DESIGNING STUDENT-CENTRIC SOLUTIONS THROUGH COLLABORATION: EXPLORING THE EXPERIENCES OF HIGHER EDUCATION ADMINISTRATORS LEADING CROSS-FUNCTIONAL PROJECTS AND INITIATIVES

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Dedication

This work is dedicated to my family: my wife, Christine, and my daughters – Emma and Hailey

Thank you for giving me reason push forward.

Always remember – the path taken is the most satisfying of any accomplishment

The sacrifices you all made that allowed me to pursue my dreams is something I will forever be grateful.

Abstract

The existing organizational structures and design of higher education institutions can best be described as university-centric where a student engages in various moving parts that, at times, can be described as disjointed, loosely coupled, and bureaucratic. Also, significant research and reports find that employees are questioning the education to employability readiness of graduates. These two instances lay a foundation where higher education institutions can evolve to meet a holistic student-journey that transitions a student from education to employability. Thus, the purpose of this research study was to understand the experiences that mid-level higher education leaders have when designing student-centric solutions. A qualitative Interpretative Phenomenological Analysis (IPA) approach was used to understand the experiences of four higher education administrators that lead student-centric initiatives at the non-profit higher education institutions they serve. Design thinking was used as the theoretical framework. Through design thinking, design teams seek to understand the unseen or unarticulated needs of a customer. This approach is appropriate as higher education seeks to better understand how to best support the needs of students as they transition from education to employment.

Three major findings emerged from the collection of superordinate and sub-themes. First, higher education administrators' strong-sense of empathetic behaviors toward the student journey is influenced by past events and behaviors they experienced. Second, this study found that higher education administrators possess the ability to overcome challenges by using a combination of qualitative story-telling data and sense-making to change perspectives. Finally, this study found that higher education administrators collaboratively seek to develop empathetic solutions that positively influence the holistic student lifelong educational and employability journey. These findings provide practitioners a greater understanding of the motivation, barriers,

and approaches that higher education administrators leverage as they initiate and design student-centric solutions as they attempt to close the education to employability gap. This work concludes with a discussion of these findings in the context of future research and practice implications.

Keywords: design thinking, customer-centric, student-centric, university-centric.

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Similar to a dissertation contributing to a small slice of existing literature, a responsibility exists for any educational recipient to leave the world a little better than it was given to them. I hope to continue to be the best person I can be for my family, the students I serve, and society as a whole.

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Chapter 1: The Research Problem

John is a student currently enrolled at his local university. He lives on campus but is taking courses online at a fraction of the cost of taking the course on-campus. Lois has a graduate degree in her field but needs to demonstrate skills to remain relevant in her field and enrolls in an online program that provides badges demonstrating competency in the needed subject area. Henry is a hiring manager who is dissatisfied with the level of critical thinking skills of graduates from the local university. Paul is a new college president determined to cut costs, so financial barriers are less of an issue for students seeking to attend his university. These stories provide a sample of issues faced by higher education administrators as they seek to understand the needs of students better while balancing the role and mission of educational institutions they serve.

Those with a college degree are more likely to earn more than those without an educational credential (Gallagher, 2016). Higher education institutions face disruptive shifts impacting student experiences, organizational models, and pedagogical approaches (Christensen & Eyring, 2011). Innovative delivery models are challenging the traditional delivery of educational content (Hill, 2014). Emerging technologies present unique opportunities for higher education institutions to keep pace with how a student may change as integrated technological platforms raise student expectations as it relates to learning and educational outcomes (Craig, 2018). Colleges and universities need to design impactful student-centric solutions that respond to the lifelong employability requirements of a student and the demands of a changing educational landscape. These designs must meet the expectations of students while profoundly understanding the journey a student makes as they navigate through the multifaceted phases of receiving a college education. Getting to this state requires collaboration between the multi-faceted offices that support student success and academic outcomes.

Problem Statement

Higher education provides advanced educational opportunities and contributes to the health and growth of a freethinking society (Gallagher, 2016; Fishman, Ekowo, & Ezeugo, 2018). A student participates in educational activities and receives a credential upon successful completion of an academic program. Employers hire those that possess a higher education credential and expect that a graduate can communicate effectively, think critically, and collaborate with team members (Arum and Roska, 2010). Unfortunately, the competencies demonstrated by graduates has raised questions on the value of the degree (Koc, 2017). To meet the demands of lifelong employability for students, individual and student-centric experiences must be grounded within the higher education institutions that serve students (Dahlstrom & Bichsel, 2014).

The current organizational structure and design of higher education do not fully place the needs and interests of the students at the center of the mission of the institution. Changing dynamics in higher education has exposed a gap between what a student needs, what the workforce expects, and what higher education delivers. This change may signal a requirement that higher education institutions develop student-centric programs, processes, and policies to meet these multi-varied expectations best. Developing student-centric solutions collaboratively between different academic and administrative structures is difficult within a traditional higher education organizational structure (Kezar & Lester, 2009) that is primarily designed to meet the needs and the interests of members of the institution (Carey, 2015; Kezar, 2018). Through the practice of human-centric design thinking, an opportunity exists for higher education institutions to use a design thinking approach to develop student-centric systems and processes. Higher education leaders and teams can leverage the practice of design thinking to immerse in the

worldview of the students they serve to deeply understand their individual experiences so that meaningful and purposeful services emerge that improve experiences (Brown, 2009).

While it is seemingly difficult to work collaboratively within higher education institutions, design thinking is being used to improve systems and processes for students within this environment (Willness & Bruno-Bossi, 2017; Withell & Haugh, 2013; Whang et al. 2017) Possessing an understanding on how a leader's experience in approaching these projects is needed. Thus, the purpose of this study was to understand the experiences faced by mid-level higher education administrators leading student-centric initiatives.

The Justification for the Research Problem

While most Americans view higher education as a public benefit, 75 percent expect higher education institutions to prepare students to effectively contribute to the demands of the modern workforce (Fishman et. al, 2018). As it relates to workforce readiness of college graduates, a Pew (2018) study found that 61 percent of employers indicate that higher education is moving in the wrong direction as demonstrated by the lack of soft-skills possessed by graduates. A Gallup and Strada Education Network study (2018) revealed that only 26 percent of college-educated adults find that the education they received is relevant in their daily lives. These industry reports provide a sense of the public's many perceptions of the value of higher education.

Higher education organizations are not immune to external forces driving change. However, higher educational institutions are not organizationally structured to respond and adapt to change initiatives at the speed that the current environment requires (Kezar, 2018). These forces, which include financial concerns around the stability of the college enterprise, new and emerging technology designed to improved business models and respond to customer-centric

needs, and public pressure around the cost of higher education, make responsive change initiatives challenging in higher education's loosely-coupled and university-centric organizational structure (Kanter, 1994; Kezar, 2009; Manning, 2013). As a result, higher education is finding itself in a reactive position to these systematic changes (Massy, 2016; Gallagher, 2016). Trust in educational outcomes have been questioned by employers and college affordability has been a frequent topic on if the cost to obtain a degree is worth the investment made by those enrolled (Arum & Roska, 2009). Micro-credentials and competency-based education provide an alternative pathway to obtaining a recognizable educational credential that is relevant to employers (Sandeen, 2016; Gallagher, 2016). Alternative credentials and competency education challenge the Carnegie credit hour, which integrates with multiple facets of higher education including financial aid, course sequencing, and a measurement of what students learn in a time-based model (Carey, 2015). Additionally, emerging technologies such as machine learning, and artificial intelligence require higher education institutions to understand how these technologies will disrupt the organizational structure and plans of their institutions (Gallup & Northeastern, 2018) and student expectations. Responding to these external disruptions collaboratively while also meeting student expectations is a requirement that higher education should strive to meet.

The career readiness of college graduates does not meet the expectations of employers. Arum and Roksa (2010) found gaps in what employers expected of graduated and what higher education institutions believed they delivered. In this study, Arum and Roksa found that graduates lacked critical thinking, collaboration, and communication skills expected by employers. Higher education institutions believed that these students graduated with the necessary skills and met employer expectations. A more recent study demonstrates that this

expectation gap continues to exist. Specifically, results of a survey conducted by the National Association of Colleges and Employers (Koc, 2017) demonstrate that employers continue to lack confidence in the critical thinking, communication, and collaboration skills demonstrated by students now employed within the workforce.

Students expect higher education to include an appropriate level of technology but also the ability to access course content digitally and without barriers (Dahlstrom & Bichsel, 2014). Technology is integrated into a student's life more so than in previous generations (Christensen, Horn, Caldera, & Soares, 2011). Students are shifting to online resources to higher education services and support (Kezar, 2018). Electronic communication channels evolve to a point where immediate to near immediate responses are the expectation (Fullan & Scott, 2009). Mobile devices are prevalent, and students expect to receive course content, administrative tasks, and other learning solutions through these devices (Dahlstrom & Bichsel, 2014). A blend of digital learning, coupled with face-to-face work, strikes a balance to how students expect to engage within a modern-day higher education learning environment (Bernard, Borokhovski, Schmid, Tamim, & Abrami, 2014). Faculty members, course developers, and higher education administrators need to understand student expectations to enhance the overall learning experience and meet the needs of student's today.

The culture of higher education does not promote the need for change in response to the current needs of students and employers (Manning, 2012; Buller, 2015). Common change processes promoted by that work in hierarchical organizations are less effective in the distributed higher education leadership model (Buller, 2015). A distributed leadership model provides the sharing of power between executive leadership, faculty, administration, and in some instances, students (Buller, 2015). Distributed organizations are structured to promote shared decision

making and allow the protection of certain liberties of its members. The distributed leadership model of higher education provides responsibilities of the faculty to develop curriculum and the administration to implement policies, procedures and other initiatives directed from the governing board (Buller, 2015). This structure is best described as being more university-centric rather than student-centric.

The reform that is needed to migrate from a university-centered experience to a student-centered experience is difficult to achieve due to the organizational structures that exist today (Massy, 2016). Defense of traditional pedagogical and administrative approaches derails change conversations. Overvaluing the effectiveness of programs and processes places a barrier to reform discussions (Buller, 2015). Loyalty to discipline, reward systems, and structures that prevent knowledge sharing have also led to organizations being less open to cross-collaboration between academic departments (Kezar & Lester, 2009). Multiple tensions exist that pushes resources from one area of the university to another contributes to the distributed decision-making environment (Manning, 2012). Though these barriers make reform challenging, they are not insurmountable.

Higher education institutions need to design systems and structures that meet student needs and position for lifelong employability in an increasingly volatile and uncertain world. Accounting for what the student needs today and what the student must possess tomorrow must be at the center of these designs. Massy (2016) argues unless faculty and administration collaborate and support change initiatives that provide value to those they serve and support and align with the mission that guides the institution, higher education will never achieve the improvements it is seeking. Those that collaborate within higher education have found solutions that improved student outcomes, provided stronger research through cross-collaboration, and

developed streamlined operational structures that led to fewer student barriers (Kezar & Lester, 2009). Placing student needs first should be central to any reform activity within higher education.

To proactively meet these challenges, institutions should embrace a culture of innovation that values and rewards alternative perspectives that focuses on people and processes (Buller, 2015). To accomplish this, multiple departments and offices need to work together to design systems and structures to approach solutions that meet the human-centric needs of each stakeholder served by higher education. A framework exists to support the collaboration and emergence of new human-centered ideas.

Design thinking is a process that identifies a customer's unmet and often unseen needs. A design thinking approach promotes a culture of innovation and provides administrators with a framework to identify problems and incorporate solutions that meet the needs of students (Culén & Kriger, 2014; Benson & Dresdow, 2014). Design thinking focuses on the experiences of users by requiring the design thinker to deeply understand the issues faced by the user (Kolko, 2015). Design thinking incorporates analytical, convergent, and divergent thinking in an attempt to identify many potential solutions that can then be narrowed down to find the best solution for the organization (Buchanan, 1992). Lederman (2010) advocates leveraging design thinking in higher education to explore related problems that can lead to fundamental and student-centric change needed within the industry.

Design thinking's human-centered approach encourages cross-functional collaboration while building empathetic solutions in responses to the different forces driving change within higher education (Brown, 2009). Potential solutions derived from design thinking's human-centered approach are developed in a collaborative, iterative, and actionable environment

(Brown, 2009, Liedtka, 2014, Kolko, 2015) and strive to meet the physical and psychological needs of an individual's physical or emotional environment (Steen, 2012). Designers set aside personal bias to develop empathetic solutions using collaborative and actionable tools and a design skillset often reserved for designers (Tschimmel, 2012). Brown and Wyatt (2010) explain that design thinking leverages capabilities that problem solvers have but are not grounded in common problem-solving approaches. Unlike other widely used problem-solving methods that are not innovatively or creatively approached, the human-centered aspect required by design thinkers allows for in-depth solutions to emerge (Schon, 1983) while focusing on problems that are often not uncovered by the use of non-human centric problem solving approaches (Brown & Wyatt, 2010).

The design thinker needs to demonstrate empathy toward the customer as they attempt to design solutions that overcome the problem faced by the user (Brown, 2009). The application of empathy is a critical differentiator between the use of design thinking and other problem solving and identification approaches. The success of this empathetic approach stems from the ability of the design team to identify human-centered solutions and rapidly prototype and test these outcomes to then determine next steps within the solution lifecycle (Brown, 2009, Liedtka, 2015).

Adoption of design thinking is not without its challenges. Institutional adoption, necessary skillset, and mindset clash with pre-existing organizational cultures and systems may occur (Leidka, 2015; Melles, Anderson, Barrettm & Thompson-Whiteside, 2015; Kleinsmann, Valkenburg, Sluijs, 2017). These challenges require an organization to assess its readiness to move toward a design thinking, problem-solving approach (Carlgren, Elmquist, and Rauth,

2016). Additionally, effective adoption of design thinking also requires the organization to prioritize this approach as a core competency (Kolko, 2015).

Identifying solutions for the forces of impacting change requires an interdisciplinary and cross-functional team approach. Cross-functional team projects, like the type of projects introduced through design thinking (Kolko, 2015; Liedtka, 2015), bring together different members of the organization that work together to solve a problem or implement a desired solution (Yukl, 2010). While the benefits of collaborative problem-solving approaches are well known (Ford & Randolph, 1992; Yukl, 2010), challenges do exist that make it difficult for the team leader to manage (Denison, Hart, & Kahn, 1996; Cronin & Weingart, 2007). If not managed, these challenges can lead to failure within a transformative effort. Leading design thinking initiatives requires a creative, respected, and inspiring leader.

Statement of Significance

Understanding the experiences that mid-level administrators have leading student-centric initiatives and projects is significant for higher education practitioners and researchers. Calls for creative change within higher education have been numerous, stemming from policy papers illustrating the need for organizations to focus on quality, affordability, and accessibility (Cavagnaro & Fasihuddin, 2016). Industry publications, such as *Inside Higher Education*, *The Chronicle of Higher Education*, and the *EDUCAUSE Review*, advocate for the use of a design thinking approach and illustrate the need for higher education to develop creative solutions to complicated problems (Morris & Warman, 2015; Gardner, 2017; Mintz, 2017). Though these publications advocate for the use of design thinking, limited research exists on its effect within higher education. Of those that do, these studies focus on the intersection between higher education and design thinking results (Withell & Haugh, 2013; Benson & Dresdow, 2014;

Willness & Bruni-Bossio 2017) and not the experiences of team members. Additional research focused on design thinking needs to be conducted to look at the leader's experience leaders as they engage in leading cross-functional teams focused on implementing the design thinking within an institution.

Through design thinking, those involved begin to brainstorm solutions by working toward seeing the world from the user's perspective. Traditional problem-solving approaches are often linear and structured. Though these approaches require a deep sense of understanding what the user requires, traditional problem solving never gets to the state of human-centered design required of a design thinker. Implementing design thinking is challenging within organizations and doing so requires the commitment of those leading such initiatives to ensure that focus remains on designing student-centric solutions within the distributed educational environment. Design thinking studies that focus on challenges look at the experiences of team members adopting design thinking and the challenges they face (Melles, Anderson, Barrettm & Thompson-Whiteside, 2015; Kleinsmann, Valkenburg, Sluijs, 2017). Additionally, these studies do not look at the experiences and challenges faced by higher education administrators implementing or participating in the human-centric approach. This study will aim to fill that gap by understanding the experiences mid-level higher education administrators leading student-centric design thinking projects.

Design thinking teams require collaboration that considers multiple perspectives and experiences addressed by the end-user (Liedtka, 2015). With that, collaboration within a traditional higher education eco-system is difficult (Kezar & Lester, 2009) and often breeds organizational tensions (Manning, 2013) and creates cultural conflict based on multiple characteristics that clash with an organization's mission, purpose, and departmental objectives

and values (Kezar, 2011; Buller, 2015). An understanding of the experiences of leaders embarking on collaboration across the organization exposes the challenges faced and provided higher education professionals with approaches to incorporate throughout higher education.

Positionality Statement

This positionality statement is presented to identify, understand, and explore the ways my background influences this proposed study. Sikes (2004) advocates for the importance of the researcher being reflective in their approach, especially in the context of educational research and recommends that the researcher take the necessary time to reflect on how their worldview influences the potential study. As the primary researcher's past experiences may be of influence, it is important to explain the experiences, opinions, and positionality as they relate to the topic of interest, research, and methodological approach. This statement is prepared to explain to interested audiences how these past experiences influence this work.

My personal involvement is heavily influenced by an institution where I have had a close relationship with - Southern New Hampshire University (SNHU) an institution known for its innovative approach of supporting students and responding to educational needs in the workforce. I received my undergraduate degree from SNHU in 2005 and have been employed by the University since 2008. At the time of initial employment, SNHU's enrollment was 10,000 students. A decade later, the University now supports over 100,000 learners. Through this time of enormous growth, I held various positions responsible for assisting and building alliances that supported these growth initiatives.

In the various positions served with the University, I have been involved with strategic projects that required cross-functional collaboration and working relationships. Through these individual experiences of my own institutional transformation, it is exciting to see collaboration

among university entities. However, these experiences also exposed issues when conflict arises in the absence of collaboration. This results in missed opportunities, extended timelines, additional resources, and increased costs. I believe that cross-functional collaboration provides individuals not looking outside their silos the ability to build stronger relationships that influence student initiatives.

These personal experience influences my interest in this topic, as well as the potential to introduce the student-centric approach that design thinking requires into higher education's innovation culture. To that point, it is important to not look at design thinking as a panacea and missing link for institutions that innovate. Adopting a design thinking approach with a higher education environment is difficult. I have witnessed strong organizational change commitments emerge while also seeing the adverse effect of ill-planned and failed organizational change.

Through this qualitative interpretative phenomenological analysis (IPA) research study, I have engaged individuals that shared similar experiences leading and navigating collaborative environments to design student-centric solutions.

Research Question

Higher education organizations face many organizational challenges and strategic directions that require creative solutions. The environment, culture, and norms do not speak well to cross-organizational collaboration (Kezar, 2011, 2018; Kezar & Lester 2009; Manning, 2012, Buller, 2015). Design thinking is a human-centered and collaborative approach that allows higher education leaders to approach these problems cooperatively (Melles, Anderson, Barrett & Thompson-Whiteside, 2015; Bakic, Husgafvel, Martikka, 2015). Human-centered design places the human perspective in all aspects of the problem-solving process (Brown, 2009; Steen, 2012). As new technology and student demands drive organizational and systematic change, it is

important to understand the experiences of non-senior level, higher education administrators in driving empathetic solutions in a disbursed and ambiguous environment.

The purpose of this study was to explore the experiences of these higher education administrators as they led student-centric initiatives within their college communities. This study sought to answer the following question:

- *How do mid-level higher education leaders make sense of their experiences leading student-centric projects?*

The following sub-questions provided guidance and direction for the researcher and participants:

- *What approaches do team leaders leverage to engage collaboration among team members?*
- *What challenges do leaders face when designing student-centric solutions?*

Mid-level administrators refer to departmental or organizational leaders that have experience implementing a modern technological system or driving a program or project designed to reduce cost, enhance the student experience, or provide value to the educational institution while meeting the distinct needs of a student. Mid-level administrators do not refer to an individual that directly report to the senior-most position of a university. Senior leaders and those responsible for defining strategic initiatives were not considered. Participants will not be from a single institution. However, recruitment for the study will focus on individuals that work at a non-profit higher education institution.

Theoretical Framework

Design thinking was the theoretical framework used for this study. Design thinking approach to problem-solving places the user in the center of solutions. Through the design

thinking process, the project team builds empathy in meeting the user's emotional and physical needs (Brown, 2009, Liedkta, 2015; Brenner, Uebernickel, & Abrell, 2016). In considering the need for higher education administrators to approach challenges faced from changing demands of students and the human nature of technology, design thinking provides a structure for cross-functional groups to engage in and develop solutions to meet student needs. Meinel and Leifer (2011) identified four rules of design thinking. For purposes of this study, the human rule was examined on how effective mid-level administrators are in leading teams in developing human and student-centric approaches:

1. *The Human rule: All Design Activity is ultimately social and human-centric*
2. *The Ambiguity Rule: Design Thinking Must Preserve Ambiguity*
3. *The Re-design Rule: All Design Is Re-design*
4. *The Tangibility Rule: Making Ideas Tangible Always Facilitate Communication (*Meinel and Leifer, 2011, pg xv)

Theoretical Background of Design Thinking

Although design thinking is an iterative process, several theoretical models were developed to help explain the iterative nature of design thinking (Tschimmel, 2012). Johansson-Skodberg, Woodilla, and Cetinkaya (2013) identified multiple research studies that identify what is known about design thinking. In trying to comprehend the desired state of individuals, Simon (1969) sought to understand how existing conditions transferred into preferred ones, and Schon (1983) worked to identify how reflection on experience with a created process or product can be implemented within the design process. Both researchers' contributions with understanding the needs contributes to the modern-day understanding of design thinking.

Buchanan (1992) introduced these design-thinking concepts (Simon, 1969 & Schon, 1983) as a way to approach ill-defined, complex, and ambiguous wicked problems. A wicked problem is categorized as complex and ambiguous issues too challenging to solve by leveraging common industry standards (Rittel & Webber, 1972; Buchanan, 1992). Buchanan also discussed the value with approaching wicked problems from the user's perspectives and reviewed how changes in technology will impact user expectations. Kimbell (2011) described design thinking as a resource for organizations to approach solving wicked problems through innovation. Groeger and Schweitzer (2014) also promote the need for organizations to focus on user experiences in designing products, services, and processes as it relates to solving wicked problems faced by the organization. In higher education, Ramaley (2014) posits that higher education continues to face wicked problems related to teaching approaches, student expectations, and public perception. Ramaley suggests that creating a culture of engagement where members of the institutional community can collaborate to identify and solve problems facing the totality of the institution (2014). To approach ill-defined problems within education, Mintrop (2016) asserts the need for practitioners to develop design development skills.

