

FOSTERING INNOVATION AMONG STAFF MEMBERS
IN A MULTICAMPUS HIGHER EDUCATION INSTITUTION

by
Patricia J. Szasz

A dissertation submitted to Johns Hopkins University in conformity with the requirements for
the degree of Doctor of Education

Baltimore, Maryland
July 2021

© 2021 Patricia J. Szasz
All Rights Reserved

Abstract

This study addresses low organizational readiness for change at a U.S. multicampus higher education institution formed by a merger in 2010 between a liberal arts college and a professional graduate school. A needs assessment conducted in the spring of 2019 employed Cameron and Quinn's (2011) competing values framework of organizational cultures and found that staff members across the two campuses desired more flexibility and discretion in their work. Semi-structured interviews with senior administrators also identified a tension between staff members' desires and those of leadership: administrators felt that the institution would not become fully integrated until the graduate school was financially self-sustaining. To address this tension, an intervention program was delivered in the fall of 2020 to build innovation skills among staff members of the graduate campus. Using Ireland, Hitt, and Sirmon's (2003) model of strategic entrepreneurship as a framework, the intervention sought to increase the entrepreneurial mindset of individuals to create long-term wealth for the institution. Eleven staff members participated in a twelve-week Innovation Mentors program. After learning about innovation principles, teams presented proposals to campus leadership addressing needs identified within the institution. A concurrent mixed methods design evaluated the process and outcomes of the intervention. Nine of the eleven initial participants successfully completed the program, and a comparison between pre- and post-program surveys indicated a statistically significant difference ($p < .05$) in participants' knowledge of innovation principles. Participants appreciated working with and learning from colleagues in different job roles and from different departments across campus. During and after the program, many staff member participants began applying the innovation principles in their work and sharing what they learned with departmental colleagues.

However, despite perceived support from campus leadership and managers, some staff members struggled to find the time and space to apply the innovation principles in their jobs.

Keywords: organizational readiness for change, higher education merger, multicampus higher education institution, innovation in higher education, higher education staff, organizational culture, entrepreneurial culture, entrepreneurial learning, entrepreneurial mindset

Primary Reader and Adviser: Carey Borkoski, PhD, EdD

Secondary Readers: Karen Caldwell, EdD and Mahabat Baimyrzaeva, PhD

Dissertation Approval Form



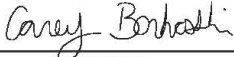


Dissertation Approval Form

Student's Name: Patricia Szasz Date: July 12, 2021

Dissertation Title:

Fostering Innovation Among Staff Members in a Multicampus Higher Education Institution

The student has made all necessary revisions, and we have read, and approve this dissertation for submission to the Johns Hopkins Sheridan Libraries as partial fulfillment of the requirements for the Doctor of Education degree.

Carey Borkoski, PhD, EdD		7-12-21
Adviser	Signature	Date
Karen Caldwell, EdD		July 12, 2021
Committee Member	Signature	Date
Mahabat Baimyrzaeva, PhD		July 12, 2021
Committee Member	Signature	Date
Committee Member	Signature	Date

Dedication

I dedicate this dissertation to my parents, Patricia and Joseph Szasz, who both trained as teachers and who always impressed upon me the value of a good education.

Acknowledgements

While this dissertation may have only one author attributed to it, in fact, there was a wide community of supporters that enabled me to achieve my goal of finishing my doctoral studies. First and foremost, my parents who always told me I could do anything I wanted and inspired me to pursue this goal. To my mother who listened with interest during our Sunday night calls and lent her own viewpoint based on decades of teaching in our public schools. To my sister, Laurie, who was a role model having completed her own online degree before me, and who empathized with the ups and downs of my life as a doctoral student.

Back at summer orientation in 2018, I was placed at a table with other students from California. Little did I know how important this support network would be to my succeeding in the program. To my Caligirls – Denice, Elaine, and Kyla – thank you for the laughs, the guidance, the cheerleading, the commiseration, and the friendship. I am so excited for us to become doctors together.

I have been especially blessed to have Dr. Carey Borkoski as my dissertation adviser. From my first semester in the program, Carey has shown me care, kindness, guidance, and support. When I hit a wall, she was there to break it down with me. When my quantitative analysis dizzied me, she was there to affirm I was on track. Thank you so much, Carey, for always being there to keep me on the path to success.

Thank you to my committee members, Dr. Karen Caldwell and Dr. Mahabat Baimyrzaeva. I am so grateful for your insights and your questions. You have pushed me to do my best work. Gratitude to all the Johns Hopkins School of Education professors who have informed my thinking and made me a better educator.

To my friends both near and far, especially Toni, Renee, Eva, and Therese. Thank you for showing interest, for cheering me on, and for forgiving all those weekends I stayed home at my computer. I am looking forward to returning to life and lunch and wine and fun with you all.

I am lucky to work in a campus environment that fully supported my studies and my research and viewed my work as a benefit to the institution. Thank you to my manager and executive sponsor Dr. Jeff Dayton-Johnson who listened eagerly to my updates on how the research was going. To my good friend, former supervisor, and all-around wonderful co-facilitator, Bob, who provided a complementary approach and attitude toward our program and our participants. I am so grateful to you, my friend, for being there through a pandemic to see this vision become a reality. And of course, I am so appreciative of my colleagues who became Innovation Mentors for their persistence, their insights, their creativity, and their commitment to seeing the program through. Likewise, thank you to all the study participants who completed the endless surveys and participated in interviews and focus groups with candidness and grace.

Table of Contents

Abstract.....	ii
Dissertation Approval Form.....	iv
Dedication.....	v
Acknowledgements.....	vi
Table of Contents	viii
List of Tables.....	xii
List of Figures.....	xiii
Executive Summary	xiv
The Problem of Practice and the Current Context	xiv
Factors Contributing to the Problem of Practice.....	xv
Evidence of the Contributing Factors in the Current Context	xvi
The Intervention: The Innovation Mentors Program	xvii
Research Design and Methodology	xix
Findings and Discussion	xxi
Chapter One	1
Synthesis of Literature Related to the Problem of Practice	1
Problem of Practice.....	2
Theoretical Framework: Open Systems Theory	3
Internal Systems and Subsystems	5
External Sectors that Influence the Organization	5
Conceptual Framework.....	7
Synthesis of Research Literature	9
External Sectors Affecting Higher Education Institutions.....	10
The Organizational Suprasystem: Maintaining Homeostasis	16
The Adaptive Subsystem: How Change Affects Organizations.....	24
The Managerial Subsystem: Leadership in Times of Change	28
Summary	31
Chapter Two.....	34

Empirical Examination of the Factors and Underlying Causes	34
Context of the Study	34
Purpose of the Study	35
Research Questions	36
Method	36
Participants.....	37
Measures and Instrumentation	42
Procedure	46
Findings & Discussion.....	49
Perceptions of Merger Goal Achievement (RQ1).....	49
Perceived Organizational Culture Based on Location (RQ2).....	55
Perceived Organizational Culture Based on Department (RQ3)	61
Present Organizational Culture Versus Aspirational Organizational Culture (RQ4)	67
Conclusion	73
Chapter Three.....	76
Synthesis of Literature Addressing the Problem of Practice	76
Theoretical Frameworks	79
Centralized versus Decentralized Diffusion of Innovations	79
Entrepreneurship of Individuals and Organizations.....	80
Learning Organizations and Team Learning.....	81
Synthesis of Literature	83
Measuring Entrepreneurial Culture.....	83
Organizational Structures for Innovation.....	84
Developing the Entrepreneurial Mindsets of Individuals	92
Decentralizing Innovation Diffusion Systems	96
Proposed Intervention	100
Chapter Four	103
Intervention Procedure and Program Evaluation Methodology	103
Proposed Intervention	104
Purpose of the Study	108
Research Design.....	108
Process Evaluation	109

