it was in the best interest of their learners.

**Group Two Learning Vignette**

Group Two participants have been at the institution more than five years collectively, and oversee more than 50 employees collectively. Group Two participants serve in a variety of combinations of dual roles such as administration, students, and faculty.
The focus of the Group Two session was largely data driven actions and collaborating around data often in morning scrums and standup meetings. The fast-paced nature of the institution required people to meet often to ensure that everyone was on the same page, moving in the same direction, and had a clear understanding of all elements of the project. It was acknowledged that things were subject to change quickly and therefore people to meet regularly. Morning scrums are used at the unit level and are also used for major projects across the institution.

Group Two also spoke to the data driven nature of the institution and how quickly they were aware if a student had not turned in an assignment as an example. They are focused on quickly changing course or adding interventions when necessary either for students or institutional projects.
## Appendix G

### Inductive Coding Spreadsheet Sample

<table>
<thead>
<tr>
<th>Interview Matrix</th>
<th>Inductive Codes per participant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question</strong></td>
<td><strong>P1</strong></td>
</tr>
<tr>
<td><strong>Engaging the external environment</strong></td>
<td>Outward looking_ 9 Business environment_2 Proactive_4 Outside Learning_1 Leadership Encouraged_2</td>
</tr>
<tr>
<td><strong>Creating the strategic plan</strong></td>
<td>Cross-Sectional Collaboration_9 Leadership Guidance_3 Focused_2 Individual Personal Ownership_3 Accountability_2</td>
</tr>
<tr>
<td><strong>Structure and communication on important information and strategic initiatives</strong></td>
<td>Transparent_3 Frequent Communication_1 Chains of Communication_1 Cross-Sectional Collaboration_9 Considerate of Others_1 Learning from mistakes_1</td>
</tr>
<tr>
<td><strong>The relationship between business units and academic units</strong></td>
<td>Shared Decisions_1 Cross-sectional Collaboration_9 Positive Tension_1 Student Centered_5</td>
</tr>
<tr>
<td><strong>Prompts for changes in services and products</strong></td>
<td>Student Centered_5 Outward looking_9 Futuristic_2 Leadership Guidance_3 Business Environment_2 Outside learning_1</td>
</tr>
<tr>
<td><strong>Reflecting on failed initiatives</strong></td>
<td>Risk Takers_1 Fast Paced_1 Transparent_3</td>
</tr>
<tr>
<td><strong>Employee acknowledgement and rewards</strong></td>
<td>Formal Acknowledgment_1 Care for Employees_2 Culture of Acknowledgement_1 Leader Encouragement_1</td>
</tr>
<tr>
<td><strong>Climate/morale/concerns addressed</strong></td>
<td>Inspired_1 Committed to Diversity and Inclusion_2 Data Driven_1 Proud_1 Focused_2</td>
</tr>
<tr>
<td><strong>Internal environment and culture</strong></td>
<td>Trust in leadership_3 Transparent_1 Innovative_2 Student Centered_5 Culture of Communication_1 Risk Takers_1</td>
</tr>
</tbody>
</table>
## Appendix H

### Table of Codes with Quote Definition Table

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Cluster Focus</th>
<th>Examples Cluster Quotes</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committed to the Students</td>
<td>Learner success comes before anything else at Virtual U</td>
<td>“VU will maintain a learner-first focus where each person feel the faculty and staff's dedication to his/her success, regardless of how large the university grows. Our first question is starting a new project will always be: How will this help the learners?”</td>
<td>Student Centered 45, Student Driven 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“The internal environment is focused on just one thing – the success of our students. This permeates the entire internal environment and is living by every employee every day”</td>
<td></td>
</tr>
<tr>
<td>Committed to the Employees</td>
<td>Employees feel valued, empowered, and supported at Virtual U</td>
<td>“We will hire and cultivate people who are committed to our mission and vision, and who understand and reflect our learners. We will provide training and professional development opportunities and promote leadership literacies. We prioritize culture-building among our employees.”</td>
<td>Culture of Service to Each Other 1, Culture of Acknowledgement 6, Informal 1, Family 1, Work Life Balance 1, Care for Employees 9, Committed to Diversity and Inclusion 1, Manages Culture 2, Culture of Learning 1, Positive Culture 1, Mistake Forgiveness 1, Mission Aligned 2, Rewarding Environment 2, Highly Engaged 1, Empowered 5, Exciting (environment) 1, Proud 1, Individual Ownership 3, Respect 1, Belief (in org ability) 1, Employee Development 10</td>
</tr>
<tr>
<td>Strong Leadership</td>
<td>Leadership creates a safe, supporting, and encouraging environment for learning</td>
<td>“I think every employee here would follow him through the gates of hell.”</td>
<td>Encouraged by Leadership 3, Leadership Guidance 3, Trust in Leadership 5, Inspiring Leaders 4, Leadership Sharing 2, Strong Leaders 5, Leaders Admit Mistakes 1, Leadership Presence 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“He's pretty incredible, he's amazing actually. He inspires us right from the top, he inspires people feeling so invested in developing and being innovative and being focused on the</td>
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</tbody>
</table>
student, and really paying attention and looking around. What is the best way to do things? And don't think you need to do things exactly how they're being done today. We don't wanna increase costs, we wanna make it affordable for students. Having access to higher education is one of our number one goals. So how do we make it innovative, how do we make it world class, how do we make it affordable? We've got to keep thinking about that."