Krippendorff (2006) and Lawson (2006) sought to understand the importance of deeply understanding the problem that a design approach aimed at solving and making sense of the subject's environment. Krippendorff (2006) viewed design thinking as a way of making meaningful connections between the design thinking outcome and the process of determining the solution.

Critical Response to Design Thinking

Idealistic views of design thinking are found often in business and industry publications that promote the process. Some researchers have questioned the valid application of design

thinking. Badke-Schaub, Roozenburge, and Cardoso (2018) claims that empirical evidence does not support the application and use of design thinking as an appropriate business change application. Carr, Halliday, King, Liedtka, and Lockwood (2010) studied the integration between design thinking and business. The researchers found that managers questioned the value of implementing design thinking and often were confused by the term. Hernández-Ramírez (2018) found that this criticism is valid, however, encourages users to not follow the prescribed design thinking process, but rather focus on being a designer.

Design Thinking Process

IDEO, a consulting and management firm based in California, applies design thinking to social problems faced by its' clients (Brown & Wyatt, 2010). IDEO is cited often in higher education publications when discussing design thinking (Morris & Warman, 2015; Gardner, 2017; Mintz, 2017). The problems addressed by IDEO require a more in-depth and empathetic understanding of the user's interaction and experiences with the issue. (Brown & Wyatt, 2010).

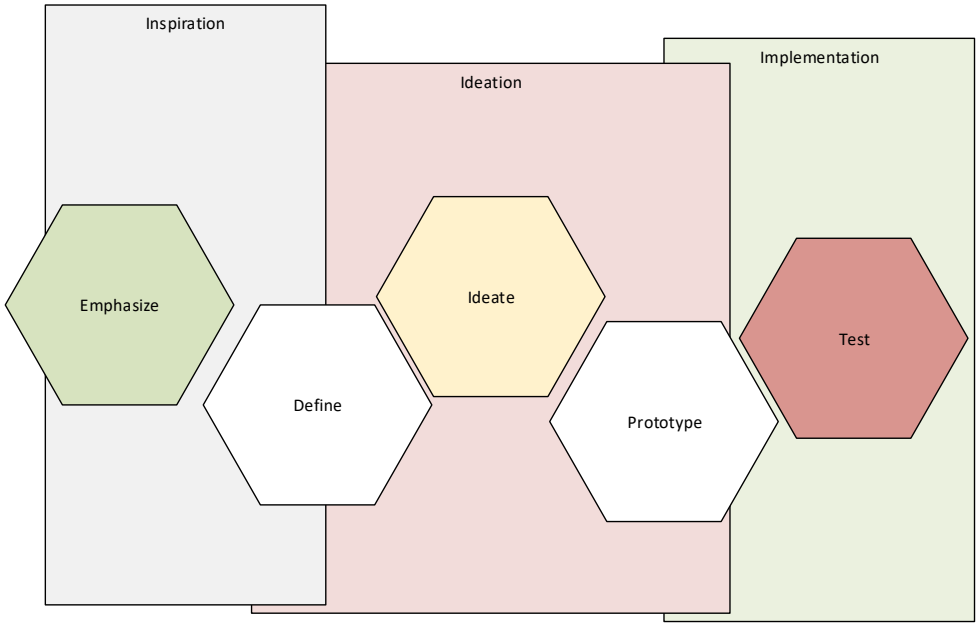

Figure 1: Design Thinking Iterative Process (Brown, 2009)

Figure 1 demonstrates how design thinking can be used to identify solutions to challenges faced by the organization. After identifying a framework to approach design thinking, the concept further gained acceptance by managers as a different tactic to organizational approaches and has been accepted as a component of management theory (Melles, Anderson, Barrett & Thompson-Whiteside, 2015). The modern definition of design thinking requires a user or group to journey through five phases, which include developing a sense of empathy with the user, defining the problem, creation of possible outcomes, prototyping viable solutions, and the testing of those solutions.

Empathy. The best designs are human-centric, and empathy allows a design thinking practitioner to spend the necessary time and experience in seeking to understand the worldview of the individual or group of individuals (Brown, 2009; Melles, Anderson, Barrett & Thompson-Whiteside, 2015, Krippendorff, 2005). The first step in any design thinking process is developing a sense of empathy for users by striving to understand their experiences (Brown, 2009). Design thinking practitioners spend significant time identifying what issues cause the emerging problem (Melles, Anderson, Barrett & Thompson-Whiteside, 2015). Achieving empathy asks users to share extreme examples through deep probing questions. Through an empathic approach, design thinking practitioners are aware of and sensitive to, individual experiences, needs, desires, and emotions (Ceviker-Cinar, Mura, Demirbag-Kaplan, 2017). Madden (2015) recognizes empathy to be the process of understanding and feeling other people's needs. Empathy allows people to process information differently, which is especially important, as argued, within large organizations where Madden (2015) found that a tendency exists to be insensitive to the needs of those served.

Defining the problem. The second step for design thinking practitioners is to define the problem. Designers should approach a problem that is broad enough to innovate but narrow enough so that a tangible starting point emerges (Kolko, 2015). Through observation in current environments and the ability to ask probing questions, a design thinking practitioner is well equipped to understand the worldview they are trying to uncover (Brown, 2009). A project brief is a tool used by design thinking practitioners that provide a project team with a framework of where to begin, benchmarks to measure progress, and objectives that should be met (Brown, 2009).

Ideate/Brainstorm. To ensure all voices are heard and each perspective incorporated, the important outcome determined through this phase is to develop as many ideas as possible. Project teams then will ideate and brainstorm possible solutions (Groeger & Schweitzer 2014). Design thinking promotes early and frequent failure and teams should prepare accordingly. Valuable information emerges demonstrating what might or might not work. This mixture of success and failures offers insights and experiences that lead project teams in designing fruitful and engaging solutions (Brown, 2009; Groeger and Schweitzer 2014). To assist with ideation, visualizing a problem through sketches, drawings, or models are approaches used by a design thinking practitioner to clarify and elaborate on thoughts and ideas (Tschimmel, 2012). At this stage, the quantity of ideas supersedes the quality of ideas (Groeger & Schweitzer 2014).

Prototype. Prototypes are used in design thinking to demonstrate and communicate a tangible solution (Kolko, 2015). Holloway (2009) discusses a prototype as a way to express ideas. Through prototyping, design thinking teams may practice rapid iteration and refinement of cost-effective prototypes that can be validated, tested, and refined with customers (Holloway, 2009). Prototyping keeps momentum within the team moving forward and constantly learning

new information that influences better product design (Kolko, 2015). Prototypes, while not needed to be perfect, must have elements that allow a decision stakeholder to experience it the same as how the customer experiences it (Holloway, 2009). Kolko (2015) argues that design thinking practitioners, need to tolerate failure as those can be learned from and built upon. It is also during this phase that unexpected discoveries that may influence project directions may emerge (Brown, 2009).

Test. The last phase for design thinking is to test the developed prototypes against users. It is common for designers to go back through the original process as new information is uncovered and provided by the customer. The design thinking testing process is meant to be a non-linear approach (Brown, 2009; Kolko, 2015; Liedkta, 2015).

Conclusion

External forces and internal pressures have made higher education institutions to be known as less collaborative (Kezar & Lester, 2009) and due to this organizational alignment, higher education is slow to change (Manning, 2013). With the continued emphasis on quality and results in higher education, an opportunity exists for organizations to work collaboratively to empathetically meet the needs of both students as the individuals that receive services and society as the collective group that benefits from a student having advanced educational opportunities. The role of the mid-level administrator is a significant role in this transformational work. This study focuses on the experiences that mid-level higher education administrators had when developing student-centric solutions. These experiences serve to inform higher education professionals how adminsitrators came to develop a sense of being student-centric and the challenges and barriers faced when designing student-centric solutions. This study also explored collaboration in a higher education environment.

As a way for higher education leaders to approach ill-defined or unseen problems, design thinking is an attempt to approach ill-defined and wicked problems to question the problem and underlining assumptions (Brown, 2009; Brown & Wyatt, 2010; Steen, 2012). It is human-centered in that that it requires those that practice design thinking techniques to empathize with the user, define their needs, wants, and desires, ideate, prototype, and test. In essence, design thinking allows a user to think differently from multiple vantage points of the problem to uncover solutions that are new and can work to meet collective stakeholder needs. Design thinking provides the foundation for users to work collaboratively and approach a problem related to process improvement, instructional design, or administrative services, creatively.

The next section reviews literature related to the current structure of higher education. Through this discussion, topics such as barriers and challenges are explored in the context of developing new initiatives. A thorough discussion that surrounds design thinking in external organizations and higher education institutions is also presented.

Chapter 2: Literature Review

Introduction

This review examines research related to organizational structures and their collaboration abilities within the higher education system. Bodies of literature include those on organizational change within higher education, collaboration within higher education and focuses on the current organizational structure of higher education.

Higher education's structure allows for great flexibility for individuals and departments but does not promote cross-departmental collaboration between faculty and staff. To further meet the needs of students and the expectations of employers, those that work within higher education will see more of a need to collaborate on student-centric change initiatives.

This review examines the current organizational structure of higher education and characteristics related to higher education institutions. A section within this review is devoted to change initiatives, highlighting conceptual frameworks used within higher education. Collaboration within higher education between cross-functional areas is also discussed as it relates to its current existence in higher education.

Building student-centric solutions in an environment that aim to meet the needs of students continually changes; thus, this review consults the design thinking literature with a specific focus on building empathetic solutions within an organization. Literature that exposes how design thinking impacts organizational change is also examined. Challenges of design thinking were central to this review, as it highlights the struggles leaders need to overcome to develop student-centric solutions.

Organizational Change in Higher Education

Environments, systems, and stakeholder needs change considerably faster than organizations. Thus it is important to understand that organizational change has different meanings depending on the environment where a change is being undertaken (Burnes, 1996). External forces, such as technological advancement, consumer demand, or governmental regulations influences organizational change. A change in leadership, reduction of force, or the reshuffling of organization priorities can drive internal change. Burke (2011) defines organizational change as a shift from what is known and practiced to what is unknown. Weick and Quinn (1999) view organizational change as "episodic, discontinuous, and intermittent," or "continuous, evolving, and incremental". Kezar (2011; 2012; 2018) defines the "why," "what," and "how" of change. Both internal and external forces can drive the "why" of a change. The "what" of the change is dictated by timing, the focus of change, and the degree of the change. The "how" of the change refers to the organization's response as being either proactive or reactive to the forces driving the need for an organizational change.

Resisting change is common within organizations. Individuals resist change for several reasons. Hambrick and Cannella (1989) identified three change resistance distinctions that are helpful for an organizational leader to understand and include whether the change is blind without any reason, politically motivated, or idealogically driven. Burke (2011) discusses the experiences of individuals and groups affected by organizational change initiatives. O'Connor (1995) speaks to factors that may influence resistance to change and found that many individuals have a lack of trust toward the change, do not believe that the change is necessary, or may believe the change is not feasible within the confines of the environment. Those resistant to change may possess a fear of losing power, status, or income and are politically resistant to an organizational change or possess ideological reasons to be against a change (Burke, 2011).

There are silent forces that influence the organizational culture that change agents should be aware of as these forces influence response. Kezar & Eckel (2002) explains these forces in three distinct models: political, social-cognition, and cultural. To create change within a political model, change agents use tools such as negotiation, mediation, and coalition building. Mental models, learning about the change, and having focused and purposeful interactions drive change initiatives within the social-cognition model. To enact change in an organization that values cultural elements, the emphasis is placed on the understanding of history, tradition, and demonstrate how this change aligns with the organizational history of the institution (Kezar & Eckel, 2002).

Organizational Characteristics of Higher Education and Barriers to Organizational Change

Though higher education institutions are viewed as slow to adapt to change, Kezar and Lester (2009) posit that this view is partly due to the organizational structure of higher education that emerged after the turn of the 20th century. During this time, faculty became less concerned with institutional outcomes, leading to the emergence of specialized academic units and faculty becoming more discipline-focused and less reliant on the institutional mission. The focus on specializations led to academic units developing their own goals. This focus led to less of an opportunity or need to collaborate on institutional initiatives. Lack of knowledge sharing between disciplines and departments resulted in competition for funding and students. To fund research, faculty members sourced grants and other external funding. As funding for institutions became reliant on faculty research assignments, a greater voice within governance structures of the faculty emerged. Once faculty-led, administrative structures emerged separately from faculty ownership to support non-academic functions of the institution.

These organizational changes resulted in the organizational characteristics found within today's higher education environment. Kezar (2011) identifies multiple characteristics that affect organizational change in higher educations. These characteristics include:

- Interdependent organization
- Independent environment
- Unique culture
- Values-driven
- Multiple power and authority structures
- Organizational anarchical decision making
- Shared governance
- Goal ambiguity

Kezar cautions that change leaders should not overlook these characteristics. Manning (2013) refers to, "organized anarchy": the loosely coupled systems, conflicting administration values, and anarchical decision-making approach found within distributed organizational models in higher education.

Higher education decision-making authority is unique, and unlike the traditional hierarchal organizational model, various groups within the institution share this authority (Buller, 2015). Higher education institutions are often considered a distributed organization where power is shared among different organizational groups and the person makes decisions responsible for the outcome (Buller, 2015). Though a loosely held hierarchical structure is common in a distributed leadership model, actual power, change, and decision-making originate from multiple organizational levels (Buller, 2015). Those responsible at the top of the organizational chart seldom have complete control over decisions made through the ranks. A shared governance

model allows individuals or groups to possess a power no matter the position they have within the organizational hierarchy (Kezar, 2011).

Higher education institutions are complex organizations that experience competing tensions influenced by organizational boundaries and traditions. These tensions are influential, thus increasing the debate on the values of higher education and influence organizational decision-making. Manning (2013) discusses multiple tensions faced by higher education. The practice of long-term employment creates tension between the values of an established structure and the agility and flexibility of an organization (Manning, 2013). Another example faced by higher education includes whether core educational content is integrated within an academic program or if a student is better served by specializing in a major or minor. Many voices from the academy influence this debate. Other tensions include whether an academic institution is private or public or if administrative policies are best served to be collaborative or competitive between organizational units within the institution (Manning, 2013).

Organizational characteristics of higher education influences the organizational higher education structure. Colleges are different from other organizations where members of the institution demonstrate their profession and complete their responsibility within an environment that is ambiguous, complex, and politically charged. Departmental silos, bureaucratic and hierarchical administrative units, and other rigid structures act as barriers to cross-functional work and organizational partnerships (Kanter, 1994; Kezar, 2009). Buller (2015) refers to higher education as a "professional bureaucracy" (pg. 17). Kezar (2014) describes higher education's bureaucratic nature associated with the existing dual power and authority systems. By nature of this approach, decision-making within a higher education institution, academic departments do

not tend to view external threats and changes to a complete organizational process holistically (Madden, 2015).

The structure within higher education institutions is also distinct from other organizational structures. Hierarchical organizations are best suited for rapid decision making based on the organizational structure. Buller (2015) posits that common change organizational frameworks (i.e., Kotter, 1996) are not effective within higher educations distributed organizational structure as those frameworks respond well to a hierarchical structure where decision making responsibility is clear. Compared to an organization set-up to rapidly respond to change and possessing the agility to do so, higher education's decision-making model is a barrier to responsive change (Buller, 2015, Burke, 2011) and at times, resistant to change (Manning, 2013). In higher education, academic decision making resides with faculty members and groups responsible for specific programs. At times, decisions made can conflict with institutional goals (Kezar, 2011). More often than not and due to the interdependent model of higher education, decisions made are grounded in the affected individuals' discipline or department (Kezar, 2011; Kezar and Lester, 2009).

Overcoming Barriers to Change and Developing Collaborative Environments within Higher Educations

To overcome barriers introduced through organization culture, Kezar and Lester (2009) speak to the need of members and stakeholders being active participants that work collaboratively to support organizational change adoption. Collaboration refers to the shared responsibility of outcomes and eliminates the need for one individual or group to take complete ownership of rising conflict. Burke (2011) finds that planning sessions, solution identification, and recognizing members that are better suited for change initiatives promote active participation

and can overcome resistance to change found in organizational groups. Liedkta (2015) also discussed that active participation in change activities could lead to overcoming change resistance.

Organizational culture dictates the approach to change at an institution (Buller, 2015). Kezar and Lester (2009) teach us that strong collaborative structures lead to greater success in innovation and learning, diverse problem-solving perspectives, better service experience for customers, cost savings, process efficiency gains, and greater amounts of employee motivation. Collaboration within higher education has resulted in improving administrative services, student learning outcomes, research, and governance and management of the organization (Kezar, 2009). Manning (2013) suggests that greater collaboration within higher education institutions produce significant results for students served by the academy.

Kezar and Lester (2009) presented a model with six areas that organizations transitioning to a culture of collaboration need to understand. These include:

- **Strategy**. Strategy refers to what the organization is attempting to accomplish on a specific timeline. All of the organization needs to understand and be aware of the strategic goals of the organization.
- **Tasks**. Tasks or the work the organization needs to do to meet strategic goals.
- **Structure**. The structures need to be re-engineered to create integrating mechanisms. A centralized administration would need to be created to link several disparate activities.
- **General Process.** The general process such as goal setting management and decision making need to be modified to support collaboration.
- **Rewards**. Rewards need to be developed to provide incentive and accountability systems recognizing teams rather than individuals.

- **Training**. Organizations need to commit to training and provide the necessary skill and development throughout the organization to promote collaboration.

Organizational structures should be designed to embrace collaboration. In higher education, organizing for collaboration must account for the individualistic needs of students. Multiple perspectives inform higher education institutions on conditions needed to redesign organizational structures and embrace collaboration. To accomplish this, Mohrman, Cohen, and Mohrman, (1995) suggest that enhancing group and cross-functional work move organizations toward a team-based design. Jones, Lefoe, Harvey, and Ryland (2012) suggest that higher education should incorporate a more collaborative and distributive model that embraces the historical elements of higher education while also addressing the need to manage a modern-day institution. Institutions can begin by identifying existing relationships and campus networks that regularly engage. These structures organically exist and can influence change initiatives and nurture collaborative partnerships (Kezar & Lester, 2009). The benefit of existing collaborative partnerships is that trust has been established, mutual respect exists, and personal bias is limited within their work (Kezar, 2005; Coburn & Russell, 2008).

Cross-functional teams are sometimes formed to respond to an organizational change initiative. Cross-functional teams are established and are responsible for managing the change project (Yukl, 2010). The diverse composition of these teams can positively influence the outcomes by sharing different experiences, backgrounds, and viewpoints (Yukl, 2010; Burke, 2011). Often, individuals making up the cross-functional team are not permanent fixtures within the team and bring background and expertise that influences the direction of the project. Burke (2011) also encourages leveraging cross-functional teams and identifies the added benefit for the

individual to develop and carry forward new skillsets that benefit both the individual and organization.

Leaders of cross-functional teams must also be aware of adverse outcomes working on cross-functional assignments. Functional units may also possess a loyalty to the functional unit and not the cross-functional project (Yukl, 2010). Also, communication barriers exist between cross-functional teams that make working within a cross-functional team a challenge. Approaches to language, acronyms, and team-specific jargon can be difficult to interpret between one team and another (Cronin & Weingart, 2007). Kezar and Lester (2009) demonstrate how reorganizing a campus environment best supports collaborative cross-functional efforts such as service learning, team teaching, and university organizational partnerships. Kezar (2014) suggests that institutions look at existing internal communities as areas to drive needed change.

Develop the organizational structure for change is important, but more important is the assurance that an individual navigates through a process to make sense of the change within their environment. Sense-making is the process that an individual goes through as they navigate changing environments (Weick, 1995). Sense-making requires an individual to attach new meaning to familiar ideas (Kezar & Eckel, 2003). For example, a historical view of a student is that they have the course textbook and a paper notebook to take lecture notes. Technology has changed the way a student consumes traditional coursework delivery in that they now have a mobile device and an internet connection access to various views of the subject. In this example, the need exists for the faculty member to makes sense of the students experience so that the course is structured appropriately to support the student's learning journey. Alternatively, the faculty member needs to make sense on how they fit within the new pedagogical paradigm.

Through sense-making, individuals constructively develop a feeling how transformations may affect their worldview (Kezar & Eckel, 2003; Kezar, 2018).

Sense-making is a deeply individual activity and not meant as a groupthink activity, organizational leaders, however, can create a culture of sense-making within their institutions to support this critical change activity by incorporating sensegiving activities within their organizations. Sensegiving activities are activities to assist individuals to navigate through the sense-making process. Kezar (2018, pg. 92) identifies sensegiving activities used in higher education:

- Ongoing and widespread campus conversations
- Collaborative leadership
- Developing cross-developmental teams
- Sponsoring faculty and staff development activities
- Drawing on and discussing external ideas
- Preparing and giving public presentations
- Creating documents and concept papers
- Flexible vision

Changing environments and disruptive forces will require individuals to make sense of transformational changes. Organizational structures are best served to support the role of individuals seeking to make sense of these transitions. Design thinking provides a framework to follow that allows an individual to make sense of these changes and develop collaborative solutions that are student-centric.

The Idea of Design Thinking

Design thinking is an approach to innovation that allows practitioners to identify solutions to needs based on a deep understanding of the desires of an organization and those served by the organization. The approach refers more to a system of overlapping processes rather than a systematic approach (Brown, 2008). Melles, Anderson, Barrett & Thompson-Whiteside (2015) identify design thinking as a human-centered approach to solve problems associated with strategic decision making in business and social innovation. Uebernickel, & Abrell, (2016) consider design thinking as part of a mindset and categorizes the approach as an aberration between convergent and divergent thinking. Design thinking allows a practitioner to empathetically approach solutions collaboratively, visually, and actively (Brown, 2009). Hassi and Laakso (2011) identified three elements of design thinking that include 1) set of practices, 2) cognitive approach, 3) mindset. Lawson and Cross (2006) identify design-thinking as a mindset that is grounded with an understanding of the origins and root causes of problems they are seeking to solve. The approach links problem discovery with ideation and is used to gain a deeper understanding and to uncover opportunities in business strategy, marketing strategies, and the development of new products and services (Melles, Anderson, Barrett & Thompson-Whiteside, 2015).

The effective use of empathy is an important differentiator between the use of design thinking and other problem identification approaches. Design thinking is an approach that humanizes problems and allows organizations to identify simple solutions that meet and exceed a user's experience (Kolko, 2015). The success of this approach stems from the ability of the design team to identify human-centered problems and rapidly prototype and test potential solutions for discussion, validation, and commitment (Brown, 2009, Liedtka, 2014). This

approach allows for customer-centric needs to emerge so that an appropriate solution is developed (Newton and Riggs, 2016). Practitioners approach design thinking projects with abductive thinking, the way of looking toward the future while being influenced by the past (Tschimmel, 2012). Groeger and Schweitzer (2014) posit that design thinkers gain a deep understanding of people through conversation, observation, and explanation of the issues that the end-user is experiencing. Design thinkers ground this analysis on understanding human values and why the person physically and emotionally experiences specific situation that design thinkers navigate through.