Outcome Evaluation.....	111
Method	112
Participants.....	112
Measures	114
Procedure	117
Chapter Five.....	124
Findings and Discussion	124
Process of Implementation.....	125
Research Questions and Findings	130
Program Reach and Participant Responsiveness (RQ1)	131
Factors Motivating or Inhibiting Program Completion (RQ2)	133
Knowledge of Innovation Principles (RQ3)	136
Experience of Working and Learning in Project Teams (RQ4)	137
Intention to Use Innovation Principles in Future (RQ5).....	147
Conclusions.....	152
Increasing Clan and Adhocracy Organizational Cultures	152
Decentralized Diffusion of Innovation	153
Entrepreneurial Mindset and Entrepreneurial Culture	154
Entrepreneurial Learning within Teams.....	156
Limitations of the Study.....	157
Implications for Practice and Recommendations	161
References.....	167
Appendix A: List of Interview Participants	181
Appendix B: Departments Included in the Survey	182
Appendix C: Interview Schedule	183
Appendix D: Adapted Organizational Culture Assessment Instrument.....	185
Appendix E: Themes and Codes	191
Appendix F: Data Report for Organizational Culture Assessment Instrument.....	192
Appendix G: Categorization of Departments	196
Appendix H: Proposed Program Outline and Timeline	197

Appendix I: Project Evaluation Rubric.....	198
Appendix J: Summary Matrix.....	200
Appendix K: Logic Model.....	203
Appendix L: List of Intervention Study Participants.....	204
Appendix M: Pre-Program Survey.....	205
Appendix N: Post-Program Survey.....	209
Appendix O: Follow Up Survey.....	215
Appendix P: Program Cessation Survey.....	219
Appendix Q: Focus Group Protocol.....	222
Appendix R: Final List of Codes and Subcodes.....	224
Appendix S: Screenshots of Social Media Platform for Innovation Mentors Program..	225
Appendix T: Revised Project Evaluation Rubric.....	227

List of Tables

Table 1. 1 A Summary of Which Culture Scored Highest on Each Dimension of Organizational Effectiveness.....	18
Table 2. 1 Survey Respondent Characteristics (N = 120).....	41
Table 2. 2 Mann-Whitney U Test Results for Location	59
Table 2. 3 Mann-Whitney U Test Results for Present Profile by Department.....	63
Table 2. 4 Mann-Whitney U Test Results for Aspirational Profile by Department	66
Table 2. 5 Wilcoxon Signed Ranks Tests for Institutional Glue, Present versus Aspirational.....	68
Table 2. 6 Wilcoxon Signed Ranks Tests for Institutional Leadership, Present versus Aspirational	70
Table 2. 7 Wilcoxon Signed Ranks Test Comparing Present and Aspirational Scores for Adhocracy, Market, and Hierarchy Quadrants	72
Table 3. 1 What it Means to Increase Clan and Adhocracy Cultures.....	78
Table 3. 2 What it Means to Increase Clan and Adhocracy Cultures.....	101
Table 5. 1 Final Workshop Schedule of Innovation Mentors Program.....	127
Table 5. 2 What Motivated You to Complete the Program? (n = 8)	134
Table 5. 3 What Challenges did you Face in Completing the Program? (n = 8)	135
Table 5. 4 Comparison of Participants' Knowledge of Innovation Principles Before and After the Intervention Program using Wilcoxon Signed Ranks Test (n = 8)	136
Table 5. 5 Most Frequent Codes and Subcodes from Focus Group Transcripts.....	138
Table 5. 6 Comparison of Post-Program Survey (“I intend to apply...”) and Follow Up Survey (“I am able to...”) (n = 8)	148
Table 5. 7 What it Means to Increase Clan and Adhocracy Cultures.....	153

List of Figures

Figure 1. 1. Model of Katz & Kahn's (1978) Open Systems Theory	4
Figure 1. 2. Concept map of factors contributing to the problem of practice.....	8
Figure 1. 3. The competing values framework of organizational cultures	17
Figure 2. 1. The competing values framework of organizational cultures	44
Figure 2. 2. Comparison of present organizational culture profile by campus location.	57
Figure 2. 3. Comparison of aspirational organizational culture profile by campus location.....	58
Figure 2. 4. Comparison of present organizational culture profile by department type	62
Figure 2. 5. Comparison of aspirational organizational culture profile by department type..	64
Figure 2. 6. Comparison of present and aspirational organizational culture profiles on the content dimension of institutional glue.....	68
Figure 2. 7. Comparison of present and aspirational organizational culture profiles on the content dimension of institutional leadership.....	70
Figure 2. 8. Present and aspirational profiles based on all six content dimensions of organizational culture.....	72
Figure 3. 1. Comparison of present and aspirational organizational culture profiles on the content dimension of institutional leadership	77
Figure 3. 2. Model of strategic entrepreneurship.....	81
Figure 3. 3. Resources gain cycle	93
Figure 4. 1. Data collection sources and timeline.....	115
Figure 5. 1. Timeline comparison of intervention as designed and delivered.	126

Executive Summary

This study explores how to foster innovation among staff members in a multicampus higher education institution formed by a merger. It also highlights experiences of higher education staff members because little research on innovation in the higher education context focuses on administrative staff. Instead, the bulk of research studies consider faculty members' experience with change, such as the implementation of new technology or curricular redesign initiatives (Blin & Munro, 2008; Cooper, 2017; Galea, Fried, Walker, Rudenstine, Glover, & Begg, 2015; Jäppinen, 2017; Kamarudin & Starr, 2014; Reyna, 2016; Thurab-Nkhosi, 2018; Yeo, Bennett, McNichol, & Merkey 2015). Importantly, it is administrative staff that play a critical role in the implementation of new processes and programs in the higher education setting. The current problem of practice and associated intervention aim to increase organizational readiness for change in a multicampus higher education institution by building innovation competencies in staff members to drive the institution toward increased employee empowerment, student success, and financial sustainability.

The Problem of Practice and the Current Context

In response to economic pressures, colleges and universities may seek mergers with other institutions to strengthen finances or broaden academic programming (Cai, Pinheiro, Geschwind, & Aarrevaara, 2015; Harman & Harman, 2003), but many years may pass before the newly-formed organization achieves successful integration of organizational cultures (Evans, 2017; Harman 2002; Leslie, Abu-Rahma, & Jaleel, 2018; Norgård & Skodvin, 2002). Loose integration, in which conflict is frequent and units do not appear to be moving toward the same goals, could be rooted in conflicting organizational values (Cameron & Quinn, 2011; Quinn & Rohrbaugh, 1983). These competing values create tensions across the organization that can

impede organizational effectiveness and innovativeness (Cameron & Quinn, 2011). Geographic distance between campuses can also inhibit cultural integration (Harman, 2002; Norgård & Skodvin, 2002). Likewise, organizations that possess unclear missions or unpredictable finances (Lehman, Greener, & Simpson, 2002), lack of trust between employees and their managers (Vosse & Aliyu, 2018), or weak leadership (Carter, Armenakis, Feild, Mossholder, 2012) may possess low organizational readiness for change. This dissertation considers how to increase organizational readiness for change among staff members in a multicampus higher education institution to ensure the long-term viability and success of the organization.

The context for this study was a multicampus higher education institution in the United States formed by a merger in 2010. The merger included an elite liberal arts college in New England established in 1800 and a professional graduate school in California focused on preparing graduates for global careers and founded in 1955. The two institutions formed an affiliation in 2005 and formally merged in 2010. Throughout this paper, the liberal arts college, which enrolls about 2,600 undergraduate students each year, is referred to as the “East Coast campus,” and the graduate school, which enrolls about 650 full-time equivalent students annually, is referred to as the “West Coast campus.”

Factors Contributing to the Problem of Practice

In the current context, low organizational readiness for change may result from the effects of the merger of two higher education institutions. In the years following the formal merger, administration of the West Coast campus became increasingly centralized through a system known as “matrix management” in which many staff members in operational functions on the West Coast campus, such as human resources and information technology, reported up to managers on the East Coast campus. This management system created a need for greater virtual

collaboration across campus locations. While the matrix management structure increased the West Coast campus's access to financial and other resources, it also lessened the autonomy of the West Coast leaders' decision making. Additionally, there was a perception among employees on both campuses of conflicting organizational cultures and an "us versus them" mentality common among employees of institutions formed by a merger. Martin and Samels (2017) describe how a merger between two higher education institutions may create a "shock to both communities and their leaders" (p. 10). The subsequent destabilization within the organization may contribute to low organizational readiness for change (Lehman et al., 2002).