### A Culture of Collaboration

**Cross-sectional collaboration is the key to success at Virtual U**

"During VU’s time of exponential growth, the university was best served by developing an independent model where departments and entire business units were free to work among themselves to build their models. Now, in a time of sustaining growth and planning for the future, VU is building an interdependent model where shared exploration and the emergence of new perspectives are critical to surveying the existing landscape and making projections for the future. VU aims to incorporate agility and optimization across the university as part of its interdependent model."

"We have working groups that specifically have many different stakeholders, representatives as possible. I'm working on a large initiative right now that’s grounded in the team that I manage, but I have about 12-15 different operational groups across the campuses that meet bi-weekly."

### The Business of Higher Education

**There is no question that Virtual U is in the business of higher education and embraces that part of their identity**

"That transition to being more of a business model started at least more than six years ago, with the president at that time, who didn't have an academic background. He was totally business. And that's how he established the

| Cross-Section Collaboration 26, Positive Tension 2, Shared Decisions 1, Considerate of Others 1, Frequent Communication 1, Chain of Communication 1, Culture of Communication 1, Aligned 3, Possible Silos 1, Balanced 2, Interdependent 2, Culture of Transparency 2, Collaborative 7, Learning Teams 1, Innovation Teams 1, Town Halls 2, Work Groups 1, Upward Communication, 1 Transparent 6 |
college. And I think from his point of view, was that to create the place that he envisioned, that this was going to be set up as a business, even though we were also kind of using academic terms. But now has been, you said, that line is blurred about academic business. I think we're kind of a combination of the two."

“Specifically, to help grow at scale, by the president. And, really, I'd say his vision of treating the college like a business is”

<table>
<thead>
<tr>
<th>Continuous Improvement</th>
<th>There is an atmosphere of continuous improvement through learning and data driven decisions</th>
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<tbody>
<tr>
<td></td>
<td>“We use data to derive a better understanding of our learners and our institution. Understanding which metrics matter along the learner life cycle is critical. We measure persistence, retention, learner success, learning outcomes, and numerous other metrics that provide daily insight to learner-facing teams on how to prioritize goals. Through data analytics, we derive a deeper understanding of the learner experience.”</td>
</tr>
<tr>
<td></td>
<td>“We have metrics and KPIs related to success rates, graduation rates, persistence and retention that leadership monitors at the program and vertical level, along with marketing metrics such as melt, leads and program changes by cohort.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Future of Higher Education</th>
<th>Virtual U is a shapeshifting organization that is committed to staying at the forefront of higher education through proactive environmental engagement, innovation, and technology</th>
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<tbody>
<tr>
<td></td>
<td>“We use the VUCA lens to imagine the challenges and opportunities facing future learners. We are preparing for the Class of 2030, the oldest of whom are part of Generation Z and the youngest of whom do not even have a name for their generation yet. By orienting ourselves around the needs of the Class of 2030, we can strategize and prepare for teaching them in a world</td>
</tr>
<tr>
<td></td>
<td>Outward looking 21, Proactive 9, Outside Learning 10, Futuristic 3, Risk Takers 6, Innovative 5, Innovation from all Levels 1, Forward Thinking 3, Outside Training 1, Open Minded 1, Disruptors 1, Creates the Future 1, Continuous Research 1, Relentless Reinvention 1, Shapeshifters 1</td>
</tr>
</tbody>
</table>
dissimilar from the existing higher education landscape."

“To remain relevant in an uncertain future, Virtual U must be agile enough to respond, adapt, and transform with the ebbs and flows of forces and challenges beyond our control.”

| Research and Development 5 |