Design Thinking in Organizations

The academic definition of design thinking described in the previous section centers on what largely is known about design thinking today. The process requires a deep understanding of the problem. ,To practice design thinking, a users must possess a specific skillset to approach that problem (Melles, Anderson, Barrettm & Thompson-Whiteside, 2015). As an approach to an existing organizational culture, design thinking assists with identifying new ways to review existing problems (Madden, 2015). Kolko (2015) strongly advocates for the establishment of design thinking cultures within organizations that prioritizes empathetic design thinking principles. To incorporate different worldviews that contribute to the overall solution, Groeger and Schweitzer (2014) advocates for the diversity of these teams.

The San Francisco design firm IDEO's definition of design thinking is best known through management models today (Johansson-Skodberg, Woodilla, and Cetinkaya, 2013). Organizational design thinking has the ability, through collaboration and looking at existing problems in user-centered ways, provide an opportunity for individuals to work together differently than they had before. Rylander (2009) considers design thinking as a visual way of

sense-making. Design thinking is a process of reflective practice that leads to an act of creating meaning to a way of problem-solving (Melles, Anderson, Barrett & Thompson-Whiteside, 2015). Beckman and Barry (2007) identified the use of the cross-disciplined approach to solve problems by using different tools, methods, and language not found in traditional business problem identification toolsets. Liedtka (2014) suggests that design thinking is the integration of human, technology, and business factors through a process that identifies a problem and designs a solution based on a design thinking practitioners' empathetic ability to approach a problem. Venkatesh, Digerfeldt-Månsson, Brunel, and Chen (2012) grounded theory research identified six theoretical propositions to define design thinking within an organization. These propositions include: (1) putting greater emphasis on imagination rather than technical knowledge (2) Customer-oriented over customer-driven design strategies (3) Seek to transform the world and go beyond the problem of the moment (4) Emerging of long-term design goals (5) the design thinking process should be organizationally adopted and not a one team approach (6) capture the emotions and heart of the customers, not just their mind. Meinel and Leifer (2010) identify four rules of design thinking that include the (1) human rule, (2) the ambiguity rule, (3) the re-design rule, and the (4) tangibility rule. Design thinking practitioners maintain a capacity to consider human needs, availability of resources, and the barriers and opportunities of a project and business (Tschimmel, 2012).

There is no single, best approach to design thinking within an organization (Groeger and Schweitzer 2014). Organizations seek to use design thinking as a way to approach strategic alignment (Fraser, 2007; Junginger, 2007) of innovative practices (Camillus, 2008, Kotler & Rath, 1984). Use of design thinking goes beyond a mindset to develop new and interesting products. Additionally, it is a useful approach to reimagining modern business practices and

strategic planning (Tschimmel, 2012). Higher education usage in design thinking allows higher education administrators to understand the emotional and physical needs and desires of a student and work to develop relevant and timely solutions.

Arguing that the complex problems faced by educational systems cannot be solved through existing and easy to grasp solutions, Mintrop (2016) attempts to make the leap of design thinking from theory to practice within an educational environment. As such, he presents a design development framework that can be leveraged by educational practitioners. Through this approach, Mintrop argues that the design development process includes the convergence between rational and intuitive thought that leads to continuous quality improvement through iterative, evidence-based cycles designed for teams to collaboratively design and test solutions.

Tools Used by Design Thinking Practitioners

To gain a state of empathy with the user, the design thinker uses different tools, such as in-depth interviews, photographs, and other visual registers, to gain a state of empathy and to clarify the project task (Tschimmel, 2012). Tools such as storytelling and using metaphors visually assist design thinkers in empathizing with the individual or group of people design thinkers seek to understand (Leidtka, 2014). The tools used in design thinking allow multi-disciplinary teams to engage in the creative and active envisioning found within design thinking (Tschimmel, 2012).

Other tools, such as journey mapping and mind maps allow a design thinker to identify untold needs of users that use a product or participate in a process (Tschimmel, 2012; Newton and Riggs, 2016). When done well, customer journey maps, allows the designer to see the emotional impact of each step within the journey. The customer journey map is used by design thinking practitioners to review and discuss the path a user takes and provides the project team

with a visualization that can be incorporated into solution design. Kolko (2015) discusses that the primary function of the customer journey map is to illustrate the journey a customer takes while interacting with a product or service. When constructing a journey map, Richardson (2010) suggests that designers conduct human-centric customer research and group findings within a framework that considers the user's actions, motivations, questions, and barriers faced. The journey map can be used within higher education to illustrate the steps a student takes as they navigate through the disjointed systems within higher education.

Kolko (2015) found that mind maps provide the design-thinking practitioner a visual representation that connects topics and provides a user a more intuitive representative of the process as a whole. Tschimmel (2012) suggests that the use of sticky notes, colors, lines, and photographs increases the meaningfulness and comprehension of information and ideas. Each keyword with a mind map can be associated with other emerged words and images, thus creating a visual representation that is more universally understood by the project team (Tschimmel, 2012). Brain-sketching and Brain-writing emerged as tools that visually map user ideas for analysis with the design project team. Through brain-writing, Tschimmel (2012) suggests that the sticky notes provide the ability for project teams to better categorize and organize thoughts and ideas into themes. Project team members write ideas on sticky notes and posts them to a wall. This is different from brainstorming where ideas are verbally communicated and discussed.

Journey and mind maps influence the development of a user’s persona. Personas are visual representations of the users that design thinkers are using when identifying needs and developing solutions. The visual representation allows the design thinker to maintain a visual sense of empathy. User personas come from developing a deep understanding of the user and

function as a visual and functional representation of user needs (Newton and Riggs, 2016). Tschimmel (2012) also discusses personas in design thinking. Visualized on an empathy map and created from the observational activities of design thinking practitioners, personas strive to make the theoretical idea of a person or groups personal and human (Tschimmel, 2012). Personas are useful for higher education design thinkers as they attempt to identify what current and future students may need from higher education now and into the future.

Organizational Change and Design Thinking

By using qualitative and emotional language to describe a user's experience, design-centric organizations empower employees to observe user behavior to identify what people want and need (Kim, 2015). Holloway (2009) describes how a cross-functional team used a design thinking approach and collaborated to navigate through a digital transformation. The group made connections through empathy that increased faith and trustworthiness within the firm (Holloway, 2009).

To encourage innovation that transforms programs and processes, Leifer and Steinert (2011) advocate removing barriers associated with established policies and procedures. Removing these barriers, in addition to creating a space for collaboration to emerge, increases speed to learning, which allows design thinking participants gain the opportunity to learn from what works and what does not (Leifer & Steinert, 2011). Moreover, Creviker-Cunar, Mura, Demirbağ-Kaplan (2017) identify the importance of innovation space and posit that these spaces allow design thinking practitioners an environment to build and prototype that is outside of existing structures. Groeger and Schweitzer (2014) agree that innovation is company-wide and design thinking, as a state-of-mind, should be incorporated throughout the organization and not in a specific and siloed effort. It should not be a "rigged" plan forced on employees.

Design Thinking and Higher Education

Design thinking can assist policymakers in understanding issues faced by those they serve and develop appropriate policies that improve the overall communities in which they live (Bakic, Husgafvel, Martikka, 2015). Minstrom and Luetjens (2016) connect the design thinking phases with social science methodologies and discuss how these strategies have influenced public policymaking efforts. They assert that design thinking has the potential to develop human-centered policies that enhance public welfare. In a study that examined how design thinking can create improved and more effective policies, the authors found that using a human-centered approach to construct and enact policy can build human-centric policies that impact the lives of those the policy affects. To link back to higher education, the authors recommend this approach to better understand students and, when needed, design policies against those desires.

Studies have shown curriculum changes that are influenced by design thinking. Willness and Bruni-Bossio (2017) studied the process that business school curriculum developers used for course planning and implementation. Through the development of a community based learning curriculum, which was grounded in design thinking principles, the authors observed academic administrators. The environment that required a curriculum change necessitated collaboration and development of different prototypes to highlight potential outcomes. Results of this study led to recommendations on how a design thinking approach seeking to understand the needs of students and centered on collaboration influences organizational innovation (Winnness & Bruni-Bossio, 2017).

Teaching design thinking within a college environment has contributed to a greater understanding of design thinking as a concept. Demands for innovation in curriculum development is causing some business programs to teach students the principles associated with

design thinking (Melles et al., 2008, 2011). Through a case study that included a literature review and an observational visit to the d. School at Stanford, Withell and Haugh (2013) designed a 12-session design thinking curriculum and delivered the course to 25 first year product design students. The results of the study found that the student participant's knowledge and application of design thinking increased due to the direct instruction and practice of a collaborative design thinking project-based curriculum.

A series of cases were examined to demonstrate the potential of engaging students from different disciplines in the problem identification process, which led to the proposal of solutions that fit the design thinking approach. With that, these case studies demonstrated the limitations that student has with not fully setting aside firsthand experiences, bias, fears, or risks to truly identify different and transformative solutions (Melles, Anderson, Barrett & Thompson-Whiteside, 2015). A Whang, Danneker, Belanger, Edward, Garcia, and Klaus (2017) case study focused on how a higher education institution approached a problem in assisting transfer students with identifying and understanding available campus resources. The institution found that transfer students did not have the same amount of time and experience to become acquainted with campus resources. A group consisting of cross-functional team members committed to understanding experiences of transfer students worked to design and enriched and student-centric transfer student orientation. The results demonstrate that when collaboration occurs, better results for a student emerge.

Design thinking can assist with the digital transformation of higher education institutions. In a study focused on implementing a digital transformation strategy for an academic library that included automating functions, leveraging data, and implementing smart technology, cross-functional groups approached problems using a design thinking approach Culén & Kriger 2014.

Design thinking practitioners approached this project with empathy and provided care and support that provided a supportive environment for a collaborative approach to developing solutions (Culén & Kriger 2014). This allowed for the requested need to be met with existing technologies.

To revolutionize the content of an existing university library, Newton & Riggs (2016) found that a design thinking approach resulted in a cultural shift that was noticeably more collaborative and resulted in broken down silos. Design thinking tools, such as journey mapping and personas, as described above, allowed cross-functional team members to collaborate on this initiative. Higher education teams practicing design thinking can build journey maps and personas that provide a view that identifies a user's feelings, tasks, pain points, influences, and overall goal that are trying to achieve. The visualization of these tools is less research and academic focused (Brown, 2009), but provides ways for faculty members and administrators can work to understand a student's experience to best support a student through their rigorous academic journey.

In a case study comparing three prominent design thinking schools, Ceviker-Cinar, et al. (2017) found that teaching design thinking is best when using the approach to real problems faced by individuals. Design thinking has a positive effect if the concept is integrated throughout the student's full higher education journey and experience. The practice should be incorporated not only through aspects of the business school curriculum, but part of the full student experience, including outside speakers, clubs, organizations, and career connections. This study also found that lecture-based instruction retained more knowledge compared to a project-based learning approach where team members work together to solve a problem using a design thinking approach (Ceviker-Cinar et al., 2017). The incorporation of design thinking principles

in project-based learning allows the student to develop and practice critical thinking skills in a team environment (Ceviker-Cinar et al., 2017). These examples demonstrate how academic teams integrated design thinking to respond to change in an established programs curriculum. As we will see in the next section, organizations face challenges through attempts of incorporating design thinking within an organization.

Organizational Challenges with Implementing Design Thinking

The premise of design thinking is that a customer-centric solution will emerge or an existing structure will change. Implementing design thinking within an organization can be challenging. Design thinking encourages risk-taking, which can lead to doubt among users looking for a more linear approach to understanding and developing solutions to problems (Melles, Anderson, Barrettm & Thompson-Whiteside, 2015).

Through an analysis of five teams, Carlgren, Elmquist, and Rauth (2016) identified several challenges associated with the implementation of design thinking within an organization. Employees within these industries questioned the legitimacy of the approach as a viable substitute for routine problem-solving. The study found that employees questioned the fit of design thinking within existing processes and structures. Employees found design thinking as a resource heavy activity that ran counter to existing priorities and deadlines.

A solution derived from design thinking was also challenging to implement at the firms studied by Carlgren, Elmquist, and Rauth (2016). Product development teams at these firms were wary of implementing a solution they lacked involvement in designing. The study also demonstrated the conflict between existing organizational structures and design thinking. Product team members were confused as to who owned the solution and how it aligned with existing strategic initiatives. Additionally, the study found that design thinking solutions were

hard to prove. This was another example of tension between a solution produced through design thinking work and meeting an organization's existing Key Performance Indicators (KPI). Managers, skeptical of the process, were asked to prove successes from project teams. Teams found that they quickly had to demonstrate results (Carlgren, Elmquist, & Raught, 2016) thus putting additional pressure on the team to produce tangible products quickly thus negating the time it takes to navigate through a design thinking process.

Design thinking principles and mindsets clashed with existing organizational culture. Risk-averse positions put employees that practiced design thinking in peculiar positions as it related to predictable job duties. Employees from one of the firms represented in the study found difficulty going against a company culture where disagreement was not commonplace and delayed action until reaching a company consensus. The visual representations and "war rooms" that were set up to co-locate design thinking team members were against company culture (Carlgren, Elmquist, & Raught, 2016).

Design thinking challenged firms with navigating through existing power dynamics. Managers felt threatened as decisions were moved to the team level and reduced their authority. Some employees felt threatened by internal design thinking consultants responsible for navigating design thinking approach and viewed these acts as an encroachment on functional knowledge and expertise (Carlgren, Elmquist, & Raugth, 2016).

Additionally, the study identified that participants felt the principles and mindset required to approach problems creatively is not a competency possessed within these organizations. Participants suggested that the needed skills to conduct design thinking, such as visualization and prototyping, were difficult to learn. Participants felt they did not know when enough collected insights were good enough. Design thinking challenged teams to switch between roles and

decision-making authority, a challenge for study participants. Communicating results based on subjective data and human-oriented data was a challenge (Carlgren, Elmquist, & Raught, 2016).

Design thinking not being culturally dependent is a significant hurdle a design thinker must overcome. In a study that reviewed how design thinking influences innovative organizations found that individuals responsible for driving organizational innovation discovered the difficulties with introducing design thinking within the organization (Kleinsmann, Valkenburg, Sluijs, 2017). Benson and Dresdow (2014) identified that the success of design thinking initiatives depends on the culture of the team along with support from the institution's leadership. To specifically lead the projects, a core group of faculty should take charge and lead initiatives appropriately and without bias.

Liedka (2015) identified nine natural cognitive biases that may limit the effectiveness of the true nature of a problem through an innovative problem-solving approach. Cognitive biases are a natural phenomenon that humans often demonstrate as they traditionally approach problems and attempt to offer and validate specific solutions. Through understanding where bias originates, a design thinker can best reduce individual bias as they seek to better understand the nature of the problem (Leidka, 2015). Leidtka (2015) found that three categories emerged. The first sought to reduce bias in one's worldview and to understand the subject's origins by developing perspective-taking skills. The use of compelling storytelling and metaphors are two tools a design thinker can use to gain a deeper understanding of the subject's worldview. Collaborative teamwork, specifically the co-creation that a design thinking engagement produces, reduces personal worldview bias.

Leidtka's (2015) second category introduces the need to reduce bias in customers. Rooted in the concept that customers' needs go unsaid, Leidtka (2015) proposes that design

thinkers reduce bias introduced by a customer. Leidkta (2015) argues that a customer possesses an inability to describe what is truly needed. To facilitate needs not easily identified by a customer, journey mapping and job-to-be-done analysis are useful tools used in the design thinking process. Also, important with reducing bias, is the need for a design thinker to prototype a solution. A prototype assists a customer with viewing a tangible product that may or may not meet their needs and expectations (Liedkta, 2015).

Finally, Liedkta (2015) introduces a third category related to identifying bias within testing as related to becoming too attached to early successes and pushing for a result that does not meet the needs of the user. Being overly optimistic with the solution and maintaining a preference of a potential solution that can be easily imagined assists with the identification of this bias. The ability to produce tangible prototypes may also reduce this bias. The ability of users to validate the finished product allows prototyped solutions to again act as a stage gate for solution design by mitigating cognitive bias (Liedkta, 2015). Removing bias is difficult for expert designers. Kim and Ryu (2014) studied the attempt of expert designers to remove personal bias from the design process and found that expert designers had difficulty removing personal bias from design projects.

Inspiring Organizational Collaboration through Design Thinking

Design thinking is a way to communicate strategic organizational value through prototyped solutions. Through a case study, Holloway (2009) illustrates the value of using prototypes to express ideas to senior management. Senior managers were able to see prototypes and express satisfaction or improvement over concrete examples. Discussions around these artifacts were rich and provided value to the design thinking team on changes needed to enhance the prototype (Holloway, 2009).

The organizational environment is essential when introducing initiatives that suggest an organizational change. Design thinking is an active process and, as discussed by Elsback and Stigliani (2018), can significantly influence organizational culture as team members are in better positions to support and advocate for each other. Leadership is an important organizational enabler that assists users with understanding a new way of looking at problems (Madden, 2015). Madden (2015) proposes that for higher education to introduce design thinking into its organizational culture, a leader must first create a vision for that change and communicate that vision to stakeholders. Leaders are needed to initiate change, communicate vision, and provide the environment necessary for innovation to occur (Madden, 2015). Madden (2015) also argues that higher educational institutions should give employees an environment to be innovative and the flexibility to do so. Madden (2015) proposes that innovation needs to become a core activity in the organization. Employees need empowerment to use design thinking tools and not wait for a facilitator to guide them (Madden, 2015). Madden (2015) advocates for the use of design champions within an organization. A design champion enables and encourages non-designers to use design methods when approaching problems. Successful design champions are motivated and possess a desire for some level of organizational change.

Organizational Innovation, Design Thinking, and Transformational Leaders

Organizational innovation leaders should be aware that different innovation purposes exist. Kleinsman, Valekenburg, and Sluijs (2017) discuss four different images of design thinking as it relates to innovation. Categorized as purpose-driven innovation, vision-driven innovation, experience-driven innovation, and value-driven innovation, design thinking has a different approach depending on the projects aim. For example, in vision-driven innovation transformation, the aim of the design thinking prototype is to promote a dialogue with

stakeholders and validate the created vision. This differs from a design thinking prototype created within experience driven innovation transformation where users use prototypes to turn ideas into concepts (Kleinsman, Valekenburg, and Sluijs, 2017). This demonstrates the flexibility of a design thinking approach within a specific innovation framework.

Bass' (1985) theory of transformational leadership provides four dimensions that are widely researched and relate to a set of criteria that aid organizational transformation efforts. The elements, known as the 4I model, include intellectual stimulation, individualized consideration, inspirational motivation, and idealized influence. Groeger and Schweitzer (2014) identified cultural factors and identified nine capabilities that design-thinking practitioners apply through the design innovation process. These capabilities include: (1) empathetic toward people's needs (2) holistic and accepting of uncertainty (3) embracing diversity and radical collaboration, (4) curious and open to alternative suggestions (5) embracing experimentation and testing (6) encouraging feedback (7) constructive and action-oriented (8) encouraging visual storytelling and (9) mindful of people and process. The authors propose a conceptual model of design innovation leadership and suggest that linking the identified thinking capabilities with Bass'(1985) four dimensions of transformational leadership (the 4I model) facilitate innovation among individuals to meet organizational transformation objectives. The overlay of this model demonstrates how design thinking and transformational leadership intersect.

Those that lead change initiatives in an unconventional manner possess unique traits that aligns with Bass's (1985) 4I model. The 4I model consists of:

- Idealized Influence
- Inspirational Motivation
- Individually Considerate

- Intellectually Stimulating

Idealized Influence & Inspirational Motivation. Idealized influence, also known as charisma, is perhaps the single most important transformational leadership component (Judge & Bono, 2000, p. 751). Bass considers charisma to be the most "important component" in transformational leadership (1985, pg. 34). Charisma in a leader attempts to create an environment where followers are enthusiastic about their tasks, assignments, or work, thus inspiring them to be involved in the process and not simply a, "spoke in the wheel" (Bass, 1985, 1990). Leaders possessing charisma have "great power and influence" as employees strive to identify with them (Bass, 1990 pg. 21). Judge and Bono (2000) found that agreeableness was one of the strongest predictors of transformational leadership (pg. 760). While this might seem surprising, agreeableness and charisma share many of the same attributes such as trust, compassion, and empathy, thus contributing to the notion that agreeableness allows transformational leaders to show passion and commitment to their task (Judge & Bono, 2000). Often, idealized influence and inspirational motivation are combined in practice. A key distinction between the two concepts is that inspirational motivation articulates a clear and inspiring vision to followers where idealized motivation is closely linked to charisma.

Individually Considerate. Transformational leaders pay close attention to their employees to identify differences. They mentor these employees who need additional help to learn and grow. They act like role models (Bass, 1990). These actions contribute to the follower's respect and admiration for transformational leaders (Bass, 1990). One example is shared governance. A study of shared governance in a nursing field revealed that transformational leadership could provide the context to support health care professionals to achieve growth in "self-esteem, self-actualization, recognition, and responsibility" (Bamford-

Wade & Moss, 2010 pg. 819). To support growth in individualized development, Bass (1985) suggests that transformational leaders delegate work and responsibilities to followers, thus providing the opportunity for individuals to contribute to a project.

Emotional leadership was found to contribute to transformational leadership and might be a useful component to leadership (Palmer, Wells, et. all, 2001). Barling, Slater, and Kelloway (2000) found that emotional intelligence is associated with individualized consideration. Additionally, followers see individuals with higher emotional intelligence as having more transformational leadership abilities (Barling, Slater, & Kelloway, 2000) along with being more effective in their leadership roles (Hur, Van den Berg, & Wilderom, 2011). In short, leaders with higher emotional intelligence possess the ability to control their emotions, be a positive influence, and gain the respect of followers by understanding their emotions.

Transformational leaders also lead to a higher rate of job satisfaction among those they lead (Medley & Larochelle, 1995; Yukl, 2011). Job satisfaction is also considered to be an individual preference and suggests that higher job satisfaction leads to higher employee retention (Medley & Larochelle). If an employee is happy in their work environment and challenged, they are likely to be committed to the organization and do not plan to seek employment elsewhere (Yukl, 2011).

Intellectually Stimulating. Transformational leaders act like teachers and are willing to show followers new ways of looking at old problems (Bass, 1990). Jung (2000-2001) posits that creating an innovative environment strategy within an organization may assist individuals with gaining intellectual capacity, expertise, and creative thinking skills (p. 186). This could create an environment for which transformational leaders can motivate, teach, and inspire followers. In Jung's (2000-2001) study on group performance, he found that groups who possessed

transformational leadership qualities where more creative than groups who possessed transactional leadership qualities.