Evidence of the Contributing Factors in the Current Context

To examine contributing factors of the problem of practice, I conducted a mixed methods needs assessment with members of the institution in the spring of 2019. A convergent mixed methods design (Creswell & Plano Clark, 2018) was employed to triangulate data from two constituencies, senior administrators and staff members. To explore senior administrators' perspectives on the goals and outcomes of the merger between the two institutions, semi-structured interviews were conducted with 10 former and current administrators. These qualitative data were compared to a broad survey of staff members from both campuses ($N = 120$), which employed the Organizational Culture Assessment Instrument (OCAI; Cameron & Quinn, 2011). The quantitative survey measured staff members' perceptions of the current organizational culture as well as the organizational culture they wanted to see in the future. Survey results indicated staff members' desire for an organizational culture that placed more value on collaboration, mutual support, creativity, and innovation, or what are known as the clan and adhocracy cultures in Cameron and Quinn's (2011) framework. However, senior administrators expressed the belief that the two institutions would not be fully integrated until the

West Coast campus achieved financial sustainability. This viewpoint corroborated staff members' perception that institutional leadership were primarily focused on goal achievement. Such findings identified factors contributing to low organizational readiness for change across the institution.

The Intervention: The Innovation Mentors Program

To address factors identified in the needs assessment, an intervention program was designed and delivered in the fall of 2020. The intervention was a set of complementary activities intended to strengthen the organization's entrepreneurial culture and to create conditions allowing staff members more discretion and flexibility in their work. In exploring various intervention models that might lead to increasing the clan and adhocracy cultures (Cameron & Quinn, 2011) within the institution, the model of strategic entrepreneurship (Ireland, Hitt, & Sirmon's (2003) and Rogers's (2003) diffusion of innovations theory informed the work.

The intervention aimed to facilitate the development of entrepreneurial mindsets of staff members, which should subsequently increase the institution's entrepreneurial culture. The model of strategic entrepreneurship (Ireland et al., 2003) suggests that increased entrepreneurial mindset in individuals and increased entrepreneurial culture in the organizational can create a competitive advantage and long-term wealth for the institution. According to Ireland et al. (2003), an effective entrepreneurial culture is an organizational culture which values creativity, failure, risk taking, learning, innovation, and continuous improvement. Such a culture is similar to Cameron and Quinn's (2011) adhocracy culture to which staff members of the current institution aspire. This cultural shift would support both the dual goals identified in the needs assessment of senior administrators seeking long-term financial sustainability and staff members looking for greater flexibility and discretion in their work. Likewise, Rogers (2003) suggests that

for the diffusion of innovation to be successfully sustained over time, a balance between centralized or top-down diffusion and decentralized or bottom-up diffusion must be achieved. Rogers (2003) describes how decentralized diffusion of innovation involves local change agents adapting the innovation to their unique contexts. This bottom-up approach may ensure the long-term sustainability of the innovation.

The intervention program was adapted from the “I-mentors” program implemented at the Whirlpool Corporation (Snyder & Duarte, 2008). The “I-mentors” program sought to build innovation skills in employees and to diffuse innovation across the company as employees applied their newly developed skills in their job roles. The adapted program delivered in the current context, known as the Innovation Mentors program, was a three-month professional development experience open to staff members on the institution’s West Coast campus. The program covered six innovation principles adapted from the Whirlpool program: how to link innovation to institutional processes; how to incorporate the voice of the user in new process development; how to incorporate the voice of the student in new program development; how to ideate and brainstorm; how to create a migration path to the dream state; and how to develop a business model (Snyder & Duarte, 2008).

The Innovation Mentors program had three phases. The first phase was a series of interactive workshops facilitated by the author and a co-facilitator to cover the six innovation principles. The second phase allowed participants to form project teams, supported by one of the program facilitators as a coach. Teams worked together to develop an innovation proposal for the institution addressing a need previously identified and explored by participants earlier in the program. In the third phase, project teams delivered a presentation of their innovation proposal to

a panel for feedback based on a scoring rubric. The panel consisted of three senior administrators in the institution and a faculty member who teaches about organizational innovation.

Eleven staff members originally agreed to participate in the Innovation Mentors program, and they represented eight departments across the West Coast campus. The study sample was 9% of the overall staff member population. There was a mix of female and male participants as well as salaried and hourly employees. Two participants ceased participation in the program in weeks three and four of the intervention. The remaining nine participants formed three project teams based on problem statements developed in the first phase of the program. Using the tenets of user-centered design, each team built a project proposal for an innovation that would address a problem in the institution. These proposals were related to better supporting the academic success of students, improving the employee onboarding experience, and strengthening the organizational infrastructure that supports community partnerships.

Research Design and Methodology

The purpose of the intervention study was to explore how a program like Innovation Mentors might move the organizational culture of one higher education institution toward greater clan and adhocracy cultures (Cameron & Quinn, 2011) in an effort to build more organizational readiness for change within the institution. In evaluating the program, five research questions explored the implementation and proximal outcomes of the intervention: the first two questions considered the process evaluation, and the last three questions explored the proximal outcomes.

The research design of this study took a mixed methods approach. Johnson and Onwuegbuzie (2004) describe how the mixed methods approach allows the researcher to combine the deductions drawn from the quantitative data and the inductions taken from the qualitative data to create abductions, or the best possible explanation of the results. The

intervention study employed a concurrent mixed method design in which data were collected from both quantitative and qualitative sources simultaneously and results were triangulated during the data analysis process (Creswell & Plano Clark, 2018). The study design can be notated as a quan + QUAL design, in which data are collected concurrently and there is an emphasis on the qualitative strand (Creswell & Plano Clark, 2018). The qualitative data take precedence due to the small sample size and a focus on participants' experience of the intervention program.

All staff members from the West Coast campus of the institution were invited to participate in the Innovation Mentors program. Eleven participants joined the program, and nine successfully completed it in December 2020. Participants represented a variety of job roles, departments, and payroll statuses from across the campus. After obtaining informed consent from participants, both quantitative and qualitative data were collected before, during, and after the program. Data sources included a pre-program survey, a post-program survey, a follow up survey administered about two months after the end of the program, and post-program focus groups. The pre- and post-program surveys were used to compare participants' knowledge of the six innovation principles covered in the program before and after the intervention. Open survey responses were triangulated with focus group data to gain a clearer sense of participants' experience during the program as well as to measure participants' intention to use the innovation principles in future. Note that two participants who ceased participation submitted a program cessation survey which enabled the researcher to compare the attributes of those who successfully completed the program to those who did not.

Findings and Discussion

As previously mentioned, the intervention study followed a concurrent mixed methods design (Creswell & Plano Clark, 2018) and included a process evaluation and an outcome evaluation. As part of the process evaluation, the first two research questions explored program reach (Baranowski & Stables, 2000), participant responsiveness (Dusenbury, Brannigan, Falco, & Hansen, 2003), and participant maintenance (Baranowski & Stables, 2000). In short, did the intervention reach its intended audience, did that audience engage in the intervention program, and did participants successfully complete the program? In terms of program reach, the Innovation Mentors program met most of its pre-set goals in that the staff member participants represented a wide variety of job roles and departments across the West Coast campus. Additionally, the program met its goal of at least 80% program completion: nine of the 11 participants (82%) successfully completed the program and achieved the Innovation Mentor designation. Across all participants, both those who completed the program and those who did not, time constraints were the greatest factor they identified in hindering program completion. For 88% of participants, the main support to program completion was interest in the program content.

Turning to the outcome evaluation, a comparison of the pre-program and post-program surveys appeared to indicate that participants' overall knowledge of the innovation principles covered in the program did increase. A Wilcoxon signed ranks test comparing mean scores of the self-reported knowledge of the innovation principles before and after program participation found statically significant differences ($p < .05$) in five of the six innovation principles. Only the topic of how to ideate and brainstorm did not show a statistically significant difference before

and after the program, and this result may be due to the fact that participants ranked themselves fairly high on this item prior to the program.

Looking at the experience of learning in project teams, most participants expressed that their learning was enhanced by the knowledge, skills and attitudes that their fellow team members brought to their project. In the case of one team, conflicts regarding team roles and the ultimate goal of the project led to dissatisfaction for some team members. Yet, according to Bagheri and Pihie's (2011) model of entrepreneurial learning, the discomfort one faces when working with those with different perspectives should lead to enhanced learning.