Additionally, followers would feel that their contributions were being utilized and their value respected as they begin work in an innovative environment. Intellectual stimulation questions current system thinking and encourages the expression of ideas. As described by Judge and Bono (2000), openness to experience refers to the ability to be thoughtful, creative, and imaginative, thus providing a link to an intellectually stimulating component of transformational leadership. Judge and Bono's research findings also support that openness to experience is a key trait in transformative leaders (2000).

Conclusion

Digital experiences, technological advances, and employer workforce needs are driving student needs and expectations within higher education. The structure of higher education has and will continue to serve the advanced educational needs of a society that must also make sense of these changing dynamics (Bok, 2013). Organizational structures found at higher education environments do not respond effectively to change models designed for a hierarchical organization. The need to design structures for the 21st-century student requires a collaborative approach across multiple departments to identify the modern needs of students. Additionally, higher education faculty, staff, and students need to take the time to make sense of changes introduced my disruptive forces (Kezar, 2018).

Design thinking provides a framework that places the student in the center of the solution. The administrator creates empathy with the student by understanding the emotional experiences they have as they navigate through higher education's multiple structures. Student-centric design and design thinking is not new to higher educations. Case studies examined how

an academic department revised existing curriculum to meet the needs of student. A study also demonstrated how a library approached the digitization of their content using design thinking and placing the student at the center of that work.

Organizational adoption of design thinking is challenging. Barriers exist that demonstrate the effectiveness of the approach. Individuals find that the creative skills necessary to engage in design thinking is hard to acquire and difficult to practice. Organizational leaders expect a strong return on investment as it pertains to design thinking.

There is a need for studies that describe the experiences of how mid-level higher educational administrators approach creating student-centric solutions at their institutions. There is also a need for studies that utilize research methodologies that can capture perspectives of identifying solutions beyond those designed by faculty. As this review has demonstrated, design thinking allows for project teams to design solutions based on stakeholder needs. Understanding the experiences of those that lead these initiatives is essential and needed for higher education leaders to understand the importance of the person leading these iniatives. As such, using an Interpretative Phenomenological Analysis (IPA) approach, this study is designed to understand the role of mid-level higher education administrators as they lead team members in discovering the needs of students and creating student-centric solutions designed to meet the needs for the 21st century student.

Chapter 3: Research Design

Methodology

This qualitative study sought to answer the following question: *How do mid-level higher education leaders make sense of their experiences leading student-centric projects?* In desiring to understand these experiences, the choice to conduct a qualitative research study empowered participants to share their experiences and stories in a safe and secure environment (Creswell, 2013). The purpose of this study is to understand the experiences of mid-level higher education administrators have in driving empathetic solutions in a disbursed and ambiguous environment. A qualitative research model was best suited to meet this goal.

This study is grounded in design thinking, which advocates for a human-centered and empathetic approach to solving problems (Brown, 2009). Meinel and Leifer (2011) describe four rules of design thinking (1) The Human Rule, (2) The Ambiguity Rule, (3) The Re-Design Rule, (4) The Tangibility Rule. These rules are influenced by the systematic approach that designers have when approaching problems. Based on design thinking, this study focused on understanding mid-level higher education administrators as they guide human-centric change within the organizations they serve. Ponterotto (2005) discusses the use of a qualitative study to "interpret the experiences of the research participant" (p.128). Another goal of this study was to gain a deep understanding of the perceived barriers a leader faced when leading student-centric solutions. In order to best understand the essence of mid-level administrators' experiences, an interpretive analysis phenomenological (IPA) approach was utilized.

Collaboration within higher education is not without its challenges. These challenges are highlighted by the fact that institutions are individualistic and decision-making structures are spread through multiple areas of the institution. Possessing a knowledge of the experiences

faced by the higher education leader with the team they are motivating is important to understand. The research question sought to understand the experiences that higher education leaders have driving collaboration through design thinking.

Research Approach and Justification

A qualitative research study is undertaken when the researcher possesses a desire to gain a deeper understanding of a central phenomenon faced by an individual, group, or organization (Creswell, 2012). Though we know that design thinking has been previously used in various settings within higher education (Madden, 2005; Bakic, Husgafvel, Martikka, 2015, Melles et al., 2008, 2011; Willness & Bruni-Bossio, 2017; Withell & Haugh, 2013), little is known about the experiences of the person leading these efforts. Working within a constructivist paradigm, the researcher derived deeper meaning from the mid-level higher education administrators experience by conducting in-depth and interactive conversations with research participants (Ponterotto, 2005).

Role of the researcher: The role of the researcher was to ensure that participants are sharing their experiences in a comfortable environment allows the researcher and participant to co-construct findings that emerge from their conversation (Ponterotto, 2005). The researcher was also an active participant in the dialogue with the goal to understand the lived experiences of the research participant.

Research Tradition

Qualitative studies seek to understand and interpret experiences of people in an attempt to craft meaning and drive change (Creswell, 2012). Interpretative Phenomenological Analysis (IPA) is a qualitative research approach and is the chosen methodological approach selected for this study. Researchers using IPA seek to understand, through detailed analysis of personal

accounts, the deep meaning of lived experiences of personal accounts. By giving voice to participants, the researcher captures these stories to makes sense of their experiences (Smith & Osborn, 2015). The purpose of an IPA study is to look into details of the subject's experiences to explore, interpret, and situate an individual's experience with a given phenomenon (Tuffour, 2017). IPA was first presented to the psychology discipline as a way to introduce experiential studies to a field predominately focused on quantitative outcomes (Tuffour, 2017). IPA is grounded in three theoretical sources: phenomenology, hermeneutics, and idiography.

Phenomenology. Phenomenology is the study of commonalities between several individuals (Creswell, 2013). The role of the researcher is to identify a central phenomenon and collect information to develop a description that portrays a deep essence of that experience (Moustakas, 1994). Stewart and Mickunas (1990) suggest that a person perceives the reality of an object within the meaning of their own experience. Phenomenology has a deep grounding in philosophy as introduced by mathematician Edmund Husserl (Dowling, 2007; Creswell, 2013). Husserl introduced the concept of "bracketing" within phenomenological research. Through bracketing, or *epoche*, the researcher suspends all judgements and personal experiences in an attempt to preserve the experiences of the research subjects (van Manen, 1990).

Hermeneutics. Hermeneutics refers to the understanding of interpretation as it relates to meaning (Smith, Flowers, & Larkin, 2009). Hermeneutics key theorists Heidegger, Schleiermacher, Ricoeur and Gadamer explored the meaning of interpretation as it relates to building on existing knowledge to address complexities not identified in existing textual conceptions. Hermeneutics seats the researcher in dual roles where they place themselves in the role of the participant and being empathetic toward those emerging experiences while also ensuring the separation of the researcher and participant (Smith, Flowers, & Larkin, 2009). .

Idiography. IPA researchers demonstrate strong attention to detail in terms of analyses and commitment to understand the central phenomenon faced by the individual. Rather than approach generalizations, an IPA study relies on an idiographic mode of inquiry and seeks to deeply analyze the lived experiences of participants (Smith & Osborn, 2015)

Rationale for IPA

This study, exploring the experiences of mid-level higher education administrators driving strategic interdepartmental change initiatives, aligns well with an IPA study approach. Much stands to be learned from looking at a sample of administrators that have led collaborative efforts that drive empathetic solutions. Higher education institutions are largely disparate, possess loosely-coupled organizations, and allow for decisions to be made on what is best for the individual and not the institution as a whole (Kezar and Lester, 2009).

Previous design thinking studies focused on organizational collaboration and placed emphasis on case studies examining the barriers faced by organizations using design thinking (Melles, Anderson, Barrett & Thompson-Whiteside, 2015; Kleinsmann, Valkenburg, Sluijs, 2017). A gap in the literature, however, exists between the relationships of mid-level higher education administrators experience and driving student-centric collaborative change within an organization. Therefore, this study aimed to contribute to the discourse on design thinking and organizational change in higher education.

Participants

This study collected information from four individuals directly engaged with higher education change activities that effect multiple institutional stakeholders. IPA research seeks individuals that can provide relevant insight and experience about the research topic (Smith & Eatough, 2007). Smith and Osborn (2015) state that small sampling of participants for an IPA

study is effective as the detailed analysis required takes time to ensure that a successful exploration of the experiences and perceptions of the research participants is conducted.

Sample Characteristics. This study conducted interviews with four, mid-level higher education administrators that have experience leading significant collaborative change efforts at a college or university. Mid-level administrators refer to departmental or organizational leaders that may have experience implementing a modern technological system or driving a program or project designed to reduce cost, enhance the student experience, or provide value to the educational institution while meeting the distinct needs of a student. Mid-level administrators do not refer to an individual that directly report to the senior-most position of a university. Senior leaders and those responsible for defining strategic initiatives were not considered. Participants will not be from a single institution, however, recruitment for the study will focus on individuals that work at a non-profit higher education institution.

Sampling Procedures. Finding individuals who have all experienced the same phenomenon can be a challenge and a small sample size provides an opportunity for the researcher to collect, analyze, and inform of the lived experiences of a select few who have experienced the phenomenon (Creswell, 2012). For the purpose of recruiting mid-level higher education administrators, a purposeful sampling strategy was used. A purposeful sampling strategy is most effective for this study as it allows the researcher to identify mid-level administrators with experience leading cross-functional projects. Participants will be recruited using purposeful sampling. After Institutional Review Board (IRB) approval, participant recruitment followed the following steps:

1. The researcher sent a targeted email to specific administrators known by the researcher asking for their participation. The email briefly described the study and time commitments, and risks involved.
2. Participants were instructed to indicate a willingness to participate by responding to the researcher's email.

Research site. There was no research site for this study; participants were mid-level administrators employed at multiple non-profit higher education institution sites.

Procedures

Data Collection

IPA researchers seek to analyze, in detail, the sense-making and perceptions of individual participants (Smith & Osborn, 2015). Therefore, the use of a semi-structured interview was used to provide a flexible approach benefiting both the researcher and participant. With a semi-structured interview, questions were established, and the researcher possessed the flexibility to modify existing questions or expand on interesting and important areas as they arise (Eatough & Smith, 2007; Smith & Osborn, 2015). When appropriate, participants were asked to reconstruct experiences, to ensure that both experiences faced by the individual are recalled while also including elements of sense-making learned by the individual (Seidman, 2006).

Semi-structured interviews seek to answer the central question of: *How do mid-level higher education administrators make sense of their experiences leading student-centric projects?* Each interview lasted between 55-60 minutes.

After the interviews were transcribed, the transcriptions were read several times. The researcher thoroughly reviewed them and identified key words, phrases, and passages that aid in the goal of formulating useful and common themes (Creswell, 2012). The researcher contacted

each participant by email and provided the transcript of the interview. Participants will have an opportunity to review the transcripts, correct the record (if needed) and add additional comments, if desired. Participants also had the opportunity to comment on the themes and offer additional insight and information about their shared experiences (Creswell, 2012). Participants had the option to respond in writing or request a meeting to discuss transcribed results and emerging themes.

Data Storage

Audio files were destroyed through deletion after the files had been transcribed and validated by participants. All interviews were transcribed by a third-party service that specializes in research-based transcriptions. Interviews will be recorded with the permission of each participant using a single digital recording device. All identifying information, including name and higher education affiliation, was removed from the transcripts and issued a pseudonym that was only known to the researcher.

Data Analysis

Merriam (2009) suggests that researchers make data collection and data analysis a simultaneous activity to avoid unfocused actions, repetitive analysis, and an abundance of overwhelming data. With this suggestion, interviews were immediately transcribed and read multiple times. Re-reading participant transcripts aids the researcher in becoming as familiar as possible with the participant's account (Smith and Osborn, 2015). The process of analyzing data gleaned from an IPA research project requires the researcher to be reflective and maintain a close relationship with the collected data (Smith et al., 2009) and derive meaning from the research participant (Smith, 2003). To accomplish this, the researcher sought to deeply interpret

emerging themes. Smith et al. (2009) present a five step process for an IPA researcher to use to analyze the outcomes from the interviews and build themes around the data:

Step One. Step one required the researcher to become familiar with the structure of the content and try to gain a deep understanding of the live experiences of the participant. This involved the researcher reading the interview transcripts and listening to the audio recording multiple times. The researcher also made strong attempts to set aside any preconceived notions or ideas. The multiple reviews required at this stage is necessary to ensure that information is correctly captured, researcher bias is decreased, and the researcher can begin the deep understanding of the experiences of the research participant (Smith and Osborn, 2015).

Step Two. Step two required the researcher to conduct an initial coding of the presented data (Smith & Osborn, 2015). Initial codes emerged and descriptive summaries capturing the essence of the participants' responses. This step required the researcher to effectively make notes and take into consideration language used to describe themselves and their experiences, pauses in speech, hesitation, and volume were also considered (Smith et al., 2009; Smith & Osborn, 2015).

Step Three. Step three requires clustering the codes captured in step two into groups of information and patterns that are significant for the research participant. The notes taken in steps one and two informed the data analyzed during this step. Notes taken during this step will capture the significance of what each research participant is saying (Shaw, 2010).

Step Four: Connections will be researched across all emergent themes. This is needed to create the structure that identifies the most captivating pieces of each interview.

Step Five: Step five includes taking all meaningful themes from across all interviews and creating graphical representation of all themes emerging from the collected interviews (Shaw, 2010).

Trustworthiness

To ensure that the interpretation of the collected data accurately reflected the lived experience of the research participants (Creswell, 2012), this study employed multiple validation strategies. Through the pragmatic approach of incorporating both member checking techniques and a triangulation strategy, the intended audience possesses a confidence that the results of this study are both valuable and thorough (Padget, 1998).

Through member checking, the researcher provided an opportunity for each participant to review the accuracy of his or her interview (Creswell, 2012). Member checking builds a trusting relationship between the researcher and participants, which is important in qualitative research (Padgett, 1998). Participants had an opportunity to review interview transcripts and provide additional information, if warranted. This approach, which required the researcher to reenter the field of study continually, also confirmed if the researcher is on track with emerging findings.

Researcher bias is also a threat to qualitative study, and for this study, the researcher's status as a participant in strategic change initiatives within higher education created an environment where researcher bias may enter. The researcher carefully constructed interview questions so that participants were not guided to offer a pre-determined answer. They were open-ended inquiries, striving to allow the research participant to reconstruct events rather than recite from memory (Seidman, 2006). Additionally, the researcher did not ignore data that did not support the findings or emerging trends (Padgett, 1998).

The Protection of Human Subjects

Ethical Considerations

Protection of Human Subjects. The subject group interviewed for this study are mid-level higher education administrators. The study did not pose any risk to their physical health. It is also highly unlikely that this study and the interview protocol used will posed any threat to the status of the participants. Nonetheless, the researcher assigned a pseudonym to research participants and use the pseudonym in the written report and any presentation of the findings. The participant will also had an opportunity to review their interview transcripts for accuracy with an opportunity to edit and amend their comments for accuracy.

Confidentiality. Data was stored in the researcher's password-protected computer. Access to this raw data was only provided to the researcher and, if requested, members of the researcher's doctoral committee. Pseudonyms were assigned to all participants in the study. The school or institutional affiliation where the participants are selected was also be assigned a pseudonym. Additionally, the area where the study takes place was described in broad and generic geographic terms.

Informed Consent. Permission from each participant was obtained in writing. A letter accompanied this request and include information about the study and its purpose, a request for participation, why they were selected, how they were selected, procedures to participate in the study, their right to voluntarily withdraw from the study, data collection procedures, known risks of study, expected benefits, and the signature of the participant (Creswell, 2012).

IRB Approval. Before the collection of data commenced**,** Institutional Review Board (IRB) approval was obtained from Northeastern University (Appendix A).

Summary

This research study explored the experiences of mid-level higher education administrators as they led student-centric initiatives. To focus and ensure that experiences are rich with meaning, an Interpretative Phenomenological Analysis (IPA) approach was the qualitative method utilized for this study. All IPA procedures were followed with regard to collecting of day and analysis approach in an inductive manner. The following chapter presents the research findings found by utilizing this approach and method.

Chapter Four: Research Findings and Analysis

The purpose of this interpretative phenomenological study was to investigate the mid-level higher educators' experiences as they lead student-centric solutions within a higher education environment. The researcher conducted in-depth interviews with four mid-level higher education administrators employed at a non-profit higher education institution. Each of the four did not directly report to their institutional president or senior most executive officer. Each were responsible for designing and leading projects. Additionally, all four participants were actively involved in developing student-centric initiatives. The study participants were asked to share their lived experiences through a series of semi-structured questions intended to answer the study's central research question: *How do mid-level higher education leaders make sense of their experiences leading student-centric projects?* After a thorough analysis of the interview transcripts, three superordinate themes and seven subordinate themes emerged.

The analysis of the data yielded three superordinate themes which included: (1) Student-centric as a personal mission; (2) Facing barriers and challenges; (3) Designing student-centric initiatives. Superordinate themes were identified as those that occurred in all of the interview participant's experiences. Sub-themes were identified as those that occurred in at least two of the four participant's interview data. Table 1 provides a listing of the superordinate and sub-themes that were derived through the analysis process.

Table 1 *Participant Data Table*

Superordinate Themes *Subthemes*	Bruce	Patricia	Abigail	Molly
1. Student Centric as a Personal Mission	Yes	Yes	Yes	Yes
1.1. Becoming student-centric	Yes	Yes	Yes	Yes

1.2. Purpose-driven	Yes	Yes	Yes	Yes
1.3. Displaying empathy toward the student journey	Yes	Yes	Yes	Yes
2. Facing Barriers and Challenges	Yes	Yes	Yes	Yes
2.1. Frustration with status quo	Yes	Yes	Yes	Yes
2.2. Overcoming Obstacles	Yes	Yes	Yes	Yes
3. Designing Student-Centric Initiatives	Yes	Yes	Yes	Yes
3.2 Cross-functional Collaboration	Yes	Yes	Yes	Yes
3.3. Translating experiences for real world applicability	No	No	Yes	Yes

Student-Centric as a Personal Mission

Student-centric as a personal mission was the first subordinate theme revealed in the study. Specifically, personal mission related to the experiences that each of the study participants embodied through their interactions with student-centric initiatives. This subordinate theme was divided into four sub-themes that identified specific experiences related to becoming student-centric, being student-centric, developing empathy for the student experience, and telling the student's story. Each of these sub-themes is examined within the context of the personal mission of being student-centric.

Each participant described personal and professional experiences that influenced their desire to look at the student journey holistically and fulfill the personal mission of the practice of student-centric design. Each participant experienced a personal experience that demonstrated to them the importance of being student-centric. Participants also shared viewpoints that display the importance of being student-centric. Lastly, these "being" viewpoints coupled with "becoming" viewpoints lay a grounded foundation on the ability for each participant to display

empathy for the student's journey while also developing appropriate frameworks that tell individual student stories.

Becoming Student-Centric

The first superordinate theme that emerged from this study focused on the participant's experiences that influenced their perspective on becoming student-centric. These personal experiences affected how these participants developed and approached future student-centric initiatives that meet the needs of a student. Through these experiences, participants developed empathy for others and a career commitment to provide what is needed for the student to use or work through a product offering. In the context of higher education, these experiences shaped participants view on the way a student interacts with systems, processes, and procedures. Before entering her role as a higher education administrator, Abigail had multiple positions as an administrative manager, tax preparer, and insurance sales. As she explains:

> Everywhere else I've worked, it was in areas where ... I had gotten experience as a tax preparer, and insurance sales and that was like a storefront. I ran the store until the owner came, so it was always a leadership-style position. Even though, no knowledge, nothing. I mean, I was sent to learn how to prepare taxes by the person. Then, he made me go and take insurance courses to understand property and casualty insurance, and auto.

Though these experiences developed an understanding of the unseen needs of a customer, Abigail faced an academic setback and was placed on academic probation as an undergraduate student. Though Abigail eventually went on to finish a doctorate program, this experience stayed with her as she entered higher education professionally. It is also because of this experience she developed a "kinship" for students that she serves and has led to programs and initiatives to support those students through that process.

Bruce shared a similar experience that grounded his experience and fueled his passion. As a bartender and food service provider, Bruce established a strong sense of understanding the uniqueness of the customer experiences and meeting and exceeding expectations.

> I was a bartender for many, many years. You figure out working with people very quickly. You develop a lot of emotional intelligence working in roles like that. And obviously in any kind of retail position, or even bartending, to be frank, you learn to take on empathy for your customers, and understanding what it is that they're going through, what their needs are, and how you can help fulfill those needs, right.

That experience coupled with his personal experience as a university student led him to seek roles within higher education first within the admissions office and then moving to an advising role. Within these roles, he felt compelled to share his personal experiences and assist others through navigating the higher education admission process.

> Hey, I just got out of college. I know what college is all about. I know how this can benefit people, and I know how to talk about those experiences. Great, put me in an admission role. I can talk to students about that all day.

Bruce eventually went on to earn an MBA through an online education program. Compared to his undergraduate college experience, this was a different experience for Bruce. Bruce felt isolated with the process of being an online student and distant learner.

> So I went through my entire Master's degree program in an online program. I did my MBA, and part of being an online student, that just smacked me upside the head as an

> online student, was how isolating it was trying to be distance learner, and trying to get some sort of connection to your university that was states and states away.

Bruce is a doctoral student. Through that admission process a reference letter from a faculty member intimately familiar with Bruce's academic experience. Bruce recognized that he did not have the type of relationship typically developed within a graduate program.

> When I applied for my doctoral program, one of the things that struck me was that they wanted me to provide them references from people, instructors, faculty that I had worked with in my Master's program who could speak to my ability to be successful in my doctoral program. Guess what? In that online program, I was in class for five weeks with a faculty member who was Joe Schmo faculty and you don't develop those sorts of relationships with your faculty members, nor do you build those sorts of community relationships with other students necessarily.

Bruce continues to explain the difference between a traditional program and the engagement had with that programs faculty and the engagement routine with an accelerated program with an 8-week term structure.

> You are in this class for five weeks, and when the class is over, they put you in another class, with a completely different faculty member, a whole other different set of students, and all of those relationships that you build in the context of a course, are really severed at the end of that course.

This experience compelled Bruce to look at the systems and inconsistencies and drove him to advocate for a student-centric initiative that builds an online community for adult learners that enroll in non-traditional academic terms and structures.

Through a combination of educational opportunities and contributing to her family's start-up business, Molly developed a unique empathy for the customer experience. Through these experiences, Molly's focus to grow her family's business provided her with diverse experiences that allowed her to see the intersection and dependencies of multiple areas. These experiences eventually led to her take on an academic technology and instructional design role and a strong affinity for technology being a lever for change while coupling the importance of incorporating cultural and humanistic elements into technological solutions:

> What I love about technology is that it's a lever for change. And I really love the ways in which it questions your assumptions about the way you've always done things. And the thing I liked to do the most in the tech space was marrying the cultural and human needs. So the anthro side of me to a technological solution. I started looking at careers that did that, and instructional technology was a new one at the time.