Additionally, many participants reported what one person called a "time crunch" throughout the program, both due to the changes made to the program schedule as well as external factors and stressors related to the COVID-19 pandemic that occurred during the fall of 2020. There was a sense among more than one participant that they had failed to do their best work due to time constraints and competing priorities. While participants did appreciate the support received from peers, program coaches, and academic leadership, there was still an enduring sense expressed by participants that there was not enough time to focus on innovation. Whether this lack of time is real or perceived remains an open question, but these findings reinforce the need to create a space for employees to experiment and fail if an organization truly wants to move toward a more supportive and innovative culture.

Chapter One

Synthesis of Literature Related to the Problem of Practice

Higher education institutions move slowly when it comes to implementing change (Baker & Baldwin, 2015; Carlson, 2016; Kezar, 2016). Resistance to change can lead to an inability to shift nimbly with market demands (Leslie, Abu-Rahma, & Jaleel, 2018). At the same time, higher education tuition continues to rise faster than the rate of inflation (Ehrenberg, 2012), and students and their parents increasingly question the return on investment of a graduate or undergraduate degree (Baker & Baldwin, 2015; Brint, Riddle, Turk-Bicakci, & Levy, 2005; EAB, 2019).

In response to shifting external forces, higher education institutions may seek mergers. Mergers in the higher education context tend to have one or more of the following goals: to bolster financial resources, broaden educational offerings, or leverage economies of scale (Cai, Pinheiro, Geschwind, & Aarrevaara, 2015; Harman & Harman, 2003; Skodvin, 1999). In some countries, national governments may pursue mergers to consolidate the number of institutions across a country, as has occurred in Australia, France, Norway, and the United Kingdom (Evans, 2017; Harman, 2002; Harman & Harman, 2003; Locke, 2007; Norgård & Skodvin, 2002; Stensaker, Persson, & Pinheiro, 2016). Some governments have also used financial incentives to spur consolidation of the higher education sector (Harman & Harman, 2003; Skodvin, 1999). In other instances, colleges and universities have sought mergers of their own volition (Cai et al., 2015; Skodvin, 1999). In the United States, 30 higher education mergers took place from 2000–2016; during the same time period, 47 higher education institutions closed due to financial challenges (Martin & Samels, 2017).

Problem of Practice

In response to economic pressures, colleges and universities may seek mergers with other institutions to strengthen finances or broaden academic programming (Cai et al., 2015; Harman & Harman, 2003), but many years may pass before the newly-formed organization achieves successful integration of organizational cultures (Evans, 2017; Harman 2002; Leslie et al., 2018; Norgård & Skodvin, 2002). Loose integration, in which conflict is frequent and units do not appear to be moving toward the same goals, could be rooted in conflicting organizational values: for example, some departments may value accuracy, authority, and compliance with rules and regulations, while other departments focus on experimentation and innovation (Cameron & Quinn, 2011; Quinn & Rohrbaugh, 1983). These competing values create tensions across the organization that can impede organizational effectiveness and innovativeness (Cameron & Quinn, 2011). In institutions formed by a merger, the geographic distance between campuses can also inhibit cultural integration (Harman, 2002; Norgård & Skodvin, 2002). Likewise, organizations that possess unclear missions or unpredictable finances (Lehman, Greener, & Simpson, 2002), lack of trust between employees and their managers (Vosse & Aliyu, 2018), or weak leadership (Carter, Armenakis, Feild, Mossholder, 2012) may possess low organizational readiness for change. This chapter explores factors that may contribute to low organizational readiness for change in multicampus higher education institutions.

The organization currently under discussion is a multicampus higher education institution formed by a merger in 2010. The main campus is an elite liberal arts college in New England founded in 1800. The acquired campus is a professional graduate school in California founded in 1955. The main campus enrolls about 2,400 undergraduate students each year and is frequently listed as one of the top 10 liberal arts colleges in the United States (U.S. News & World Report,

n.d.). The acquired campus enrolls about 650 students in master's degree programs each year. The globally-focused graduate programs have strong reputations in the fields of translation, interpretation, language education, nonproliferation of weapons of mass destruction, and terrorism studies, among others.

In an effort to examine the problem of practice outlined above more deeply, this chapter uses Katz and Kahn's (1978) open systems theory to examine the external and internal factors that may contribute to low organizational readiness for change in a multicampus higher education institution. The first section considers external influences on higher education institutions across four sectors: the sociocultural sector, the political sector, the economic sector, and the technological sector. The next section reviews studies of mergers in general and within the higher education context in particular, to discover the salient features and common challenges associated with such mergers. The third section discusses how leadership may drive and inspire change within organizations. Finally, the last section considers the construct of readiness for change, particularly in higher education contexts. Prior to the review of literature, I introduce the theoretical and conceptual frameworks that outline this chapter.

Theoretical Framework: Open Systems Theory

Taking a systems approach to studying organizations can help to ensure that no blind spots are being ignored and perhaps uncover hidden factors that may not be readily apparent at first glance. Therefore, I use Katz and Kahn's (1978) open systems theory as the framework for this discussion. Historically, organizations were viewed as closed systems impervious to outside factors (Katz & Kahn, 1978). However, organizational psychologists Katz and Kahn (1978) posited that organizations are in fact open systems influenced by the external environment in

Internal Systems and Subsystems

A boundary delineates the organization from its external environment (Katz & Kahn, 1978). What resides within the interior of this boundary is known as the organizational suprasystem. For instance, employees of a company reside within the organizational suprasystem, and partners are found outside the system in the external environment. Within the organization, five subsystems interact to support, maintain, and ensure the viability of the organization: the production, supportive, maintenance, adaptive, and managerial subsystems. The production subsystem is primarily concerned with throughput, i.e., the creation of products and/or services. The supportive subsystem is responsible for acquiring inputs. For instance, an institution's human resources department, as part of the supportive subsystem, attracts and hires personnel to work in the organization. The maintenance subsystem is not directly involved in the means of production but rather manages the efficient operations necessary to support the production subsystem. An accounts payable department could be considered part of the maintenance subsystem. The adaptive subsystem reacts to changes in the external environment to ensure the long-term survival of the organization. In other words, the goal of the adaptive subsystem is to maintain homeostasis, or equilibrium, in response to changes outside the organization. Finally, the managerial subsystem maintains the regulatory mechanisms (i.e., the norms that hold within the organization) and the authority structure responsible for decision making.

External Sectors that Influence the Organization

As an open system, an organization interacts with, is influenced by, and in turn influences its external environment (Katz & Kahn, 1978). The external environment is comprised of everything residing outside the organizational suprasystem. Katz and Kahn (1978) outline five

sectors in the external environment that influence an organization – from the availability of inputs to the market for outputs. These five sectors are sociocultural, political, economic, technological, and physical. The sociocultural sector refers to the cultural norms and values of the society in which the organization operates. The political sector encompasses the legal norms and statutes of the context. The economic sector describes the availability of resources and the market for products and services. The technological sector refers to changes in the way information is processed as well as the competition that results from shifts in technology. Lastly, the physical environment is concerned with the geography, climate, and natural resources surrounding the organization.

This discussion will focus on four of the external sectors defined by Katz and Kahn (1978): sociocultural, political, economic, and technological. The physical sector is not discussed as it does not directly relate to the problem of practice at hand. The chapter will then turn to the factors contributing to the problem of practice. First, I consider factors at the organizational suprasystem level, including mergers in higher education and the challenge of distance collaboration in distributed organizations. Next, the two subsystems most directly related to the problem of practice are discussed. The adaptive subsystem will explore the effect of change on employees in organizations, and the managerial subsystem will be used to focus on leadership and management in times of change. Although other factors, including additional subsystems and system outputs, are integral to Katz and Kahn's (1978) open systems model, this discussion will limit itself to the parts of the model most relevant to the problem of practice being addressed.