Even though Molly's experience, becoming student-centric was "amplified" as she participated in a project to redesign her college's learning space. It was through this experience that she recognized the "power" of the student's voice.

> I feel like I've always been there. When was it amplified for me? I would say when I first started doing learning space design. Whenever I was really formal about collecting data on the student experience. The first time I really did that in a formal way was when we started testing learning space designs. We were about to go through new capital

> renovation on campus and we started a center for teaching and learning, and I pitched that we needed an incubator or classroom in that space so that we could be more thoughtful about how we connect the learning environment to the technology that's being put in that space. We did this one ... we had this one ... we had an incubator space that was looking at best practices from places like Steelcase and others of how you would do active learning. So active learning was a big push at the time. Okay, the student voice is actually quite powerful in getting faculty to really truly change their teaching. Not the theater change, but really change.

One of Patricia's first professional experiences made clear the importance in designing a unique student learning outcome. As a TA, she collaborated with other TA's to design tests for classes they taught. Patricia instantly overcame with angst as she realized that in teaching the same course, both classes would fail if forced to take different tests. Patricia explains how routine practice can expose issues with the student journey. As she explains:

> Well, I think it means you start with the students, you start with what is best for them, what they need, how you'll measure the success of that. I'll give one example that is from early in my career, that I think has shaped how I viewed everything else. When I was a TA, my Ph.D. is in linguistics, and so I was teaching the intro linguistics class, right. And, one day I went back to the TA office, and one of the other TA's, this woman Janel was in there, and she said, "Hey, I'm trying to write my final exam, can I see your mid-term, can I see your last final? You can see mine." Like TA's do, right. You swap test questions. And I was like, "Yeah, absolutely."

Patricia continues:

> I pull it out of a file drawer, and I hand her my old exam, and she hands me hers, and I read through her exam, and I'm reading it, I'm getting this sinking, sick feeling in my stomach, and I looked at her and I go, "Janel, my students would fail your exam." And she goes, "My students would fail yours." And we were teaching the same class, right, but it was because there really weren't a standard set of outcomes, there weren't a standard set of assignments, there wasn't even really, I mean, we were working from the same textbook, but we were able to pick which readings. So we had really a lot of autonomy, especially for TA's, but we had autonomy that is like what many traditional institutions provide their faculty, to really shape the class however we wanted it.

Patricia explains how they both reacted. She questioned whether the current system is setting up a student for success. As she continues:

> She was less horrified then I was. I was horrified because I thought, this is the first class in the major, and I don't know, I mean, we're teaching two totally different things. How are either of us setting our students up for success, really?

Patricia provided an interesting analysis of how students had changed overtime. Initially she relates and recognizes the privilege she was raised in. As she explains:

> And I think that probably just personally, I'd highlight a couple things in my own thinking, one is I came to realize the privilege I was raised with, very deeply, very early. My first I did was I was in grad school at University of North Carolina, in Chapel Hill, and I was teaching really traditional 18 year olds, right, who also, many of them came from a place of privilege, college was an expectation, that's what their parents told them

> to do, and so they did it, and if one of them was late with an assignment, it was probably because they had gone to a party the night before.

Patricia continues by explaining a change in the students she now works with. Through this, she recognizes the different levels and adjustments needed to make to support this type of student. As she states:

> Whereas, I think, the students that I've worked with for the bulk of my career now are really, if they're late with their paper it's because they had to take their kid to the ER, or they got called in on an overnight shift. It's caused me to think very differently about education, and how we support students. Obviously, technology has changed tremendously. 20 years ago, we were starting to get online education, now it's everywhere.

Purpose Driven Motivation

All four participants referenced that being student-centric fulfills a sense of purpose within their respective career. Patricia understands a student-centric initiative to be "one in which students are not just spitting back what they have been told". She goes deeper by acknowledging that a student can enter higher education with "different levels of skills or abilities." She shared:

> The way I look at, in some ways, student-centric design is, students can come in with all different levels of skills or abilities, we all have that. No one's great at everything. And so students come in with varying skills and abilities. My promise is that I don't care where you come in, but I'm gonna get you to here.

Her desire to understand the individuality of learning and how instructional design can either "support" or "sabotage learning" is an essential element as she maintains a student-centric mindset. As part of gaining this perspective, Patricia shared her approach and the student-centric outcomes she hopes to achieve:

> I'm very interested in how we learn, and how instructional design can either support or sabotage learning, and so I've read a lot and apply a lot of theories around cognitive load, and how you chunk out content, and how you present contact the way that helps the brain absorb it, and how you can do the opposite, right. I also would class that as student-centric design because I think it's really interested in not just what are we telling students, but what are they actually learning.

Abigail also recognizes the importance of the "end goal for the student" while "placing a student first." She cautions that being student-centric is not allowing a student's sense of entitlement to come through". Additionally, Abigail further explains that the student needs to see success. As Abigail shared, sometimes this is difficult if the student "comes in with "triple-zero credits" or other situations that place them further back from a "starting line."

Bruce understands being student-centric to mean that deep down, he recognizes that "it's the right thing to do" to remove unnecessary barriers from the student experience. He references the "many applications" available to manage students experiences and go on to explain:

> And then the customer piece, like I said, there's so many applications for just the way that you take care of your students, and the way that you try to improve their experiences, and

> make their lives better, make things easier for them, right. And try to remove the barriers for them, just make it simple.

Bruce also challenges peers to look outside of higher education and identify of customer-centric models that can be leveraged to better enhance the student's journey. As he explains:

> You know what I mean? And think about ways to do that smartly. If you're looking only within the higher education industry for how to do that well, you're looking in the wrong place. You've got to look at the Amazon's out there, the Netflix's out there, the Southwest Airlines, right, to really understand how to do that really, really well, because we wanna be super customer focused.

Molly also references the user-experience (UX) aspect and explains what it means for her to design experiences that meet end-user needed. As she explains:

> In the two different spaces I'm in, the main thing for me is it's a UX type approach. I think anytime we're designing anything, thinking about the way you design it from the end user should be first and foremost in your mind

When Bruce transitioned to a role at an online institution responsible for building upon student experiences, he vividly remembered the experience he had as an online student and was able to relate to the experiences shared by the same online students he serves. As he reflects:

> When I got here, it struck me that we were doing the same thing to our students here, which was you enroll in an eight-week course, and then we cut you off, and then we push you into another eight-week course, and you've got another faculty member, and a whole bunch of students you don't know, and you're left to figure it out on your own. And we

> put a lot of pressure on students to build that community on their own, and we fail at providing them the tools to do that.

Patricia shared a situation that displayed her compassion for a student faced with submitting an assignment and working at a United States military command post.

> So we had this situation of it was an issue this fall, and there was a student, and it just so happens I was in Asia when this happened, so I could verify there was a big typhoon coming, all this happened, and we had to evacuate. The student, the typhoon was hitting the day before the term ended, right. The student didn't have enough time, was still working on his final paper, didn't have enough time to finish it because he was part of an air command, he had to fly the jets from Okinawa up to Korea, so he went to his faculty member, and he said to the faculty member, "Can I submit this paper 24 hours late?"
>
> Yeah, of course. That's fine, because I'm still in my grading window, it's not gonna hurt for me to get one other paper 24 hours late, it doesn't matter. Yes, be safe. Go."

Abigail works with students that are “far behind the starting line” and take control, identify student needs, and build specific and timely programming opportunities.

> I have to say that I believe that, you know, the population of undocumented and dreamer students. Having that population of students has sort of reinvigorated that, "Oh, I'll definitely want to be student-centric. I definitely want to create programs for these students.

In supporting DACA recipients, Abigail emphasizes the experiences of this unique student experience and the barriers they face. In addition to educational barriers faced by this

diverse group, they are working through barriers and fear caused, as she posits, by the 2019 political climate. As she explains concerns raised by a family at a recent event:

> I just held one on Friday where I had about seven students. I want to say three of which have DACA. One is eligible for DACA but didn't apply because her family was afraid to do that during the time of, you know, we just got Trump into presidency, and it's been a very hard time for a lot of the family members. There's one student who, she's in the midst of getting permanent residency, but they can't, they're not allowing her case to go forward now, because everything's shut down. You have these completely vulnerable soon-to-be students, right?

At times, this support was “exhausting” to her and “terrifying” for the student, which required Abigail to look deeper into potential solutions. Abigail shared,

> As exhausting and terrifying as that is, because for a while after Trump was brought into office, I was so upset because of these students. They would walk into my office and just cry, so that was the hardest thing. Then, understanding that we have to find what we can to get these them on their way through their educational journeys

Abigail demonstrated her student-centric approach by describing a recent scholarship application event she organized for DACA recipients:

> I sat with all of them. I commandeered one side of the computer lab, and I had them all go onto the website to the various places that I know that offer scholarship funding for people who are undocumented or are eligible for DACA. I was like, "Okay, here, this is ... I want to see your essays." I have them sending me their essays, they all have my cell

> phone number. I'm getting texts from people that I don't even know. I'm like, "Yeah, just send (me) the essay.

This example demonstrates, in the face of adversity, the level of caring for the student and ensuring that the student group managed by Abigail receives the best in both emotional and programmatic support to jump over barriers and move hurdles. It is these experiences that drives that Abigail's passion. Abigail explains:

> I think that meeting these high school students and really getting to know my undocumented students has reinvigorated that student-centric idea for me, that I know that I can push forward and be student-centric.

The experience of being available and to "push forward" on behalf of the student demonstrates a career intersection that she ponders. She shares an experience detailing a moment where she ponders "…if I didn't do it, then who would". She explains,

> Their teacher actually brought them in, and he was on the phone with the principal like, "Oh, we need to know this, and this, and this." He emailed me on Sunday and he was like, "Thank you so much for taking time from your busy schedule. You make such a big difference for these students, for these kids." If I didn't do it, then who would do it? I know there's going to be someone, but I know I want to do it, so I think that's where you start thinking about, oh, would I love to be called Dean Cross? Probably not as much as I'd like to be called Miss Abigail.

Abigail is beginning to understand that the further I grow in a career, the less interaction with a student I might have. The struggle between personal career advancement and working directly

with a student is evident within Abigail's experience. This appeared to be a pain point for Abigail as she views the work she does as transformative for the individual student, but also has career plans she would like to continue to explore.

Developing Empathy for the Student Journey

All four participants shared situations where they sought to understand and demonstrate empathy toward the student journey. Patricia speaks about how learners have changed and the experiences of changing perspectives. She seeks to make sense of this experience by comparing the traditional approach of higher education with the evolving nature of adult learning.

> I think, from my perspective, one of the biggest things that has changed is my understanding of the students, I think also the students have changed. Non-traditional learners now make up the majority of students, so they're not actually non-traditional anymore, they're the norm. And I really spent the last 15 years working mostly with under-represented, under-served adult learners, a lot of first generation, a lot of lower income, a lot of military, and some of those circles overlap.

As she noticed more adult learners entering higher education at later stages, she grappled with the changing student journey. To relate to this change, she described the difference between a traditional-aged student being late with a paper and non-traditional adult learner being late with an assignment. As she reflects:

> Whereas, I think, the students that I've worked with for the bulk of my career now are really, if they're late with their paper it's because they had to take their kid to the ER, or they got called in on an overnight shift. It's caused me to think very differently about education, and how we support students.

Patricia took a keen interest in the uniqueness of a student's pathway through higher education and an academic program. She explains,

> I also think a lot about how students' path through programs, and how particular courses, in particular orders, how do we optimize that progression, so we make sure that students are getting what they need when they need it. And so what was very clear to me is that every time a student walked into a new online classroom, or face-to-face, but particularly online, they had to relearn everything.

Patricia displays empathy as she recognizes the different pathways an adult learner has when reentering a formal educational environment. This is also evident by the frustration demonstrated when she realized that policies and procedures were not accessible within the consistent location for an online course. Patricia explains this frustration using an example of a course syllabus. As she describes:

> And it was like, even the syllabus wasn't in the same place consistently. That's just nonsense. There's no reason why the syllabus needs to live in seven different places, that's not an academic freedom issue, that's a poor user interface issue, right.

Though Patricia's description of having the syllabus in different places exposes interface issues for an online course, it was her explanation of the diverse a student needs that illustrate the importance of understanding how these inconsistences effect the student journey. She explains:

> I'm particularly, as my university now is very, half of our students are military affiliated, now probably only 20% are actually active duty, and the one's who are actually on a Naval carrier, where they only have access to the internet one hour a week, they're even a

> smaller minority, but I have to remember those students in what we do. But I think that's sometimes a challenge in being student-centric, is making sure that you remember how diverse the students are and what their design needs are.

Patricia also described a project where she led that eventually eliminated textbook costs for students. Patricia explains this reasoning:

> The reason why we did that is because we know a few things. One is, we know that the average national cost for textbooks is like $1,500 a year, that's a college board statistic. And we know that students just don't buy them, and especially adult students who may be choice between going to the grocery story or paying rent. So we had a lot of students who were not buying textbooks, getting a couple weeks into the class, seeing if they could maybe get away with not doing it. We also have a large population of military students, and if you got a student whose out at sea on a Naval carrier for six months, getting a book there involves a helicopter, and it's not easy, and they don't always get the book.

Patricia recognized that physical print textbook effected the student journey and caused a level of unneeded stress that impacted the ability for the student to concentrate on what educationally mattered. Abigail faced a similar situation that also affected the student journey. As she describes, a student may face a situation where the deck stacked against them. She shares:

> We take away their aid, and we tell them, "Okay, we're cutting you down to seven credits." How do you bring up a GPA when you're only bringing it up incrementally? So

> hard to bring up. I told her, "The students want to do this. We'll have our best students mentoring our ... Not to say our worst, but academically not up to par students.

This level of empathy for the students looks at a systemic issue with policies and procedures for a student. Abigail is explaining a situation where the student failed to meet Satisfactory Academic Progress for Financial Aid (SAP). To receive federal financial aid, a student is required to meet certain standards. This example demonstrates frustration that Abigail had with the challenge faced by the student. Eventually, she went on to develop a program to better support a student on SAP suspension which included a unique peer-mentoring component and exposed the number of students that fell into this category.

Molly display of empathy is not only associated with current students, but also those recent graduates that alumni that are ten years out. Specifically, she describes her students as:

> They had good networks coming in. They had good strategies coming in. What are the ways in which Stephenson actually adds value, are the things that I think we needed to hone in on. Our students over time, do really well. But it's almost impossible to say whether or not that had anything to do with Stephenson. The only thing you could really say is Stephenson didn't hurt him on their way out. As we think about institutional change and testing big ideas that would reimagine the institutional, reimagine the liberal arts for digital age, if we're not designing it for the people we're serving …and I think those people in higher ed are not just students, but recent alumni, alumni that are I think, 10 years out or less, then we're really just throwing a dart and hoping to hit the mark.

Possessing an understanding of what the student experiences after they leave Stephenson demonstrates Molly's empathy toward the student journey. Molly explains her belief that it

takes 5-7 years for a Stephenson College student to translate the work completed while at Stephenson with relevant work experience.

> Our students when they graduate, struggle right out of the gate to translate the value of what they just did over four years. They eventually through work experience, can connect the dots back to the rigor and say, "Oh, I see how this prepared me for anything", but it takes five to seven years for that to click and for that to show results. What we want to do is close that gap, and by the time you graduate, you're able to clearly articulate the value of what you just did, which means really re-imagining the student experience to be much more of an applied cycling theory to practice, vocational exploration and so on.

Molly leveraged a qualitative tool to capture user stories and identify specific issues that were simply not shifting. As she details,

> But when we did this storytelling tool, this sense-making tool and collected all these stories and we had the students signify these stories in a framework of inclusion, and that framework included things like where they received support from and where they had challenges. It's designed in a way that ideally gets you to choose more of a liberal arts experience. And so students were complaining about how difficult it was to understand how to register for classes, and as we started to go deeper into what the problem was ... we didn't want to go down the path of, "Oh, we just need to make an easier tool", or "We need to make a set of instructions that makes it easier for them to understand how to use the tool." What we really needed was holistic advising in the summer.

Molly indicates that the needs discovered through the sense-making process would not have been readily available through the traditional qualitative survey response. Additionally, Molly sees value with current students engaging with young alumni. As she described:

> Young alumni want to engage ... it's another sweet spot because they can't ... and many of them don't have the income yet to give back to the college, but they will give their time and they will give their expertise and they will give their mentoring and advice and it's a way for them to engage that doesn't mean you have to have $1 million. Right?

Possessing the foresight to engage alumni in the student journey demonstrates Molly's understanding of the needs of a student journey. Another initiative requiring Molly's involvement centered on the design of a learning space. This design had wall-to-wall white board, technology solutions allowing students devices to connect to presentation spaces, and furniture that encouraged collaboration. The issue was that faculty members did not adjust their pedagogical approaches with this space and students did not find much value with environment change. As Molly explains:

> There's a huge disconnect here. You felt incredibly engaged and everything was different. You could have been in any classroom and it would have been the same. The reason being you didn't change your pedagogy, you just taught the same thing in a different environment. Or the same way in a different environment.

This experience demonstrates the heightened awareness possessed by Molly. As Molly indicated, changing the environment was not the issue, the pedagogical approach also required to change. This speaks to her approach of "*find the pain point from the end user or the student*

perspective, then go deeper, go deeper, go deeper until you get to the crux of what the problem really is".

In demonstrating empathy toward a student, Abigail raises the need to meet a student at where they are with technological communication systems. As communication technologies evolve, Abigail understands the necessity of keeping up with how a student communicates. Through an interaction with a student, she describes her experience in understanding the different communication paths a student may navigate through:

> I'm thinking I could text everybody. They were like, "Listen, just get on WhatsApp." I'm like, "What? What is that? Can't I just text you?" Yeah, really you have to keep up with their technology, right? Their social media, and how they communicate.

Bruce also discusses the need for technology to be aligned with the student experience and raises the issue of multiple higher education vendors not looking holistically toward the student experience. He explains:

> How do we leverage all of those channels to meet the students where they're at? And again, if you're not thinking that way from the student's seat, nothing is gonna work. If you're only focused on your business and your department, you're gonna crash and burn

Bruce is very critical how system decisions are made that effect the overall journey of a student. As he explains "You don't realize that until you sit in the student's shoes, right, and really understand what is it that they're going through. And that's a whole new level of empathy, that I don't think we've quite reached yet."

Through this system criticism, he does acknowledge the difficulty for these providers to conform but also recognizing the promise of a more integrated student eco-system. As he explains,

> And I get that, because ideally, if it was one tool that did everything, then you'd be in great shape, and the student wouldn't have this jarring experience of, "Oh I have to log-in here to do this, but log-in over there to do that." And so now you're starting to see some of those barriers come down a little bit, and the technologies are catching up, and it's like, oh, okay, you want your admission reps to be able to communicate with your advisors, and you want your advisors to be able to communicate with financial aid, all right.

This study found that understanding the journey of the student and storytelling is an effective way to communicate the journey of a student and gain approval on key initiatives. As Bruce stated, "you've gotta get out of your own lens. You've gotta get out of your own tunnel vision, soda straw, and really flip it, and look at things through the student lens." He mentions the importance of understanding the complete journey a student facilitates through. Bruce further explains,

> That's understanding where you've got inputs from the voice of customer, right. And they talk a lot about voice of customer, and how that ties into this journey mapping, and understanding student sentiment along those journeys, too.
>
> Are they happy with this process? Are they frustrated here? Are they anxious here? And they've got a lot of great organizations, again, not really in higher ed, but in other spaces where they're doing these exercises where they're looking at all their customers and breaking them down into different personas, different kinds of customers that might be

> coming to them with different needs, different values, different concerns that they have, different obstacles that they need to overcome, and then they build out these very personalized journeys for these customers based on what you learn about them up front, and based on the persona that they're coming in with. And that feels much more personal to the customer, and it can help you get them to the finish line in much better ways, right, because now you're able to meet them where they're at.

Both Abigail and Molly spoke about the "power of the student voice in getting faculty to really change their teaching". As Abigail states "I just think that, you know, the way to be on top of student-centric programming is listening to what the students are saying." Molly passionately describes the power of the student voice goes on to say:

> I think that's the time when I probably talked to people about the importance of student voice the most, because those stories were so, so powerful and they got everyone's attention. In fact, we're continuing to run with that tool more formally now as a priority project for the college.

Molly's passion for capturing this data is evident as she explained the purpose of a tool her team uses to capture student stories. This tool, a "culture scanning tool" was described as a little "weird" as it goes against the conventional research methods found in qualitative data gathering. As she explains,

> It's designed in complexity science and so it's a little weird, but it's like all the water cooler stories that you'd hear people talking about. It's a continuous feedback and continuous improvement cycle. But it starts first with students identifying their greatest

> needs, not us assuming what those are, or even assuming what the solution is. I think it's also a case of trying to go deeper into the why of something.

As Molly described, this tools usage is most beneficial when it is leveraged to identify a student's greatest needs. Additionally, Molly recognizes the importance of understanding the diverse perspectives of the students served.

> Our way of understanding that from a student perspective is to gather as many diverse voices as possible. Small sample, not a huge sample. But we want to understand the experience for athletes, versus the experience for LGBTQ, versus the experience for transfer students. The experience for first gen, the experience for our Prestigious University scholars. All these are different.

Molly conducts focuses groups to gain these perspectives, identify emerging themes, and then design three or four pilot programs to address those needs. As she explains:

> And so we interviewed ... the way I've done it is I've done a series of focus groups where I bring in that diverse group and we talk through how they experienced it the first time, how they got around things, like, "Tell us the positive and negative, what you experienced and tell us how you really make decisions." And then from all that data, we would then identify the themes that we saw emerge as the greatest pain points for students as part of that experience, and then identify three or four experiments we can run that would address that.

Molly's process provides a framework that informs others of the voice of the voice of the student in a step-by-step approach designed to elicit feedback and inclusion within other

stakeholders. As we know from this statement, Molly is interested in understanding the greatest student pain points. Molly describes an example on how this process unfolded as the team was examining a student's experience with a new registration process. As described by Molly:

> An example of that would be our students really struggle with our web tree registrations. When they're registering for classes we have a very ridiculously complex homegrown solution for how you register as a first year student. Actually for everybody. And the crux of the problem is not the tool and it was not the instructions. It was students needed to be able to speak to a human before they got here, to really understand what they're supposed to do as a first year student to get the most out of that experience. And that's where we ended up. But we wouldn't have gotten there if they hadn't sourced the problem first and we hadn't gone deeper on the five whys as to what the problem really was.

Patricia also understands the importance of the user's journey. Patricia and her team leverage the journey mapping process as a way to gain a visible illustration of a student's journey.