Note that despite being introduced more than 40 years ago, Katz and Kahn's (1978) open systems theory continues to influence researchers today. In outlining the evolutionary theory of change, Kezar (2001) notes that higher education institutions are open systems influenced by

changes in their external environments. In an application of Kezar's (2001) work, Baker and Baldwin (2015) use the evolutionary model to frame their case study of three liberal arts colleges, considering how these institutions respond to external influences to maintain homeostasis. Notwithstanding its age, the open systems theory (Katz & Kahn, 1978) remains relevant today in looking at change within higher education institutions. In the next section, I introduce the conceptual framework that illustrates the factors that contribute to the problem of practice.

Conceptual Framework

As mentioned previously, the current problem of practice focuses on low readiness for change in multicampus higher education institutions, especially institutions formed by a merger. Figure 1.2 illustrates the factors that contribute to this problem of practice in the current context. The foundation of this context is the establishment of a formal merger between two legal entities. Harman and Harman (2003) define a merger as the "combination of two or more separate organizations, with overall management control coming under a single governing body and single chief executive" (p. 30). In the higher education context, this outcome produces a unified institution with a single board, provost, chief financial officer, and president (Martin & Samels, 2017). After the merger, the institution may continue to operate multiple campus sites; such institutions are known as multicampus institutions (Norgård & Skodvin, 2002).

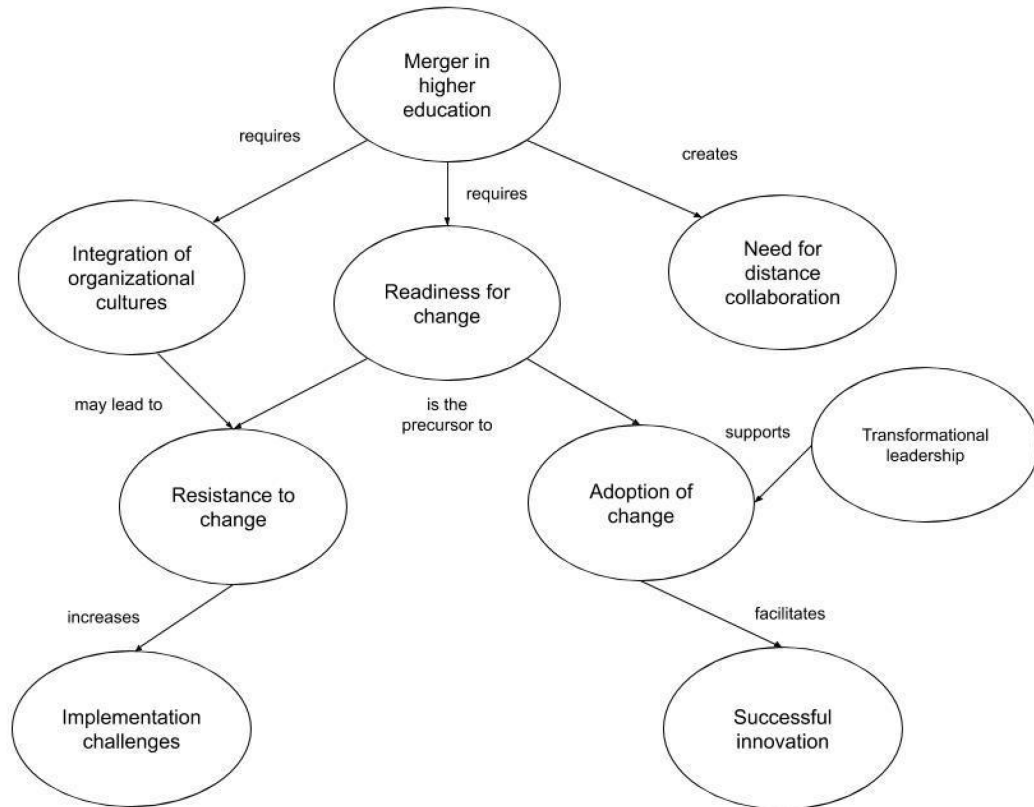


Figure 1. 2. Concept map of factors contributing to the problem of practice.

A merger and the subsequent integration of the two institutions can create significant change that may produce a “shock to both communities and their leaders” (Martin & Samels, 2017, p. 10). Along with the formal combination of infrastructures, governance, and administration that follow a merger between two organizations, this process also necessitates the integration of organizational cultures (Buono, Bowditch, & Lewis, 1985).

Organizational culture is defined as the explicit behaviors, artifacts, conscious contracts and norms, and implicit assumptions about an organization (Cameron & Quinn, 2011). In a seminal case study of the effect of a merger on organizational culture, Buono et al. (1985) claim that a merger between two institutions may create a cultural “collision” (p. 482) within the organizational suprasystem that can disrupt the operations across the whole of the newly-formed organization. Likewise, in examining the outcomes of mergers in the Australian higher education

context, Harman (2002) emphasized both the importance of and the challenges inherent in attempting to integrate two disparate organizational cultures during the process of a merger.

Multicampus higher education institutions work across both time and distance (Norgård & Skodvin, 2002). This multicampus organizational structure creates the challenge of distance collaboration and can include the formation of virtual teams. In examining the outcomes of a merger across five campuses in Norway, Norgård and Skodvin (2002) state that such distance inhibits social integration and hence, academic collaboration, among colleagues on different campuses. In exploring this aspect of the problem of practice, this literature synthesis examines the influence of distance collaboration on the effectiveness of virtual teams.

Additionally, the concept map includes the role of leadership during times of change. The hypothesis is that leadership style will affect, to some extent, employees' resistance to or readiness for change within an organization. Armenakis, Brown, and Mehta (2011) posit that leaders within an organization, acting as change agents, can create the environmental conditions that facilitate organizational readiness for change. According to Armenakis, Harris, and Mossholder (1993) readiness is "reflected in organizational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes" (p. 681). Taken together, the contributing factors outlined herein may inhibit an organization's ability to innovate in response to shifts in the external environment.

Synthesis of Research Literature

In this synthesis of literature, I explore the relevant research for each of the contributing factors in the conceptual framework via the lens of Katz and Kahn's (1978) open systems theory. First, I examine four external sectors that influence higher education institutions: the

sociocultural, political, economic, and technological sectors. Next, in looking at the organizational suprasystem, I discuss the effect of mergers on organizational culture and the challenge of distance collaboration in distributed organizations. Finally, I cover the two subsystems that relate directly to the problem of practice: the adaptive subsystem and the managerial subsystem.

External Sectors Affecting Higher Education Institutions

In Katz and Kahn's (1978) open systems theory, an organization is considered an open system, rather than closed, because inputs and outputs move across the boundaries of the system. Open systems theory posits five external sectors that influence an organization: the sociocultural environment, political and legal norms and statutes, the economic environment or market in which the organization operates, the technological environment, and its physical location (Katz & Kahn, 1978). I will address how the first four of these sectors affect higher education institutions at present.

The sociocultural sector. The first environmental sector that Katz and Kahn (1978) identify is the sociocultural sector. Organizations are subject to norms and assumptions of the cultural contexts in which they function (Katz & Kahn, 1978). In the case of higher education institutions in the United States, these norms have been shifting over the past decades. The most noticeable of these shifts is the greater accessibility of higher education to a more diverse body of students, especially traditionally underserved populations (Hussar et al., 2020). From 2000–2018, the percentage of students who completed high school and immediately enrolled in a two- or four-year postsecondary program rose 6% to 2.2 million students (Hussar et al., 2020). In 2016, the percentage of low-income students who enrolled in postsecondary education surpassed the percentage of middle-income students for the first time (McFarland et al., 2018). In terms of

race/ethnicity, undergraduate enrollment of Hispanic students increased substantially from 22% to 36% between 2000–2018 (Hussar et al., 2020).

In response to these demographic changes, colleges and universities have been offering more occupationally-focused degrees to undergraduate students over the past century (Brint et al., 2005). While students from higher socioeconomic statuses may go on to graduate school before seeking professional employment, students from lower socioeconomic statuses are seeking employment directly out of their undergraduate program (Brint et al., 2005). Along with such changes in academic programming, higher education institutions have shifted how they support student populations beyond the classroom and prepare them for career success. For instance, colleges may partner with community organizations to provide experiential learning opportunities, such as internships and service learning projects, to better prepare students for the job market (Baker & Baldwin, 2015). Likewise, institutional budgets appear to be moving some resources away from instruction toward additional investment in student services to support the persistence of economically disadvantaged students (Ehrenberg, 2012). These changes in program offerings, career support, and student services reflect how colleges and universities adapt in response to changes in the sociocultural sector.