> Just sort of starting by asking people where pain points are, and then say, "Well, let's walk through what is the user experience at this? Where do they go from start to end? What are those paths, and how can we think about that experience?" We do a lot of ... one project we're working on right now where there's a lot of ... this room where they've got the whole journey mapped out, and then they stick post-it's with smiley, or frowny faces, or angry faces to talk about how that point makes them feel. Hey, it works.

Patricia's statement describes the illustrative process of journey mapping. Patricia's team use of "smiles" and "frowny faces" elicits images of a team describing the student experience in a fun and less formal environment. Engaging in identify the process is important for Patricia.

Molly also indicated the importance of engagement and understanding the importance of the student's story. As Molly identified these stories and presented them to faculty, she felt that was the time they were most engaged with understanding this importance. As she explains,

> I think that's the time when I probably talked to people about the importance of student voice the most, because those stories were so, so powerful and they got everyone's attention. In fact, we're continuing to run with that tool more formally now as a priority project for the college. I think at the point at which I got a lot of people to listen to the potential power of student stories, being able to make them more than anecdote because of that tool and that system. And overwhelmingly where they receive support from, it hit on faculty and faculty relationships with students, highly, highly positive across the board.

Molly identified a change within the group and related that change to the ability for faculty members to hear student concerns.

Bruce also articulated the importance of stepping outside one's own perspective to develop an understanding of the student's voice. Bruce mentions the need to understand the student's journey from both a "micro" level and a "macro" level. As he explains,

> You need to be able to do this journey mapping at the macro level and at the micro level. Then you gain a whole new appreciation for what it is that they're going through, and you realize, "Oh my God, we really did just put eight different checklists in front of our

> students, and we really did just tell them to look at 12 different calendars to figure out what's going on campus next week, right.

As Bruce discussed the importance of a more integrated alignment of the student's journey, Abigail also suggests her role and need to bring together consistency around the student experience and journey. As she mentions, "I realized not only did I need to bring some consistency from a student experience across the school, and we needed to agree on some ways to do things, and to organize things, and some policies." Both Bruce and Abigail experienced a need to take this work on themselves to better serve students.

Facing Barriers and Challenges

All four participants shared experiences where they needed to overcome their own viewpoint of being student-centric to conform with other. These experiences can be seen through the emergence of subordinate themes that centered on being frustrated with the status quo of university systems and the lack of decision-making information. Participants also shared experiences they leveraged to overcome some of the challenges they faced.

Frustration with the Status Quo

Participants frustration with the status quo revealed the belief that not everyone thinks of the student journey as an individual and holistic experience. Patricia faced a situation where a faculty member was fired for extending an assignment deadline for a student delayed by a public safety work issue. The program chair disciplined the professor over the extension he provided to the student. As Patricia passionately explained:

> Insanity, right. I mean, just insanity. So the faculty member, very rightly, filed a grievance, it came to me, I saw the issue, and was like, "Of course he did the right thing." Even if he ended up being late grading that student, I would have supported it.

> Ultimately, not only did I overturn the program chair's decision, the program chair is now being performance managed because that's insanity, right. It was completely inappropriate, it wasn't student-centric, it overstepped what I felt was clear the faculty member absolutely had that right to do it.

This example display's Patricia frustration with lack of empathy displayed by University administrators. Another example shared by Patricia looks at how a faculty member's lack of understanding for the relevancy of a required course subject further frustrated Patricia. In asking the faculty member the reasoning why a student needs to take math, the faculty member replied, "because it's required." While that fact true, Patricia found the response "useless" and was discouraged by the faculty member's response. She goes on to explain:

> How do you think, math professor, that they're gonna use the math in this major?" Crickets. The math faculty didn't know because they were all math majors, who had gotten Ph.D.'s in mathematics. They hadn't ever had to sorta really think about the application of their discipline in other areas.

Although Patricia displayed a significant amount of empathy and identified the student journey as it related to the elimination of text book purchases, she faced resistance from the faculty that felt they could not teach without a copy of the text. As Patricia explains,

> And I remember having a conversation with a faculty member in particular, and he said, "If I don't have a textbook, how do I know what to teach?" And I said to him, I said, I think his name was Phillip, I was like, "Okay, Phillip, I hear you, but," I said, "I'm surprised you feel that way." I said, "You have a Ph.D. in this topic. You've been teaching this topic for years. Why do you think McGraw Hill is more qualified to tell you

> how to teach this topic than you are?" I said, "I'm surprised that you're outsourcing your brain like that." Kara: And he was really taken aback. I mean, he was offended, quite frankly. His first reaction was to be offended. And I said, "Look, I'm not trying to offend you." I said, "I'm sort of floored that you think that you can't teach without a textbook. And it's not that you don't have resources, there are other learning resources. It's not that you're having to get up and now lecture the entire textbook." So some of it was really checking people's assumptions about what they really were changing from. And I think once he clicked like, "Well you're right, McGraw Hill shouldn't be telling me what to do," then it shifted a bit, the dialogue.

As Patricia made the case directly, a positive conversation between Patricia and the faculty member ensued. Patricia was able to redirect, but the first reaction from the faculty member was “How am I going to teach this class without a textbook”. This powerful story exhibits the teacher’s norms that exist as it pertains to educational delivery.

Molly shared a similar challenge as it related to a learning classroom design project. Molly led a project that redesigned certain learning classrooms. When feedback of this setup emerged, it was not positive. Students said, “We didn't see any difference between a regular classroom and this classroom." Students did not feel engaged. Molly identified the root cause of this being that the faculty member neglected to change their teaching pedagogy. Molly shared the reaction of faculty members when faced with unfavorable feedback. She explains:

> The way we were approaching that is we're basically implying that there's something wrong with the way you teach. So you need to teach better, be more inclusive. What faculty were hearing was, "I'm not doing well enough. I'm doing something wrong. I have to do better." It's a bit demoralizing.

Patricia described a challenge of working and engaging within a higher education "gatekeeper" mentality. At a conference, she met a department chairman that required faculty members to submit final grades to him for review. She was disgusted by the "bell curve" this department chair utilized and the self-promotion of the lowest GPA in Canada. She explains,

> I am proud to say that we have the lowest GPA in Canada." Why are you proud of that? That's crazy, right. That's certainly not a mastery based model of learning, right. It's not a competency-based model of learning, it's not outcomes driven, it's applying this bizarre 1940's, I am a gate, and you won't get past this gate.

Admittedly, she discussed her frustration with this attitude. She feels that it is the "opposite of student-centric." She continues:

> I still think that we have some relics of a gatekeeper mentality. I have the hardest time quite frankly engaging with people with that mentality... I think I have the strongest challenge working with that kind of mentality, because I think it is the opposite of student-centric.

The gatekeeper mentality discussed by Patricia suggests perceived a systematic issue that grades are awarded based on maintain a statistic and not what the student earns. Additionally, this example, which might be an extreme edge case, also exposes an actor that, perceivably, is not part of the overall grading process.

Patricia shares another story that relates to policies and procedures and the suggestion that a consistency around the location of these documents are not student-centric. As she explains:

> What I was finding is each silo had its own policies for students, like around late grade, late submission, they had different formats for their rubrics, they had different templates that they used to organize the online classroom space, and they were not thinking about the student experience, because ultimately, as you know, especially in undergraduate school, students aren't taking classes from one area. You've got your gen eds, you've got elective courses, you've got your major courses, if you've got a minor, it might be something else.

The example of policies and procedures not being aligned led Patricia to the realization that organizational silos within her institution need to improve to reflect the different paths a student takes within higher education. As she explains:

> I realized not only did I need to bring some consistency from a student experience across the school, and we needed to agree on some ways to do things, and to organize things, and some policies.

Bruce also references the inward facing priorities of departments that make up the higher education eco-system. As he explains:

> And I would say that across all of higher ed. I just don't think we're quite there yet. We're still very internally focused. What does my department need? What is this business process? How do I get my SLA's in line, right? How do I get efficiencies and effectiveness out of process changes, right?

Bruce's frustration with organizational silos emerge when he speaks about different departments attempting to solve a student problem that only effects their perspective. Bruce

indicates that while higher education is really good at explaining processes and handoffs, what higher education lacks is “not mapping out specific student journey in a way that shows that we’re demonstrating a much higher level of empathy for a student.” He further explains:

> And the challenges that I think I've seen the most in all of these projects, are that people are very, and it's not their fault, they have a tendency to be very siloed in their thinking. We have a lot of people who, "Hey, I'm financial aid, I have this problem in financial aid, and I have this technology solution that's going to fix this problem in financial aid, and bam, we're good." And then you have the learning management team doing the same thing. And you got the people building the student portal doing the same thing. And the people in advising doing the same thing. And all these people are standing up all these little technologies all over the place, but they're doing it in a silo, right.

Through these conversations, Bruce indicates that educational technologies that are emerging are fixing siloed department problems and not problems faced by the overall student experience eco-system. Bruce provided an example of a student seeking help from a University call center associate.

> The student will call in and say, "Hey, somebody just called me, they're yelling at me about missing a deadline. I don't understand why I missed a deadline, I was looking at this checklist. I thought I did everything." And we say, "Oh silly student, you were looking at your wellness checklist, we wanted you to look at your orientation checklist." And the student was like, "Okay. I guess. How many checklists do I have?"

Bruce identifies other system siloed experiences, which include different experiences within the learning management system, financial aid management system, and student portal.

Each of these ask for a different personalization points and other information requiring the student to submit the same or similar information in different administrative systems. As Bruce explains:

> When students log-in to our learning management system, we give them a check list of things that they have to do that week. When students log-in to Campus Logic, our financial aid verification system, they have a checklist of documents that they need to provide to us. When students petition to graduate, we send them a checklist of things they have to do to do all these things. When students go through an orientation, right, campus students and orientation, they've got a checklist of stuff that they need to do to be able to move into that dorm, and they've got this wellness checklist of all these shots, and immunizations, and physicals, and all these other medical documents they've gotta get in.

Bruce demonstrates a heightened level of empathy through his recognition of these additional and, at times, repetitive steps. As he further explains:

> Every time we stand up a new technology solution around here, I cringe a little bit because we've got a new profile, right. Every time you log-in to a new system, you get that little avatar at the top right corner, and it says, "Hey, upload a picture here to make it more personal." So now when students wanna get into our systems, they log-in to the LMS, and they have to upload a picture, and they log-in to the student portal, and we make them upload another picture, and we make them log-in to this wellness system, and they have to upload another picture. None of these systems talk to each other. If we were to take a step back and think about things at an ecosystem level, we would realize the

> pain that we're actually putting our students through, and we're doing it because of the soda straw phenomenon.

In advocating for student eco-system thinking, Bruce identifies an opportunity for others to "put themselves in the seat of the student." He does admit the difficulty and complexity of governing these decisions. Bruce further explains

> Let's find one tool that works for everybody, and the cost savings will be tremendous. Event management, right, calendaring, I mentioned profiles, all of these different things that we do, if we can streamline that and get that better coordinated, then the student has a better experience. They should only have to upload a profile picture once to the ecosystem. It's not where we're at.

While ideal, Bruce does take notion that the difficulty of this as each of these systems are designed to meet a siloed objective. Bruce challenged a vendor to develop their product and make it more inclusive. As an example, Bruce shares the following:

> This company built out this incredible tool that gives students a quick and easy to use checklist. It says, "Here are the documents you need. Here's how you submit them." It will send them notifications or updates. It'll send them deadline warnings, right. It does all these amazing things that I would want to use across my entire university, but they limited themselves to financial aid. And they actually kinda put a stake in the ground, and said, "No, this is financial aid solution. That's all this does." All right, well why can't I use that checklist for other things, right? Why I can't use that for other parts of the student experience? Why is this just limited to financial aid?

Even though these technologies are still limited on how they support the holistic student's journey, Bruce is seeing student-centric technologies evolve. As Bruce experienced, new providers are prioritizing this journey and listening to the need to think less in a silo and more holistically. As Bruce explained this evolution, he is encouraged by what he is seeing:

> As you watch these tools evolve over time, it's sort of been fascinating to watch what they do. Learning management systems are now doing really fun things where they're starting to bake in things like notifications, and email alerts, and profiles, and the ability to connect with other students outside of the classroom, right. It's like, hang on a minute, you're doing that in the learning management system? Okay, that's kind of interesting.

Bruce experienced barriers caused by technological systems not designed to meet the needs of the student journey. That challenges student-centric administrators as they need to design solutions within a system designed to support one aspect of the student's journey.

Both Molly and Abigail discussed the needed to ensure organizational buy-in when developing student-centric initiatives. It is challenging to develop student-centric initiatives without clear and committed organizational buy-in. As Molly posits that "institutional buy-in is needed at the top and without that commitment from senior leaders, initiatives like this never get off the ground." Abigail discusses frustrations with not having support of initiatives. As she explains:

> It is hard when you don't have someone to back you. I've been in that situation where I haven't been backed, and I still do it, and I do it for the students, right? Kids will come and ask for it, and the students will back each other up to have it done.

Abigail developed a peer-mentoring program that was not initially back by administrators. This peer-mentoring program was proposed by students to support peers that did not meet academic standards. Abigail had to advocate heavily for this program. As Abigail explains "When the students want it bad enough, and they're willing to do the work for it, then I'm more than willing to do it without, or with backing." This approach demonstrates Abigail's willingness to be a champion for student initiatives that are right, purposeful, and can make an impact.

Molly also identified a challenge with identifying a project that is too big to tackle can lead to frustration and missed opportunity for a future buy-in. When she approaches new student-centric-initiatives, she ensures that the problem that needs to be solved is grounded in data and manageable to pilot. She is careful to not have this problem be too large or too assume the solution of the problem before any research is conducted. As she explains:

> I think trying to do too big of a project before you've tested your assumptions in small ways is another huge obstacle. And then I think having institutional buy in at the top. Yeah. I think the challenges that surface the most are not having data behind your assumption. If you're assuming a solution before you've either done the research, done the user experience discovery, you're going to get people digging in because you don't have any evidence to counter the disagreements with your assumption

Abigail faced a situation where an issue that anodically was large, never had clear data points to make a case for reform. As a financial aid administrator, Abigail worked with students on Satisfactory Academic Progress suspension. It was through this experience that she wanted to gain a clearer perspective on the number of students existed that were at risk of being placed on SAP suspension. These datasets did not exist, and Abigail faced some barriers to attain that information. Abigail explains:

> Well, I knew that it was data that they wouldn't ... One, it's the kind of data they don't want anybody to know about. You don't want lots of people to know how many students are 2.0 or below, or not making satisfactory academic progress. They were like, "Well, how do we get the students?" Then, I reached out to Dr. Erin Voight, who is the director of the institutional research in my school. She was like, "Abigail, I can't do that. You've got to ask the president for that." I was like, "Okay," and so I made an appointment with the president.

All participants spoke to the need of higher education to overcome accessibility challenges to meet diverse student needs. Patricia shared that access to technology is a challenge designing student-centric experiences. As she discusses:

> Well, I think sometimes there's technology challenges. And by technology challenges I mean, it's really important that you meet the needs of all students, and all students have...students aren't all the same. Some don't have access to broadband, right. Some have a disability that causes an access issue, and so I think one of the challenges in student-centric design is sometimes the thing that you wanna do the most because it's the coolest, and it's the most interesting, actually cuts the access of all of your students, and just by that, it's no longer student-centric.

Patricia also shared her belief that higher education is very slow to adopt on the "accessibility uptick." With her experience, she often challenges educational technology company CEO's and leaders on the accessibility of their product. If the product is not accessible, it is not student-centric. In explaining this, she shares:

> I think when we think about student-centric design, we need to think about the broad range of students that we have. And it's not really designing to the lowest common denominator, and I don't mean that at all in a pejorative way, but it's not that, "Well some people don't have broadband, so we have to just design for dial-up," right. It's not to that extent, but I do think we have to be aware that we have to create experiences that are student-centric for the vast majority of students. And sometimes we can get a little ahead of our skis in designing experiences that don't particularly work, or work well for students.

Though Patricia recognized the difficulties with designing systems and processes for unique situations, she does believe that student-centric design should be incorporated for the vast majority of students and demonstrates a need to ensure that systems are designed with accessibility in mind. Abigail also shared her experiences working within an institution works with diverse student populations

> We have a very young, 17 to 22 of the normal set of population. We have a very older group population that goes from, I want to say, mid-40s into early-60s, so you have a large group of those students. Intermingling, and among all of the students you have a very high population of foreign and undocumented. Understanding each of those populations, and then really being able to understand that they need a particular service that can help them along their academic journeys, you have to be able to provide.

With Abigail understanding the diverse needs of a student, she is identifying a programming challenge in providing relevant and student-centric solutions. Abigail also identified perceptions that might impact student services provided by the institution. For

example, as she discussed a perception shared by some people that an "older student has it all under control." She posits that she works with many older students that have never written an email or lack the appropriate level of technological acumen to effectively communicate within a higher education environment. This level of disconnection requires Abigail to think how to best support these student's journey.

Overcoming Obstacles

All participants recognized the importance of eliciting support and buy-in in designing student-centric initiatives. Each participant shared similar experiences as the need to demonstrate the problem and elicit support and buy-in. For Molly, she knew she needed to collect and solicit the user stories prior to participants convening. As she explains:

> So that new student onboarding experience, that one is truly the most cross functional one I've worked on. And the way I did that was to ... so I had the student life, I had admissions, communications, athletics, the registrar and parent and family relations ... excuse me ... at the table. But I did the heavy lifting of collecting the data first. I ran the focus groups with students, I did the fanatic analysis, and the first time I brought that group together, I walked them through the data results. Here we have a team of people that's willing to fix this and have bought into it and they're going to have additional people on their team to help drive it forward.

The notion that Molly did the heavy lifting of collecting the data by running focus groups allowed for the data to be displayed in less than the informal antidotes each group member heard informally. Molly explains the importance of having these small datasets combined into an actionable and digestible data source:

> And that was I think, the right approach because every single one of them was hearing stuff they'd heard before, but having it more validated in the form of a traditional focus group was good, was valuable for them. We did it that way. I just walked them through the data… From once we picked the themes, then we went through an ideation session for, what are some solutions we can try? And that's again, where we sourced individually and collectively voted…. It went really well. The key to it is everybody's voice being heard, everyone feeling like they've got actionable data to work from, which we did all that before we brought everybody together, and then feeling like they have the resources and support of facilitators to get a design in place and to help lead an implementation team through a process. It's all about helping people take ideas to action.

The idea that "everybody's voice being heard" and the availability of "actionable data to work from" is evident in Molly's description of the problem identification process. Molly further discusses the relationship between "anecdotes" and actionable data that can be acted upon. She states:

> And what was great about this was they were a collection of what ... I think our student life people would say are just anecdotes they've heard a lot, but never really felt they could act on. But we were able to bring that into a process that made it a data point and a collection of data points into clusters with shared themes.

Bruce also discusses the time he invested to advocate for the initiative. He explains that the work he put into the initiative was well worth the effort and at the end of the day, the "right thing to do."

> Yeah, it took a little bit of work working with those different teams to get that buy-in, but I think by balancing advocacy and inquiry, right, in those discussions, we were able to get to a point of much greater understanding about how to make this the best possible solution, because had we gone with our original ideas, it wouldn't have been nearly as cool as it was once we got that feedback from folks.

Early in her career, Patricia received feedback from a mentor that changed her approach to projects and initiatives. Patricia explained a situation where she was readier for change than those that she was leading. As she recalls:

> I actually had, my boss who was a woman who I really, really admired and respected, and she came to me and she said, "People are starting to not wanna work with you. When you have a bone, you really drive it." And she's like, "On the one hand it's good because your intuition is usually really good, and what you're trying to accomplish is really good, but you like change more than most other people, you like to move faster than most other people, and you have to acknowledge that part of your role as a leader is that you have to help bring people along. It may still be at the same pace, but you need to at least acknowledge that they do have fear and anxiety about this, and some of it might be really well-founded.

This feedback changed Patricia's "interpersonal style". Today, Patricia believes she has an environment and framework that incorporates all vantage points. She explains:

> I think I really, really changed my interpersonal style a lot based on that feedback. I made sure I listed more, I asked more questions. I unpacked my own thought process around

> things. I've made sure that I have a team that will sort of go, "Timeout. Patricia, we need to talk more about this," and that they feel like they can do that.

As Patricia changed her approach from “brute force” and “do what I say” to collaborative and inclusive and “change when ready”, Patricia has found colleagues to be more collaborative. She feels that this environment has resulted in greater adoption of student-centric initiatives.

Abigail recognizes the importance of building relationships with decision-makers. She needed to solicit approval with developing a Sataifactory Academic Progress mitigation program. This type of approval required presidential level approval. In soliciting buy-in, Abigail told the stories of students that did not meet SAP, the number of students this was, and the proposed plan.

> I'm sitting there, and I'm explaining to her, "I've been in financial aid this long, and this is what's happened. We have to start doing better. There is nothing in place when a student falls into academic probation other than giving them a part time schedule to try and make that up," right?

The president listened to Abigail’s sincerity and agreed to back the program. As Abigail explained, “That's the kind of backing you need, but you have to be the person that is sincere about it. She understood my sincerity in trying to help the students, and really trying to help this population.”

Bruce shared a story where his CEO was not initially on-board with a student-centric initiative designed to create greater community within an online community. Initially, the CEO did not see the value of the project to the current student. He felt that online learners only wanted to engage in academic work. He believed that this particular learning culture did not

want to engage in any community building activities. Bruce had to persist to get his project off the ground. He explains:

> Our CEO at the time was really adamant that this was a BS project. He thought that students who were online students are adult learners, who wanna get in and out as fast as possible, they don't want any of those connections, they don't want any of those ties, they just wanna get the job done, and get the hell out of here.

Bruce eventually was provided approval to build this online community. What he was finding was that students were engaging and building communities. As Bruce shared:

> When we launched this platform, and we were able to start getting some students in there, what he quickly found was that the students were coming through the admission funnel, students who hadn't really started classes yet, were starting to engage in this community, and starting to share their fears and apprehensions about going to back to school.

Bruce felt a sense of pride and accomplishment while also learning a few lessons on being persistent in the face of extreme adversity and initial disapproval. Bruce persevered and pushed the initiative forward.

Student-Centric Design Collaboration

The student-centric design collaboration superordinate theme was present in all participant responses. This theme was broken down into two sub-themes that included the need to elicit support and buy-in and cross-functional collaboration. The following section provides an analysis of these findings.

Cross-functional Collaboration

The importance of cross-functional collaboration also emerged as an important theme that each participant recognized. Molly advocates that having this data is only effective if those that understand the student journey are available to act. Describing the importance in having the appropriate team available, Molly explains:

> So those who understand advising, understand not necessarily the tool, but understand all of what the students go through when they're registering for classes. Your registrar, your point person in athletics, your point person in admissions, and so on. Having that diverse group of people who all touch the student experience in some way during that part of the process is important. It gives you multiple perspectives into what the real underlying root problem might be.