The political sector. The legal and political environment is the second sector that affects how an organization functions (Katz & Kahn, 1978). Organizations are bound to adhere to the laws and regulations surrounding employment set by municipal, state, and federal authorities. For instance, state-funded colleges and universities must comply with funding restrictions placed upon them. Likewise, private institutions are also subject to the rules and regulations for operation within their jurisdictions, and failure to comply may carry hard consequences, such as large fines and civil litigation. For example, a group of elite universities faced a class action

lawsuit from prospective students and their parents in reaction to a recent college admissions bribery scandal (Levensen, 2019).

Relatedly, state and federal legislation can affect the operations and sustainability of a higher education institution. In an effort to advocate for favorable legislation and mitigate unfavorable legislation, higher education institutions may employ government relations representatives to ensure the institution's perspective is being considered by legislative bodies (Inside Higher Ed, n.d.). Higher education institutions appear to understand the value of playing an active role in framing legislation. While the exact number of institutions with dedicated government relations positions on staff is not available, higher education institutions appear to be prioritizing government relations positions in their budgets: in its 2019–2020 salary survey of 1,160 higher education institutions, the College and University Professional Association for Human Resources (2020) reported average salaries for chief external affairs officers (\$167,849), chief legal affairs officers (\$212,000), and chief campus federal government legislative liaisons (\$153,324). Similarly, in a simple search on Inside Higher Ed's online job board, 320 open job postings refer to the search term "government relations" (Inside Higher Ed, n.d.), and the American Association of State Colleges and Universities recently offered its annual Higher Education Government Relations conference in February 2021 (American Association of State Colleges and Universities, n.d.).

Even with government relations personnel in place, the performance of higher education institutions can still be affected by legislation. For instance, the federal Gainful Employment Rule in 2014 established detailed reporting requirements for institutions, especially private, for-profit schools, to demonstrate student return-on-investment (Kreighbaum, 2018). The legislation was a boon to state-funded and non-profit colleges and universities that were struggling to

compete with private, for-profit institutions (EAB, 2018). The Gainful Employment Rule was instituted by the Obama administration in an effort to protect the student as a consumer (Kreighbaum, 2018). However, with the shift to a more corporate-friendly administration in 2016, the U.S. Department of Education looked to rescind the rule via the proposed Prosper Act (i.e., H.R. 4508), freeing for-profit educational institutions to once again re-enter the higher education market with such programs (Kreighbaum, 2018). With the U.S. House of Representatives now under Democratic party control, the Prosper Act is no longer under consideration in the current session of Congress (Library of Congress, n.d.). As affirmed by Katz and Kahn's (1978) open systems model, organizations must monitor and react to the shifting political and legal environments in which they operate to ensure the institution's success.

The economic sector. The third environmental sector to affect organizations as posited by Katz and Kahn (1978) is economic: specifically, the influence of markets on an organization's input and outputs. From this viewpoint, economic considerations influence not only what students study but also whether they attend college at all. For instance, during the 1970's in the United States, the Department of Education shifted toward policies that offered more loans rather than grants (Brint et al., 2005). This shift in policy created a corresponding shift in the students' fields of study: during this same time period, lower socioeconomic status students chose more occupationally-focused majors to ensure they were able to pay back these loans with their future salaries (Brint et al., 2005). Whereas in the past, undergraduate students may have chosen to major in philosophy as a precursor to law school, by the year 2000 philosophy majors accounted for less than 1% of bachelor's degrees conferred in the U.S. (Brint et al., 2005). Overall, Brint et al. (2005) demonstrated a trend in undergraduate degree conferral over the 20th century away from traditional arts and sciences degrees toward more occupationally-focused majors, such as

business and engineering. This trend runs in tandem with a shift in demographics showing a greater diversity in the makeup of first-time, first-year students attending undergraduate programs in the United States (Bharucha, Goldstein, Grabois, Zimmer, & Van Zandt, 2012; Hoxby & Avery, 2013; McFarland et al., 2018). Despite this shift in degree conferrals, by 2020 it was estimated that 43 million borrowers in the United States owed \$1.5 trillion in student loans (Wall Street Journal, 2020).

Meanwhile, tuition for higher education degrees continues to outpace inflation (Ehrenberg, 2012), and Brint et al. (2005) point out that a stronger economy historically correlates with lower higher education enrollments while weaker economic periods see higher enrollments. Macroeconomic conditions at the national level influence the microeconomics of institutions, and economic conditions can pose a challenge to the long-term sustainability of colleges and universities. In response to shifting economic conditions, 47 higher education institutions ceased operations between 2000 and 2016, in most cases due to the inability to attract enough students to remain open (Martin & Samels, 2017). Those institutions that survive may do so by shifting product offerings with market demands.

The technological sector. Information and technology are the fourth environmental sector in Katz and Kahn's (1978) open systems theory. Perhaps the greatest technological shift that has taken place in higher education is the rise of online learning. The United States Department of Education defines distance learning as "Education that uses one or more technologies to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously" (Poulin & Straut, 2016, p. 7). Comparing enrollments of post-secondary students at U.S. institutions of higher education, Poulin and Straut (2016) reported an increase of

363% in students enrolled in distance education for the twelve-year period 2002–2014. By the fall of 2018, 6.9 million students (35.3%) enrolled in higher education institutions took at least one distance education course, and 16.6% of the postsecondary student population was enrolled exclusively in distance education courses (National Center for Education Statistics, n.d.).

In the United States, public institutions tend to have a greater percentage of students enrolled in online courses than private institutions. For the 2016–2017 academic year, Seaman and Seaman (2018) reported that 68.9% of postsecondary students enrolled in at least one distance education course were at public higher education institutions. However, in recent years, private, non-profit institutions have shown significant growth in online enrollment, reporting 12.9% growth in student enrollment in distance education courses from the previous year in 2012–2013, and increases of 11.4% in both 2013–2014 and 2014–2015 from the previous academic years (Allen & Seaman, 2017). During that same time frame, private, for-profit institutions reported considerable decreases in online enrollments, the most dramatic of which was a decrease of 18%, or 191,300 students, from 2012 to 2015 (Allen & Seaman, 2017).

Note that in the spring of 2020, almost 90% of U.S. colleges and universities switched to emergency remote instruction in response to the COVID-19 pandemic (Online Learning Consortium, 2020). Even as campuses begin to reopen to in-person instruction, many students appear to want to continue taking advantage of the affordances of online learning: in a recent survey of 1,469 students at 856 institutions throughout the United States, 73% of respondents indicated that they would prefer to take some courses fully online after the pandemic (Kelly, 2021). Students in postsecondary education in the United States are increasingly being educated online, and the trend is a major technological influence on higher education institutions in the present period.

As demonstrated above, external sectors play a role in determining what inputs are available to higher education institutions, including students, faculty, and staff. These external sectors also affect the market's interest in the outputs (i.e., programs and students) produced by higher education institutions. In the next section, I turn to the internal factors that influence readiness for change in higher education institutions.

The Organizational Suprasystem: Maintaining Homeostasis

As illustrated in Katz and Kahn's (1978) open systems model, organizations operate among a variety of external sectors and via a set of internal systems. At the macro-level, an organization has a suprasystem that helps to define its boundaries with the outside world (Katz & Kahn, 1978). The organization is constantly interacting with its external environment, and among the characteristics of an open system is a tendency toward homeostasis. Katz and Kahn (1978) define homeostasis as a system's tendency to make continual adjustments to maintain a steady state. Without homeostasis, an organization will devolve due to negative entropy and eventually fail to survive (Katz & Kahn, 1978). Pertinent to this discussion, I consider three factors relevant to organizations at the suprasystem level: first, the relationship between organizational culture and organizational effectiveness; second, the effect of mergers on organizational culture; and third, the challenge of distance collaboration in distributed organizations.