As decisions are being made as to what initiatives will affect the student experience, facilitated design and ideation sessions occur that lead to "consensus". In doing this, she challenges the team with probing questions designed to engage thoughtful and actionable discussions that lead to the answer of "what is the end goal for the student." As Molly explains:

> And then from there, you take people through a facilitated design session that gets all of the ideas out. So everyone is able to get ... individually, you get all your ideas out. As a group, you cluster those together. You then vote on what you think is most important. You've got consensus at that point. Then you've got really general excitement about it.

Challenged by the notion that students within a fire science degree program did not know why math was required and faculty members could only answer that it was required, Patricia collaborated with faculty members to incorporate a final project that relates math to career goals. As she explained this project:

> So I realized that part of what we needed to do was train our faculty. And, to that, what we ended up coming up with is we put a final project in this math class, we did some other adaptive learning stuff, that I think was also important, but the project was really cool. In the final project, students had to think about their chosen career or profession, they had to interview a professional in that career to learn how math was used in that career, at least one example, and then they had to teach the class that math concept, basically.

Patricia needed to "train" faculty to understand the relationship between the math requirement and career relevance. The project's outcome was a result of faculty collaboration led by Patricia. Patricia shared a key result:

> We had a study who was a fire science, doing fire science, and he did how you calculate water pressure in a fire hose, and if you do that calculation wrong, and your fire's on the third floor, your water's only gonna hit the second floor, and the buildings gonna burn down. That's a pretty good application of math.

She continues:

> What happened is, imagine a math faculty members got a class of 25 students, a group of 25 students goes through that assignment, now all of a sudden the faculty member has 25 applications in his head, or her head, so then the next time they have a fire sciences student who says, "Why am I gonna need math?" They can say, "So the building doesn't burn down," and explain why, right.

While explaining that math is required “So the building doesn’t burn down” is an effective way to communicate the importance of math in a fire science degree, the results of this work illustrate the collective power of collaboration. As Patricia communicates the success rate of this initiative:

> And we saw the success rate of that class after that revision, go from again, I think we had about, it was in the 60% that were failing it that jumped to an 85% pass rate. And I think it's because I think that was student-centric design, because it said to students, it didn't actually change what they had to learn, but what it say, "We're gonna help you understand how this applies, and then we're gonna make you teach back.

The successful collaboration and student-centric approach by faculty resulted in powerful results delivered by students. The commitment of Patricia’s team to demonstrate the relationship between a required course and career outcomes was another example of designing a student-centric solution.

Another initiative that required cross-functional collaboration led Bruce to build an online student community. The goals of this project were grounded in student involvement research and reproduced to serve a “more non-traditional student.” As Bruce explains:

> We set out to build our own social media platform to give to students so that they could build those connections, and draw some social affinities, right. Where is it that you're interested? What kinds of things do you want to engage with other students around? The Online Student Connect project was very much focused on social integration, and when we started. To oversimplify the algorithm, its academic integration and social integration that are the biggest impacts on whether or not the student will be successful, and whether

> a student will remain enrolled, right. Academic integration obviously that's student's ability to be successful in the classroom, their level of preparedness coming in. And then the social integration is do they feel that affinity to the university?

To gain acceptance and get launch this project, Bruce had to collaborate with others to find the supporting data related to student melt. As Bruce recalls:

> I knew it was the right thing to do. I was talking to a lot of people in our data team to understand what really is the cost of losing a student versus the impact on lifetime revenue by maintaining and retaining a student, right?

Bruce also sought input from others to ensure that he had "no blind spots." As he explains:

> We needed to bring in folks from academic support services to get all the learning communities built out, to figure out how we can use this tool as a learning platform, not just as a social platform, because you want both that academic integration, and that social integration… That meant that I had to drop my guard, right. Because I'm coming in advocating for this big bang technology that I wanna implement, and I had to check that and say, "Wait a minute, where are my blind spots. Poke holes in this idea. Make it better with me."

Bruce's approach to this initiative was similar to Patricia. They both sought to design a project that met distinct student needs. Patricia was a bit more collaborative up front while Bruce allowed for an idea to fully form prior to engaging others. Both recognized the importance of engaging cross-functional teams to ensure that these initiatives meet student needs.

In her role, Abigail has the opportunity to build programs and initiatives at request. Frequently, she entertains ideas and suggestions from existing relationships with other staff members. As Abigail explains:

> When I consider my programming, and designing student-centric solutions, I have processed what comes in from the students, which is a lot. They tend to send it to me. Or, advisors in the different student pockets, they'll reach out to me from student success, or the ASAP program. They have advisors that'll go, "Oh, they need to reach out to Abigail and ask her about this, because all of my students are asking about this." It's about building the relationships with those type of staff members.

Abigail also incorporates initiatives proposed by students. She really likes this part of her job as it places the student in a leadership position. As she explains:

> I had one student had a 64-year-old man that didn't know how to draft an email. Another student, she's very artistic, so she drew these graphs on how to write an email. How to login to your email, and how to write an email, and she helped him to actually create his email. He never had gone into this student email account, never got anything ... You know, scholarships, events happening, but he was able to do that. That they took the initiative, it created leaders within leaders.

Patricia also took this approach when designing a peer-mentor program for students that lost eligibility for financial aid. As she explains, groups of students were seeing their friends lose financial aid eligibility and came up with a peer mentor program that encouraged higher grade and participation from those students most at risk. When Abigail sees a student putting in the effort and determination, she is doing what she can to support that student. As she describes

“When the students want it bad enough, and they're willing to do the work for it, then I'm more than willing to do it without, or with backing.”

Patricia also described the importance of having everyone aligned. In supporting teams that span worldwide, Patricia forces teams to build relationships. Patricia was charged with having to conform to consistent student-centric standards, as she describes:

> But also that it was really critical that I help those Vice Dean's get to know each other, and talk more. I had been, previously part of my role, before I came into this role, the role came with me, we have a really large overseas presence. It's affiliated with U.S. Military, but I oversee our overseas academic affairs, as well. I have a team in Europe, I have a team in Asia, and lots of faculty over there as well, and so I was very comfortable with sort of the overseas team, I also realized that the overseas teams weren't talking to the stateside teams and vice versa.

She continues

> I started making them, a) meet with each other, build relationships, flew the overseas team over here. We didn't do trust falls, but we got to know each other on a personal level. I think that's really important. And then I started tasking Vice Dean's with projects that spanned school, right. That they weren't just doing a project that was just with their unit, but they had to work across the school, and so I think in many of those, and I do try to step aside, and say, "Look, this is part of your role as a leader is to be thinking about work as part of the school," and I think that's helped. I now catch them having lunch together, right. How novel, right. And that never happened before, they just didn't talk to each other.

Bruce further talks about the need to bring a governance layer around the student ecosystem and advocating for the need to have a student experience governance layer sitting on top of systems governance. As he explains:

> I think we actually need to stop talking about systems thinking and talk about ecosystems thinking. Because what I see happening is a lot of different departments all trying to solve the same problems, and actually developing redundant solutions across your organization, when if we had not been looking at this problem through a soda straw, and if we had taken a step back and looked at the ecosystem, we would have seen that we're all trying to solve the same thing, right. That's why even that requirements gathering conversation. You gotta get the information from all the right stakeholders.

Translating Experiences for Real-World Applicability

Two participants indicated the need to incorporate alumni feedback when designing student-centric solutions. Molly understands the importance of designing solutions that meet the needs of a student. As she explains, she ensures that both students and recent graduates are part of that design process:

> As we think about institutional change and testing big ideas that would reimagine the institutional, reimagine the liberal arts for digital age, if we're not designing it for the people we're serving ... and I think those people in higher ed are not just students, but recent alumni, alumni that are I think, 10 years out or less, then we're really just throwing a dart and hoping to hit the mark.

Molly uses recent graduate experience and stories to design student-centric initiatives. As she explains,

> We actually carved out a position called ... it's a fellowship position. We hire a recent graduate for one to two years. It's a gap year experience for them, but for us it really helps us embed the student experience and student perspective into the instructional design work that we do.

Molly also leverages recent graduate experiences as a "translation" solution between current students and recent graduates that can share stories. She has a strong desire and respect for these experiences. As she shared:

> because they're here in real time, they can see things that alumni can't. But those five year out alumni are just gold. And they want to engage ... it's another sweet spot because they can't ... and many of them don't have the income yet to give back to the college, but they will give their time and they will give their expertise and they will give their mentoring and advice and it's a way for them to engage that doesn't mean you have to have $1 million. And they help our current students because our current students need to be able to network into spaces. They've struggled through those spaces. They can tap into those networks sooner.

Molly continues by discussing the role an alumnus can take as they translate experience with students:

> And even stronger is alumni can help with the translation piece by really being able to show the evidence of that means, having some experiential learning opportunities that let you show potential employers where you're capable of doing much sooner. And that's what we lack. But our alumni can make the case for that very clearly.

Molly also believes of the importance of having students and alumni be active in the development of student-centric programs. As she explains that students and alumni, "need to be

part of that. They need to be part of a feedback loop that goes longitudinally. And they need to be part of ideation, experimentation, and assessment." This understanding was further demonstrated by a project driven by Molly. As Molly describes,

> Students were really pushing back on surveys and studies and things that they never saw the data results for, that they'd never really noticed that change was happening. They were basically pushing back and saying, "We're not going to give you any more data until we see that something's changing in and you let us know what you're learning." So we opened up the process and said, "If you give us your story and signify it, we promise to give you a summary of the data at the end of the semester and we will give you an opportunity to act on what you've learned."

Abigail also leverages alumni experiences as a translation for students. As she explains:

> Well, I can say with regard to the freshman convocation, it was not always an alumni. I actually had to force that idea, that concept, the bringing back an alumni. They would always pay a speaker, like, this stupid-crazy fee. It's like, "Oh, we're going to pay this guy $3,500. He's going to come in, and he's going to talk about how he's all in. He gives out these chips that say, you're all in."
>
> "I have alumni's that are medical doctors in Mount Sinai." A student can sit there and go, "I'm never going to be a doctor." Not a dime did he pay for his education, so you have to show them the possibilities of everything that they can be. They can be a school teacher, they can be a professor in a college, or they can be a doctor. Or, guess what, you want to come in, do your nursing degree, finish it off at Lehman College and just make sure you have your BSN and you got your credential, and you just want to be a nurse, that's fine too.

Conclusion

As a result of the data analysis, the researcher uncovered several key findings for discussion and consideration. First, higher education administrators relentlessly advocate for the needs of the students, face challenges due to organizational cultural barriers, and display deep amounts of care, compassion, and empathy toward the unique student journey, and design-holistic experiences that influence the student's overall post-secondary experience.

The purpose of this qualitative study was to understand the experiences shared by higher education administrators as they lead a student-centric project. For purposes of this study, the term student-centric refers to the empathy displayed and the design of solutions that meet a student's needs. In this chapter, the researcher gave voice to each participant as an individual as to their student-centric development experiences. As this chapter found, each of the four participants displayed great empathy toward unique student experiences, were vocal and passionate in areas they saw were barriers and challenges to deigning student-centric solutions, and provided deep explanations related to collaboration. The following chapter discusses the findings drawn from the themes, their respective implications, and the position of these results in both academic and practice setting.

Chapter Five: Discussion and Implications

The purpose of this study is to understand the unique experiences that mid-level higher education administrators possess as they lead the student-centric project. Knowledge gained from this study is expected to inform higher education professionals on the characteristics and experiences of those that lead student-centric initiatives. As such, the content and structure of this study were created to best answer the research question as well as provide a detailed analysis of the data collected from which the findings could be drawn.

Data analysis and findings from this study were interpreted through the design thinking theoretical framework (Meinel & Leifer, 2011). The use of design thinking as a theoretical framework for this study allowed the researcher to connect the experiences detailed by the participants as they led student-centric initiatives. Similar to the human-centered design used in customer facing experience industries, student-centered design prioritizes the needs of students through engagement within the higher education eco-system. Through a qualitative Interpretative Phenomenological Analysis (IPA) approach, this study exampled the experiences of mid-level higher education administrators designing student-centric solutions. Four participants participated in a semi-structured interview designed to gain a deep understanding of their experiences leading student-centric initiatives. The central question guiding this study was: *How do mid-level higher education leaders make sense of their experiences leading student-centric projects?* The superordinate themes emerging from this study included 1) Student-centric as a personal mission 2) Facing and overcoming barriers and challenges, and 3) Designers of student-centric initiatives. Within these superordinate themes, sub-themes emerged to further explain the experiences faced by higher education administrators as they lead student-centric initiatives. These subthemes included: (1.1) Developing a student-centric mindset; (1.2)

possessing a sense of purpose (1.3) Developing empathy for the student's journey; (2.1) Frustration with the status quo; (2.2) Overcoming obstacles; (3.1) Cross-functional collaboration, and (3.2) Translating experiences for real-world applicability.

These themes answered the central research question by suggesting that mid-level higher education administrators could be described as seekers, advocators, barrier breakers, translators and cultivators. These themes also addressed the secondary questions of:

- *What approaches do team leaders leverage to engage collaboration among team members?*
- *What challenges do leaders face when designing student-centric solutions?*

This chapter presents three major findings that emerged from the analysis of these themes. These findings are discussed in the context of the current literature and the study's theoretical framework. The chapter concludes with a discussion of the finding's implications for future research and practice on designing student-centric experiences from a leadership perspective.

Discussion on the Findings

Three major findings emerged from the identified superordinate and sub-themes. These findings provide further insight into the experiences of higher education professionals. First, this study found that higher education administrators' possession of strong-sense of empathetic behaviors toward the student journey is influenced by past events and behaviors they experienced. Second, this study found that higher education administrators possess the ability to overcome challenges by using a combination of qualitative story-telling data and sense-making to change perspectives. Finally, this study found that higher education administrators

collaboratively seek to develop empathetic solutions that positively influence the holistic student lifelong educational and employability journey.

Student-Centric as a Personal Mission

Each participant experienced a phenomenon early in their professional careers that influenced their approach to designing student-centric initiatives. All participants initially developed this worldview through employment opportunities that required a high-level of meeting customer needs. Participants reflected on these professional experiences positively as they attempted to meet customer needs within the realm of their responsibilities. Participants faced non-student centric experiences as they reflected on their student pathways. Some participants described these systems as displaying a lack of empathy toward the individual navigating their educational journey. Participants felt confused and lost as they described their own higher education journeys.

A few participants described non-student centric experiences they faced early in their higher education careers. When initially confronted with these situations, these participants expressed guilt for the role they played in designing non-student centric experiences. As a Teaching Assistant (TA), Patricia and her colleague shared test questions. Patricia and her colleague taught the same course; however, the shared questions were vastly different. Both Patricia and her colleague realized that neither of their classes would pass the others test. Patricia was astonished and felt a sense of guilt and remarked that this was not student-centric. Though these students were enrolled in the same course, each class had different outcomes based on the exam questions. Neither teaching assistants felt confident that the class they taught would pass the class taught by their colleague. This example demonstrates a situation where the needs

of students were not deeply understood as is required when developing a human-centric organization (Van Den Hemel & Rademakers, 2016).

Developing a Sense of Purpose. This study found that higher education administrators developed a sense of purpose while designing student-centric initiatives. This sense of purpose is demonstrated by participants seeking to understand the difference between student pathways and experiences for diverse student populations. This indicated, for participants in this study, that higher education administrators need to recognize and understand that not all students have the same starting point and that a need exists to develop programs and initiatives that meet the different types of students served by higher education.

These experiences shared by each participant influences how they approach student-centric outcomes. Each participant defined student-centric as meeting the expectations of an individual student pathway. Through these experiences, each participant sought to understand these unique pathways. All participants identified the importance of designing new programs and initiatives with the end-user at the forefront. Designing with the end-user in mind is a central tenet of design thinking (Leidtka, 2014; Tschimmel, 2012).

Multiple students enter higher education opportunities at different starting points. As a purpose-driven student-centric higher education practitioner, administrators need to understand these pathways. For participants in this study, this was exacerbated by the fact that each participant experienced and described situations that influenced their understanding of these multiple pathways. As an example, Abigail developed a scholarship search program for DACA recipients, and Patricia sought to understand the unique experiences of military service members her institution serves. Both cases demonstrated a commitment to recognize the uniqueness of these pathways and a dedication to developing student-centric experiences. Possessing an

understanding of unique situations is well-founded within the design thinking literature (Mellet et al., 2015; Ceviker-cinar et al., 2017). Additionally, possessing this mindset and observing and being close with the students allows the designer to create a sense of deep understanding toward specific student's experience (Tschimmel, 2012).

Developing Empathy for the Student Journey. The participants in this research study detailed their experiences demonstrating empathy. All participants described accounts where they sought to understand the experiences of students overcoming a roadblock or a barrier within their educational journey. Patricia described a user interface issue as it related to a syllabus not being in the same place for each class in an online course. Abigail spoke about the need to understand the support needed for a student to regain financial aid eligibility. Molly described the need for students to understand the value they received from a university education and how they can confidently translate those values. In designing system solutions, Bruce described the importance of understanding the student's experience a person sits "in the student's shoes and really understand what they're going through."

Telling and translating the student's story was evident in all of the participant's experience. Molly describes the "power of the student's voice" and to gather as many "diverse student voices as possible." Molly described her experience use of a third-party qualitative data collection tool to collect and translate the student's experience into actionable insights. The stories told through demonstrating the power of the student's voice were more meaningful and rallied others around the item brought up through this approach. To express empathy toward for the student experience, Bruce identifies the need for administrators leverage different student-centric perspectives such as gaining a deep understanding of the student's journey and develop thinking that is holistic toward the student's pathway.

Patricia described her experiences with a student journey mapping process. Conducted by business analysts under her direction, she described the value of this process as being practical and transformative when identifying each unique step that a specific student-type undertakes within the higher education eco-system.

The superordinate and subthemes described in this section lay credence to the first major finding of this study that suggests that higher education administrators strong-sense of empathetic behaviors toward the student journey are influenced by past events and behaviors they experienced.

Facing and Overcoming Barriers and Challenges

All four participants faced barriers that inhibited their progress with designing and implementing student-centric solutions. The experiences they faced forced them to advocate for students needs and breakdown barriers through communication and emerging data collection methods that allow the student's voice to emerge from the presented data. Participants faced challenges with overcoming the status quo of a higher education environment. They dealt with situations where users were attempting to make sense of changes. They faced challenges with inadequate data needed to make appropriate decisions and successfully advocate for them to be designed initiative. The following section provides further discussion on the challenges faced by participants and reviews key findings and techniques they used to overcome some of these challenges.

Frustration with the Status Quo. Institutions developing student-centric initiatives face internal organizational decisions that affect institutional goals (Kezar, 2011). Participants in this study also found that organizational silos effect efforts to build a student-centric eco-system. Looking at administrative systems, Bruce references the internally focused decision-making

processes that exist with his institution. An example he shared is the concept of one student having multiple online checklists and associated this with the institution not having an appropriate student-centric eco-system to govern decisions made by individual departments. The academic experiences shared by participants reinforces Burke's (2011) understanding that individuals fear change and Kezar's (2018) detailed account of users attempting to make sense of changing situations.

As previously discussed, Patricia introduced an elimination of textbook initiative. Fearing the inability to teach without a physical textbook, the faculty member initially resisted this change. A Patricia described, he was "insulted." Patricia attempted to make sense of this professor's new situation by explaining that the textbook is not a necessity to facilitate and design the course. She went on to identify additional resources to leverage as educational supplements.

Molly faced a similar situation as it relates to changing pedagogy. In leading a classroom redesign project with the intent of making it more situated for project-based learning, faculty members did not change their pedagogy, which led to the students not seeing a positive change and faculty feeling "demoralized." Both these examples relate to Kezar (2018) assertion that those experiencing changing conditions require time to reflect and make sense of how a changing condition affects their overall role. These examples recognized as sense-making situations where both faculty members attempted to make sense of the change that was brought upon them. Kezar (2018) describes sense-making as the ability to change mindsets to alter behaviors and influence outcomes. Both Patricia and Molly needed to explain the reasoning behind the designed change and offer encouragement and assistance during the time of transition, which eventually resulted in adoption.

Patricia experienced two separate situations that demonstrated a non-student-centric mindset in a higher education bureaucracy. Buller (2015) assertion that higher education is a "professional bureaucracy" runs counter to the student-centric experiences that Patricia was attempting to cultivate. First, Patricia was disappointed when a colleague was sharing his experience working with a dean that leveraged a grading scale. Additionally, Patricia faced a situation at her own University where conflicting policies and procedures existed, which created a high level of confusion for students. These organizational silos exist due to the loosely coupled academic structures within higher education (Manning, 201) and both experiences faced by Patricia illustrated a high level of patience needed to build student-centric solutions.

As higher education administrators look for solutions for student success and retaining students through graduation, lack of data availability, accessibility, and literacy is a challenge for higher education institutions (Mandinach, 2012). This study exposed how the unavailability of data caused issues being a challenge that multiple participants needed to overcome. Gorgan (2015) illustrates the lack of a sophisticated data-decision making tool that facilitates decisions within higher education institutions as a risk to understanding problems within higher education institutions. While developing a peer-mentoring program for the at-risk student, Abigail exposed a gap in the availability of the needed data. The institution believed they had this dataset, but did not truly understand the scope of the issue faced by financial aid policies. Abigail sought and advocated for additional approval to access and re-analyze the datasets. Molly also identified how the lack of data behind an assumption is a challenge for advocating for student-centric design projects. To this end, Molly procured a qualitative data assessment tool designed to collect the collected qualitative stories and antidotes shared by members and eventually display this information in a format understood by the college's community.

This study also described the mindfulness and challenges needed to design student-centric initiatives for a diverse student body. Patricia described her experiences in providing comprehensive technology solutions. These descriptions ranged from the lack of broadband internet access for active and deployed military students to education technology vendors not designing solutions that are accessible for all students. Abigail also discussed the diverse age of students her community college serves. The technological acumen of these student ranges from being up with the latest social media communication tools to not understanding how to send an email and communicate electronically within a higher education eco-system. As higher education continues to service multiple populations with various and diverse skill levels, persistent efforts must be initiaited to build and maintain an inclusive environment that transcends traditional higher education experiences demonstrated by a traditional 18-22-year-old college student. These examples demonstrate the difficulty of designing student-centric solutions for institutions seeking to offer programming options for diverse student populations that have differing technology, pedagogical, and support needs. These findings are aligned with the seminal study of Crozier et al. (2008) which describe how diverse experiences impact higher education selection and student attainment.

Overcoming Obstacles. Organizational commitment is needed for any new initiative to be fully adopted and accepted. Multiple power and authority structures that can create barriers and challenges for new initiatives within higher education (Buller, 2015; Kezar, 2011). Participants in this study faced challenges in gaining organizational leadership commitment for student-centric initiatives. Molly needed to go through multiple decision-making bodies to gain acceptance for a student-centric pilot. Abigail experienced a similar approval process when introducing the peer mentoring programming for financial aid suspended students. Both

participants required different information for multiple decision-making bodies, often creating duplicated efforts and exposing organizational conflicts such as initiative ownership and approval. These rigid administrative structures demonstrate the barriers caused by departmental silos (Kezar, 2009). Pucciarelli and Kaplan (2016) recommend that institutions limit these barriers by expanding co-creation activities with collaboration with key stakeholders.

Top-level support and buy-in is a critical requirement for the adoption of student-centric design. Each participant shared experiences related to gaining the appropriate level of support in gaining acceptance of student-centric initiatives. Molly used the student insights and student stories she collected to present actionable datasets to stakeholders. Molly found two instances that assisted in greater buy-in of student-centric initiatives: (1) ensuring that each stakeholder's voice was heard; (2) presenting the qualitative data in a quantifiable way.

Eliciting support through persistence and relationship-building were also important experiences raised by participants. Bruce demonstrated persistence when eliciting support for an online community that supported online students. Abigail attributed the concept of maintaining essential relationships with decision makers to ensure that initiatives receive the needed support and backing. Early in her career, Patricia had a significant change in how she approached those against change initiatives. With support from a mentor, she developed a collaborative skillset that is leveraged to support student-centric initiatives.

The experiences of these participants demonstrate the need to build relationships to elicit the support of stakeholders when designing human-centric solutions. Building these relationships demonstrates empathy for the stakeholder while also contributing to designing solutions that prioritize empathy when designing student solutions (Roberts, Fisher, Trowbridge, Bent, 2016). The superordinate and subthemes described in this section lay credence to the

second major finding of this study that suggests that higher education administrators possess the ability to overcome challenges by using a combination of qualitative story-telling data and sense-making to change existing perspectives of individuals.

Designing Student-Centric Initiatives

Each participant described experiences in designing and leading student-centric initiatives. Through these participants, participants found themselves as collaborators and leaders. Participants also discussed the need to translate alumni and recent graduate experiences to current students. Possessing this level of insight demonstrates the understanding of the importance of the full student journey as they transition from an institutional learner to a lifelong educational consumer.

Cross-Functional Collaboration. The need for cross-functional collaboration was the first sub-theme that emerged from designing student-centric experiences. Cross-functional collaboration refers to the shared responsibility of teams with different functional experiences of enabling a decision or initiative to move forward. As this study demonstrates, the experiences shared by participants illustrates that success for student-centric is a result of strong cross-functional collaborative structures. With engaging in a cross-functional project, participants experience moments of teaching, leading, organizing, and creating positive student outcomes. Bruce also found that through developing an online community, other departments wanted to engage with and provide content for this non-traditional student community. The problem that Bruce was trying to solve centered on the need to build a community presence for non-traditional students. This community was built by a cross-functional team from admissions, financial aid, academics and was designed to add value for students. This experience connects with Melles et

al. (2015) understanding of design thinking's ability to gain a deeper understanding of customer experiences to design and develop new products and services for these groups.

Molly takes users through ideation sessions to ensure that all ideas are generated and discussed. Ideation refers to the generating and formulating of ideas and concepts and differs from brainstorming in that ideation sessions focus on the person against a distinct problem. Molly leverages ideation to lead to the consensus between all individuals involved with the design session. Through ideation, Molly experienced the groups' excitement with the collaborative idea. Ideation is a significant step that links the deeper understanding that groups seek to uncover when leveraging a design thinking approach (Melles, Anderson, Barrett & Thompson-Whiteside, 2015). The experiences of Molly's team coming together demonstrates stage two of Kezar and Lester (2009) model of collaboration within higher education. Stage two refers to when groups reach a collaboration episode and can celebrate results and demonstrate commitment (Kezar & Lester, 2009).

With collaborating with other offices to design, Abigail develops strong relationships that augment experiences needed to develop student-centric experiences. These experiences are essential in a higher education environment committed to building a cross-functional culture. Though it was not always easy for Abigail to gain a committed sense of unity around student-centric projects, the experience of organizing and building a convocation program demonstrated the third stage of the Kezar and Lester (2009) model of sustaining collaboration within a higher education environment. Maintaining structure and formalizing the network which leads to the ability to rethink and build upon existing structures due to the existence of an established and trusting network. As these structures are redesigned to meet student-centric needs, Abigail will need to leverage that network to continuously meet student needs.

Bruce spoke about the need to establish a student lifecycle governance group that ensure that new systems and technologies are not duplicating efforts as they seek to meet the needs of students. As Bruce experienced, a student had multiple electronic checklists. They were not integrated into a master checklist. Bruce's team was unable to provide the student-centric service needed due to confusion on what checklist the student referenced. As such, Bruce suggested establishing a governance group that sits on top of other administrative governance groups that take into account the holistic student experience. It is unknown on the effectiveness of a student-centric governance structure. What is known is that the effectiveness of governance structures requires the consensus of agreement with the University mission of group decision makers (Gayle & Tewarie, 2011). In any event, for a student-centric governance structure to emerge and be effective the institution's mission must be aligned with a student-centric mission that promotes the meeting and exceeding of student expectations.

Translating experiences for real-world applicability. Three participants discussed the importance of developing systems and programs designed to meet the needs of future students as well as support graduates when they graduate. Both Molly and Abigail value the importance of alumni when designing student-centric solutions. Molly illustrates this incorporating alumni experiences within the design of these initiatives. She developed a fellowship program for the specific purpose of gaining insights from young alumni. These insights help to inform her team's instructional design work. Through the insights gained from this fellow, Molly's team can connect closely with the online pedagogical experiences faced by students. Abigail leveraged her contacts to connect with an alumnus whose story can resonate with students. Abigail values the importance of this relationship and the message and impact that former students have on existing students that lack higher education confidence.

Patricia led an initiative that brought meaning to a required course that was perceived by students as only being a requirement with no real relevance after graduation. Through story-telling and an adjustment with curriculum assignments, faculty members gained an understanding of the career goals of the student, developed a career-relevant assignment teaching, and allowed the student to discover the connection between the required course and student career outcome. For this specific case, the course in question was a math course. A fire safety degree student did not see the relevance of taking math and a fire fighting career path. The faculty member also could not make that connection. Patricia facilitated a faculty design session that led to a course assignment requiring the student to interview those in the field they wish to enter and ask how math is applied. As the student found out, math was used to calculate the amount of water pressure and hose length to properly tackle a fire that eclipses three floors or as Patricia described "math is important so that the building doesn't burn down." Through this example, Patricia humanized the problem related to not seeing the relevance of taking math and career outcomes and developed a solution that exceeded the student's needs. The approach of humanizing a problem and providing a solution that exceeds the end user's needs is a crucial competency of design thinking (Kolko, 2015).

Finally, the themes that emerged from this section led to the last finding that suggests higher education administrators collaboratively seek to develop empathetic solutions that positively influence the holistic student lifelong educational and employability journey.

Limitations

There are several limitations to this study. First, the relatively small based sample limits the scope of applicability. Though each participant was from a non-profit higher education institution, each of these institutions had different cultures, experiences, and resources that

influence the ability to initiate and drive specific projects. The second limitation was that the researcher purposely did not describe to the participants what being student-centric meant for purposes of this study. Omitting the definition of "student-centric" from this study was intentional so that participant responses could be as fluid and as truthful as possible without the bearing of an assigned definition for this study. Though intentional, this study exposed different experiences ranging from student services to academic curriculum updates. The third limitation is related to the study's question design. While the questions did encourage participants to describe the experiences they had with student-centric initiatives, this led to answers that focused on positive experiences for the participants and less than favorable experiences for those the participants described.

Finally, design thinking was used as the theoretical framework for this study. At times, this limited the direction of the conversation between the researcher and the participant for a few reasons. First, participants displayed design thinking capabilities in displaying empathy for the student journey and designing solutions quickly so that they can learn from these experiences; participants might not have classified themselves as a "design thinker.". Additionally, five key phases exist in design thinking, which led to some ambiguity as it related to assessing each theme and identifying key findings. Though these factors limit the potency of the findings, the study was built with these limitations in mind, thereby preserving its validity.

Conclusion

This study has explored the experiences of mid-level higher education administrators as they demonstrate how they approached student-centric initiatives within a higher education institution. A thorough analysis and immersion of the interview data and current literature identified in this study yielded several key findings. First, this study found that higher education

administrators' strong-sense of empathetic behaviors toward the student journey is influenced by past events and behaviors they experienced. Second, this study found that higher education administrators possess the ability to overcome challenges by using a combination of qualitative story-telling data and sense-making to change perspectives. Finally, this study found that higher education administrators collaboratively seek to develop empathetic solutions that positively influence the holistic student lifelong educational and employability journey.

This study's findings suggest that administrators that engage in student-centric practices possess a student-centric mindset that guides decisions, approaches, and the ability to meet the unique needs of students. They grasped the understanding of what it means to be student-centric from the student's perspective. Some discussed the importance of preparing the student for post-college experiences by using alumni in a translator role. Sense-making also emerged as a way to assist colleagues and others in exploring what their specific role might be when a new student-centric initiative is enacted.

This study's finding also suggests that student-centric higher education administrators are advocates, collaborators, and cultivators. When needed, they also can be described as barrier breakers. They understand the power of the student's voice and make efforts to ensure that voice is heard through developing appropriate communication strategies that give live the students lived experiences. They practice elements of a design thinking framework. However, this study found no direct correlation that they practice design thinking as a process to create student-centric experiences.

In any change, stakeholders must make sense of what their role will through the organizational change lifecycle. At a point in time, the image of a professor with a tweed jacket, organized notes, and multi-color chalk was the perception of what others thought to be an

organized and engaged professor. Since then, tweed went out of style and chalk was replaced with white-board makers. Now the perception of well-prepared professor leverages technology to meet the needs of the content they are delivering (Kezar, 2018). As some institutions move from the University being at the center to designing experiences and solutions that place and prioritize students, the role of faculty, staff, and other stakeholders that engage with a student looks vastly different. If higher education is to meet the needs of unique students, then these institutions must seek to understand the experiences of students as they navigate through education to employability lifecycle.

Leading student-centric initiatives in a largely university-centered environment are difficult. Well-intentioned structures, decision-making models, and organizational silos are not designed to create an environment where understanding the current and future needs of a student exist. As user-centric new technologies emerge that create user-centric experiences, higher education institutions should seek to understand how these influence student and societal higher education expectations. Additionally, to close the education to employability gap, higher education intuitions should seek to design a holistic learning experience that prioritizes a student where they are and curates that knowledge through personalized learning opportunities that meets the lifelong learning and employability goals of an individual learning path.

Implications for Practice

The responsibilities of a scholar-practitioner are to recognize problems with the professional community and examine those problems through the scholarly lens approach (Behman, 1996). The unique nature of this study has provided an opportunity to examine how mid-level higher education leaders experience leading student-centric initiatives. Understanding these experiences allows for diverse groups to learn from the experiences of higher education

leaders communicating, advocating, and managing student-centric initiatives. Several stakeholders may benefit from the research findings including higher education administrators, design thinking practitioners, and customer-centric advocates. One of the goals that the researcher had for this study was to provide new insights into the experiences that mid-level higher education practitioners faced when designing student-centric solutions. The outcome of this goal was to demonstrate how these findings may influence current student-centric initiative design practice.

The concept of being student-centric must align with the institutions' mission. A commitment that centered within an organizational strategy or goals allows for student-centric initiatives to emerge. Support from senior administrators is significant in launching any initiative. Institutions wishing to launch initiatives must ensure that these align with the overall mission of the organization. Those committed to this action must be prepared to advocate and defend the reasoning to embark on a student-centered design approach. This study demonstrates the persistence required to advocate for those initiatives led to successful adoption as demonstrated by results.

Possessing a sense of empathy toward the unique needs of a student allows the higher education administrator to gain an in-depth understanding needed to identify situations that improve and exceed student expectations. Possessing empathy for the student journey exposes a new appreciation for the lifecycle and unique situations that students persist through. Each individual and department possess a different contributing step the influences the overall student journey. Through understanding the experiences discussed in this study, cross-functional departments are better prepared to design student-centric solutions collaboratively.

In leading student-centric initiatives, this study also identified the need to identify higher education administrators that are focused on creating a lifelong student journey experience. This type of commitment, as the study found, emerged through self-reflection. To facilitate the need to identify the importance of user-centric experiences may influence future design sessions, higher education institutions may wish to conduct self-reflection sessions designed to have these experiences emerge. Through this exercise, faculty and staff will be able to identify what is important to them. This self-reflection might contribute and assist participants in building empathy toward the student journey.

Though this study did not seek to define the meaning of student-centric design, all participants recognized that designing student-centric solutions does not mean that solutions be designed around a student's sense of entitlement but rather how solutions emerge that eliminate barriers and roadblocks faced by a student. Additionally, these experiences also demonstrate a commitment to ensure that students are successful after graduation and could translate to designing curriculum, services, and support that lead to a student's preparedness and lifelong employability.

Implications for Future Research

Embedded in and absent from this research study are several potential directions for research. As a result of this studies design, participants identified significant experiences related to developing a student-centric mindset, overcoming challenges related to student-centric design, and designing student-centric solutions. Exploring these themes as it relates to specific student-centric projects would yield a greater understanding of the experienced faced by these higher education administrators.

Also, researchers may want to consider examining the role a design thinking professional has with developing new initiatives within a higher education environment and culture. Possessing this understanding allows for a closer examination on the role that design thinking has within an academic environment and contribute to the work of Williness and Bruni-Bossio (2017) and Ceviker-Cinar, Mura, and Demirbağ-Kaplan (2017)

Researchers may also want to examine other methods where overcoming challenges as it relates to designing student-centric solutions is achieved. Additionally, though much of what the participants shared related to the technology, a future research study may want to examine the role that emerging educational technologies have in designing student-centric solutions. Emerging technologies such as artificial intelligence are predicted to influence the experiences that student face within a higher education environment. Peer-reviewed research examines these roles will be timely and contribute to the overall understanding of the convergence between student expectations and technology capabilities.

While participants shared successes as a result of implementing a student-centric solution, these were not validated nor confirmed by the researcher. Researchers may want to look into the effect that student-centric design has on post-secondary success and employability outcomes. These shared successes showed promise on improving student outcomes within a higher education environment. However, these need to be better understood at the higher education eco-system level.

A standard definition for student-centric in a college or university setting does not exist. Although this study sought to define what it means for participants to be student-centric, it in no means designed to tackle the definition of being student-centric. As participants shared, being student-centric does not mean feeding a student's sense of entitlement but rather ensuring that

they participate in a higher education experience that allows them to maintain a sense of lifelong employability. Future researchers may want to examine what it means when higher education users design student-centric solutions.

Finally, to better understand or reaffirm why a student seeks to be engaged with higher education, higher education institutions may want to consult Clayton Christensen's jobs to be done theory (Christensen, Hall, Dillon, Duncan 2016). This theory posits that when purchases for a good or service are made, a customer is making that purchase to satisfy a need. Possessing a deep understanding of why a student might want to engage in higher education services allows institutions to meet the needs of those students directly. An opportunity exists that allows future researchers to understand the reasons why a student engages with higher education. This research allows these institutions to develop stronger student-centric initiatives that close the gap between what an employer expects from a graduate and what the graduate ultimately has the confidence to deliver.

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Appendix A: Email to Participants

Appendix A: Initiation to Participate in the Study

Good (Morning/Afternoon) (Name):

My name is Jeff Penta and I am an employee of Southern New Hampshire University and a doctoral student in Northeastern University's Doctor of Education program. (Note, will only include this paragraph if interview subject is not known to student researcher via his student email adddress).

I am conducting a research study titled *Designing Student-Centric Solutions through Collaboration* and am asking for your assistance. The purpose of this study is to understand the experiences of project leaders as they drive cross-functional higher education project teams in designing and implementing student-centric solutions.

This study is being conducted as part of my dissertation for the Doctor of Education degree in Higher Education Administration at Northeastern University.

Your participation in this study is completely voluntary and will consist of a face-to-face interview that should take no more than 60 minutes. This interview will take place at a place of your choosing. The interview will be recorded, and the transcripts of the interview will be secured by me for purposes of this study. Data from these transcripts will be destroyed after it has been compiled into a final written report. A pseudonym will replace names and institutional affiliations to ensure confidentially and to mask this information within the collected transcripts and final report.

Thank you in advance for your consideration. If you have questions about this study or would like to volunteer for this study, please feel free to contact me by cell phone at [redacted] or email penta.j@husky.neu.edu only; emails to any other email address must be deleted with no response per Northeastern University IRB. You can also contact the principal investigator, Dr. Kristal Clemons, via email k.clemons@neu.edu.

Sincerely,

Jeffrey M. Penta

IRB# CPS18-11-13
Approved: 12/3/18
Expiration Date: 12/2/19

Appendix B: Informed Consent

Appendix B: Informed Consent Form

Northeastern University, College of Professional Studies, Doctor of Education (EdD)

Principal Investigator: Dr. Kristal Clemons,

Student Researcher: Jeffrey Penta

Title of Project: Designing Student-Centric Solutions through Collaboration: Exploring the experiences of Higher Education Leaders leading cross-functional projects and initiatives

INTRODUCTION

We are inviting you to take part in a research study. This form will tell you about the study, but the researcher will explain it to you first. You may ask this person any questions that you have at any time. 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 AM I BEING ASKED TO TAKE PART IN THIS RESEARCH STUDY?

You are being asked to participate in this study because you have experience in projects that require cross-functional collaboration between team members in a higher education environment.

WHY IS THIS RESEARCH STUDY BEING DONE?

The purpose of this research is to understand the experiences of mid-level higher education administrators as they lead student-centric projects.

WHAT WILL I BE ASKED TO DO?

If you decide to participate in this study, you will be asked to participate in a face to face interview that will last between 45-60 minutes. Interviews will be recorded and transcribed. You will have an opportunity to review the transcribed interview to confirm accuracy, if you so choose.

WHERE WILL THIS TAKE PLACE AND HOW MUCH OF MY TIME WILL IT TAKE?

Interviews will take place in a location of your choosing. The room selected will provide you privacy. The interview will take between 45-60 minutes.

WILL THERE BE ANY RISK OR DISCOMFORT TO ME?

There will be no risks associated with this study. The researcher will secure all audio files after interviews are completed. Audio files will be destroyed after transcriptions have been confirmed by both the researcher and, if desired, the research participant. The researcher will also use pseudonyms to protect the identity of the participants.

IRB# CPS18-11-13
Approved: 12/3/18
Expiration Date: 12/2/19

WILL I BENEFIT BY BEING IN THIS RESEARCH?

There is no direct benefit from this research; however, the data from this research could be used to inform higher education stakeholders of the shared experiences of administrators leading projects.

WHO WILL SEE THE INFORMATION ABOUT ME?

Your part in this study will be confidential. Only the researchers on 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 of this project. Pseudonyms will be used in order to portent the identity of the participants. Audio files will be identified using pseudonyms and transcripts will be purged after themes have been developed for the purpose of this study.

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. If you do not participate or if you decide to quit, you will not lose any rights, benefits, or services that you would otherwise have employee.

WHO CAN I CONTACT IF I HAVE QUESTIONS OR PROBLEMS?

If you have any questions about this study, please feel free to contact Jeff Penta, the person mainly responsible for the research, at [redacted] email penta.j@husky.neu.edu. . You can also contact the Principal Investigator Dr. Kristal Clemons, via email k.clemons@neu.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, Mail Stop: 560-177, 360 Huntington Avenue, 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?

You will be given a $5 gift card to Dunkin Donuts as soon as you complete the interview.

WILL IT COST ME ANYTHING TO PARTICIPATE?

No costs will be associated in participating in this study.

IS THERE ANYTHING ELSE I NEED TO KNOW?

You must be at least 18 years old to participate and must have experience leading projects designed to meet student needs in a higher education environment.

CONSENT TO PARTICIPATE

To participate in this study, you will be interviewed regarding your experiences leading higher education projects. This study has been described to me and I understand that my participation is voluntary and that I may discontinue my participation at any time without any penalty. I understand that my responses will be treated confidentially and

IRB# CPS18-11-13
Approved: 12/3/18
Expiration Date: 12/2/19

used as described. I understand that if I have any questions, I pose them to student investigator, Jeffrey Penta. By signing below I attest that I am over 18 years of age and that I consent to participate in this study. You will be given a copy of this consent form to keep.

Signature of person agreeing to take part	**Date**
Printed name of person above	
Signature of person who explained the study to the participant above and obtained consent	**Date**
Printed name of person above	

IRB# CPS18-11-13
Approved: 12/3/18
Expiration Date: 12/2/19

Appendix C: Notification of IRB Action

Northeastern

NOTIFICATION OF IRB ACTION

Date: December 3, 2018	IRB #: CPS18-11-13
Principal Investigator(s):	Kristal Moore Clemons Jeffrey Penta
Department:	Doctor of Education Program College of Professional Studies
Address:	20 Belvidere Northeastern University
Title of Project:	Designing Student-Centric Solutions through Collaboration: Exploring the Experiences of Higher Education leaders Leading Cross-Functional Projects and Initiatives
Participating Sites:	N/A
DHHS Review Category:	Expedited #6, #7
Informed Consents:	One (1) signed consent form
Monitoring Interval:	12 months

Human Subject Research Protection
Mail Stop 560-177
360 Huntington Avenue
Boston, MA 02115
617.373.7570
fax 617.373.4595
northeastern.edu/hsrp

APPROVAL EXPIRATION DATE: DECEMBER 2, 2019

Investigator's Responsibilities:

1. The 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

C. Randall Colvin, Ph.D., Chair
Northeastern University Institutional Review Board

Nan C.

Nan C. Regina, Director
Human Subject Research Protection

Northeastern University FWA #4630

Appendix D: Interview Protocol

Interview Schedule

Introduction:

1. How long have you been in higher education?
    a. Follow-up - how have your experiences out of higher education influenced your leadership with higher education

Student Centric

2. Describe what being student-centric means to you?
    a. Describe the point in your career or life where you that being student-centric mattered.
    b. Have you ever found yourself explaining what it means to be student first to others?
        1. Sense-making
3. Describe what designing a student-centric solution means to you and how do you approach a student-centric project?
    a. Why are student-centric projects important to you?
4. Tell me about experiences you had managing a student-centric project while leading a cross-functional team? 1.2.1.
    a. Describe how that team worked together.
        1. Sense-making
    b. Describe any conflicts that arose. Any conflicts that arose? How did that make you feel?
        1. Sense-making
    c. Other challenges that emerged?
        1. Describe how you overcame these challenges

Conclusion

5. Through your experiences designing student-centric solutions, describe how your approach to the student experience has changed?