Organizational culture and organizational effectiveness. Before considering how mergers influence organizational culture, the relationship between organizational culture and organizational effectiveness should be discussed. As articulated in the problem of practice, within organizations, competing values may hinder organizational effectiveness (Cameron & Quinn, 2011). In an effort to diagnose cultures within organizations, Cameron and Quinn (2011) created the Organizational Culture Assessment Instrument (OCAI). The researchers' use the

OCAI to visualize organizational culture profiles by considering two continua that create four graphic quadrants (see Figure 1.3). The vertical continuum ranges from flexibility and discretion at the top to stability and control at the bottom. In other words, organizational cultures that trend toward the top of the continuum may be described as versatile and pliable while those organizational cultures that veer toward the bottom are steadier and more durable (Cameron & Quinn, 2011). The horizontal continuum ranges from internal focus and integration on the left to external focus and differentiation on the right. Internal focus can be seen as promoting organizational cohesion through an emphasis on internal relationships, and external focus denotes an organization that prioritizes interactions with entities outside their boundaries, be they customers or competitors (Cameron & Quinn, 2011).

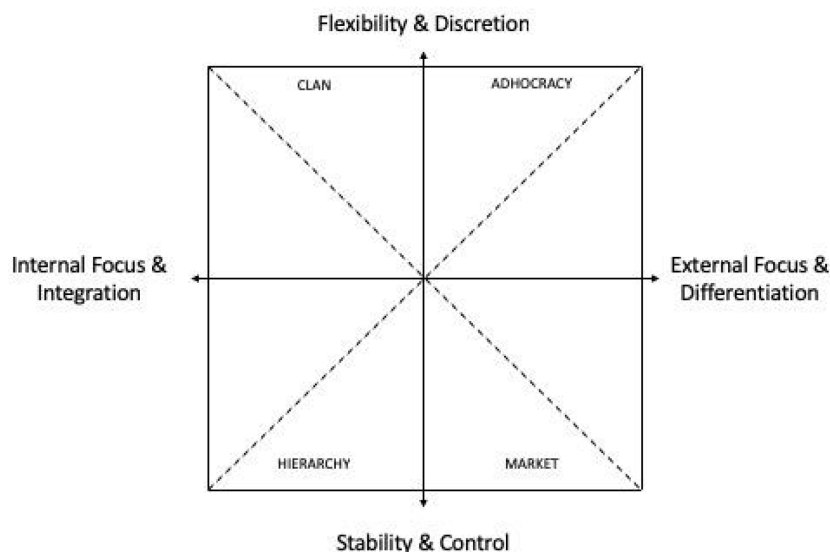


Figure 1. 3. The competing values framework of organizational cultures. Adapted from Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework, by K. S. Cameron and R. E. Quinn, 2011, p. 39. Copyright 2011 by Jossey-Bass.

In an older study conducted by Cameron and Freeman (1991), the researchers focused on higher education institutions and compared the organizational culture profiles of these institutions with nine dimensions of organizational effectiveness. Cameron and Freeman

administered a survey to administrators, faculty chairs, and trustees ($N = 3,406$) from 334 higher education institutions across the United States. The authors controlled for three variables: enrollment size, public or private control, and the existence of graduate programs. The survey items included an early form of the Organizational Culture Assessment Instrument adapted for the higher education context as well as items measuring organizational effectiveness on nine dimensions. See Table 1.1 for a comparison on which types of organizational cultures had the highest score for each dimension of organizational effectiveness.

Table 1. 1 *A Summary of Which Culture Scored Highest on Each Dimension of Organizational Effectiveness*

Dimension of Effectiveness	Culture Scoring Highest*
1. Student educational satisfaction	Clan
2. Student academic development	Adhocracy
3. Student career development	Adhocracy
4. Student personal development	Clan
5. Faculty and administrator employment satisfaction	Clan
6. Professional development and quality of the faculty	Adhocracy
7. System openness and community interaction	Adhocracy
8. Ability to acquire resources	Market
9. Organizational health	Clan

Note: *The highest scoring culture was significantly higher ($p < .05$) than at least one other culture on each dimension of effectiveness. Comparison of organizational culture to organizational effectiveness for 334 higher education institutions. Adapted from “Cultural Congruence, Strength, and Type: Relationships to Effectiveness,” by K. S. Cameron and S. J. Freeman, 1991, *Research in Organizational Change and Development*, 5, p. 45. Copyright 1991 by JAI Press Inc.

For the bulk of the effectiveness dimensions, clan and adhocracy cultures scored highest, with the market culture only scoring highest for ability to acquire resources. Notably, the hierarchy culture did not score highest for any organizational effectiveness dimension, which might indicate that this organizational culture does not support organizational effectiveness in the

higher education context based on this model. This finding is of interest since Cameron and Freeman (1991) found the hierarchy culture to be the second most dominant culture among the higher education institutions studied, after the clan culture. However, what is noticeably lacking in this study is the voice of staff members, both in the respondents to the survey as well as dimensions of organizational effectiveness which focused upon students, faculty, and administrators.

A more recent study in the healthcare context also used Cameron and Quinn's (2011) OCAI to examine the relationship between organizational culture and organizational effectiveness (Gregory, Harris, Armenakis, & Shook, 2009). Gregory et al. (2009) considered the mediating effect of employee satisfaction on the organizational culture-effectiveness relationship. The authors hypothesized that organizations with "balanced" culture profiles, representing all four quadrants equally, would have higher organizational effectiveness. This hypothesis is grounded in the notion that organizations should have no blind spots impeding effectiveness. Gregory et al. (2009) surveyed the top management teams of 99 hospitals based in the United States. They used employee and physician satisfaction to measure the mediating variable, and they measured organizational effectiveness via two measures: hospitals' management of controllable expenses and their patient satisfaction rates. Like the Cameron and Freeman (1991) study, researchers found a positive relationship between hospitals with a clan organizational culture and their patients' satisfaction. Gregory et al. (2009) likewise found a higher patient satisfaction for hospitals with balanced cultures. They found no significant relationship between culture type and controllable expenses.

Gregory et al. (2009) assert that "organizations with balanced cultures have a distinct advantage in managing environmental shifts" (p. 674). If the organizational culture veers too

much into one quadrant, that could impede the organization's ability to react to changes in the external environment. However, both studies found a relationship between the clan culture and student satisfaction in the higher education context (Cameron & Freeman, 1991) and patient satisfaction in the healthcare context (Gregory et al., 2009). Therefore, for education institutions, a cultural profile that emphasizes the clan and adhocracy cultures may lead to greater organizational effectiveness (Cameron and Freeman, 1991). Next, I discuss what happens when two existing organizational cultures are integrated via a merger.

The effect of mergers on organizational culture. Much research has been conducted on the effect of mergers and acquisitions in the corporate sector. In a classic case study of a merger between two banks, Buono et al. (1985) compared the organizational culture before and after the merger by conducting interviews and surveys with employees from both banks. Buono et al. (1985) found that the dominant culture of one bank subsumed that of the other, despite the fact that both banks entered into the merger with equal status. The dominance of one organizational culture over another led to decreased satisfaction on the part of those employees whose culture had been lost, including their expressing less commitment to the organization, lower perceptions of job security, and less perceived opportunity for promotion (Buono et al., 1985).

Research has also been conducted on mergers in the higher education context. Depending on the type of merger, newly-formed institutions may struggle with achieving post-merger integration or what Martin and Samels (1994) call a "coherent educational community" (p. 229). In Europe and Australia, national governments forced involuntary mergers between smaller higher education institutions in an effort to pool resources and reduce the total number of institutions across the country (Harman & Harman, 2003; Skodvin, 1999). Among the many typologies of mergers and acquisitions, Goedegebuure (1992) outlined the difference between

horizontal mergers, which take place between two entities with similar educational offerings, and *vertical* mergers, which combine entities with diverse program portfolios. In the involuntary mergers described above, oftentimes the merged schools had vastly different expertise and pedagogical approaches (Harman, 2002; Skodvin, 1999). For instance, in Australia, amalgamations were often forced between research-oriented universities and teaching-focused colleges of advanced education (Harman, 2002).

The forced integration of disparate organizations may lead to tension in creating policies for the new institution (Harman, 2002; Martin & Samels, 2017). While such mergers may be seen as successes from the financial or administrative side, by considering pre- and post-merger organizational cultures, it soon becomes apparent that integrating disparate institutions is difficult and may hinder academic collaboration in the new institution (Evans, 2017; Harman, 2002; Leslie et al., 2018). In a retrospective analysis of a merger that took place between two higher education institutions in 2001, Leslie et al. (2018) conducted a qualitative study based on interviews conducted more than 10 years after the merger. The authors employed purposive sampling to select 20 participants who were senior administrators and faculty members from the merged institution. The researchers considered two questions: first, what were the unanticipated challenges to the merger, and second, could the merger be considered a success from financial, programmatic, and cultural perspectives. Interviews were based on 18 open-ended questions framed around Seo and Hill's (2005) four stages of a merger: 1) pre-merger, 2) initial planning and formal combination, 3) operational combination, and 4) stabilization. Interviews were recorded, transcribed, and coded using qualitative content analysis. Three barriers to integration were identified: inadequate communication, inadequate leadership, and ineffective integration of systems and processes. While the merger had achieved some of the financial goals by creating

economies of scale for the newly formed institution, Leslie et al. (2018) concluded that the academic cultures of the two institutions were not successfully integrated due to the three barriers identified.

As described in the case study of the merger of the two banks (Buono et al., 1985), many mergers set up a disparity between the two organizations as one culture dominates over another. The disparity creates an environment in which employees of the acquired organization begin to feel like they have been “colonized” (Leslie et al., 2018, p. 183). There can be an unequal power dynamic that exists between the larger or more prestigious organization and its partner institution. In higher education, the power dynamic may be based on the status of teaching faculty versus research faculty, as was the case in Australia (Harman, 2002) and Norway (Norgård & Skodvin, 2002). Conversely, faculty from the more prominent institution may take on perceived attitudes of disdain. As one administrator reported after a merger between two institutions in the United States, some faculty members expressed feeling that they had been saddled with a “second-rate university” (Leslie et al., 2018, p. 388).

Additionally, there may be a loss of identity for faculty and staff of the acquired institution that can also affect students and alumni (Leslie et al., 2018). Incompatibility of the missions of the merged institutions may also create tension that leads to employee dissatisfaction, burnout, and eventual turnover (Evans, 2017). For instance, in a merger between a *grande école* (i.e., premier higher education institution) that absorbed a nearby research institute in France, employees of the research institute likened their experience to a type of mourning (Evans, 2017). Even many years after the legal conclusion of a merger, feelings of loss can linger (Leslie et al., 2018). In the case of multicampus higher education institutions formed

by mergers, the creation of virtual teams presents another challenge toward fully integrating the organizational cultures.

The challenge of distance collaboration. As mentioned previously, distance between campuses in a merged higher education institution may inhibit the organization's ability to create a cohesive community (Norgård & Skodvin, 2002). As globalization has increased the need to work virtually across locations, researchers have begun examining elements of virtual collaboration¹. In an examination of virtual project teams at five different companies working across the US, Japan, and Europe, Evaristo, Scudder, Desouza, and Sato (2004) identified 10 dimensions of distributedness: trust, perceived distance, level of dispersion, synchronicity, types of stakeholders, complexity, culture, type of project, systems methodology, and existence of policies/standards. Evaristo et al. (2004) noted the facilitating role of technology can be a means to diminish the perceived distance of members of virtual teams. However, the authors also emphasized that technology may not be enough to build productive virtual teams, particularly if trust does not exist between the parties. A lack of trust may threaten an organization's ability to be effective and productive because team members feel the need to monitor each other's work more carefully (Evaristo et al., 2004). As the authors state: "...when a group does not trust each other and does not know each other, they may engage in so much monitoring that it overwhelms actual productive work to an extent that no productive work happens" (Evaristo et al., 2004, p. 183).

¹ Note again that at the time of this writing, many staff members of higher education institutions in the United States are working remotely due to shelter in place orders in response to the COVID-19 pandemic. As some employees start returning to campus while others continue working from home, the need for virtual collaboration may increase.

In an examination of the relationship between trust and innovativeness in virtual teams, Pournaras and Lazakidou (2008) claim that virtual distance may be more rooted in socio-emotional factors, rather than geographic distance. The authors highlight five types of distance: (a) spatial, (b) temporal, (c) relational, (d) cultural, and (e) social (Pournaras & Lazakidou, 2008). The authors claim that face-to-face interaction can minimize the perceived distance among members of virtual teams. The importance of face-to-face meetings was also highlighted by Norgård and Skodvin (2002) in their case study of the merger of five higher education campuses in Norway. Norgård and Skodvin (2002) claimed that a lack of budget support for travel between the campuses was linked to an increased inability for members of the academic community to collaborate and feel integrated as one organization.

In this section, I examined multicampus higher education institutions at the suprasystem level, looking at the integration of organizational culture in merged organizations and the challenge of distance collaboration in distributed organizations. Research indicates that it can take many years after a merger for successful integration of the organizational cultures (Leslie et al., 2018; Skodvin, 1999). Likewise, establishing trust among team members seems to be an important element in the success of virtual teams working across distance (Evaristo et al., 2004; Pournaras & Lazakidou, 2008).

The Adaptive Subsystem: How Change Affects Organizations

When looking at change in organizations, the most relevant subsystem of Katz and Kahn's (1978) open systems theory is the adaptive subsystem. According to Katz and Kahn, organizations have a tendency toward homeostasis: as environmental conditions change, the organization must adapt to maintain a steady state. The adaptive subsystem has the responsibility to plan for changes in environmental inputs as well as to react to negative feedback from system

outputs. This section explores factors relating to change within organizations, both generally and within the context of higher education.

Readiness for change and resistance to change. Organizations and individuals may be resistant to change (Armenakis et al., 1993; Holt, Armenakis, Feild, & Harris, 2007; Lehman et al., 2002; Samaranyake & Takemura, 2017). Researchers have attempted to define and measure readiness for change, rather than resistance to change, at both the organizational and the individual level.

In the healthcare sector, for example, Lehman et al. (2002) defined the construct of organizational readiness for change as having four components: motivation for change, institutional resources, staff personality attributes, and organizational climate. Lehman et al. (2002) examined organizational readiness for change across a network of substance abuse treatment centers, using their own scale in a series of surveys given to center directors, center staff, and patients. They measured readiness for change in center staff and center directors, and they measured patient satisfaction as a means of quantifying the success of change efforts. The researchers found slight mismatches between staff perceptions of readiness for change versus directors' perceptions of readiness for change, with directors indicating that their centers had higher readiness for change than the staff working in those centers. There was a moderate positive correlation ($r = 0.36, p < .01$) between staff autonomy and patient satisfaction that may indicate that staff autonomy leads to better change outcomes. Lehman et al. (2002) concluded that organizations with climate issues, such as the lack of clear missions or unstable financial environments, may have less organizational readiness for change.

After conducting a literature review of 32 existing measures, Holt et al. (2007) developed and piloted a scale for their construct of readiness for change. The scale measured five

subconstructs: (a) self-efficacy; (b) personal valence, or individual belief that change is necessary; (c) senior leader support; (d) organizational valence, or shared belief that change is necessary; and (e) discrepancy between the status quo and the proposed change. The researchers distributed their survey twice to test the instrument: first, with 264 employees of a national military organization and, second, with 228 employees of a private sector information technology firm that had recently experienced a merger. As a pilot study, the authors found some overlap between the constructs of personal valence and organizational valence. The most salient finding was that those employees who had active roles in planning for change displayed higher readiness for change. This finding appears to be tied to the importance of staff autonomy found by Lehman et al. (2002) previously: the more employees have ownership over the change, the higher their readiness for change.

In organizational behavior research, organizational readiness for change is frequently investigated in relation to other relevant organizational constructs. For example, researchers in Sri Lanka examined the relationship between readiness for change and both organizational commitment and trust in peers and management (Samaranayake & Takemura, 2017). In a survey of 185 employees of a Sri Lankan manufacturing firm, the authors found a weak, but significant, positive correlation between readiness for change and organizational commitment ($r_s = 0.22, p = 0.01$) and a moderate positive correlation between readiness for change and trust in peers and management ($r_s = .34, p = 0.00$). The second finding matches similar positive correlations between readiness for changes and trust in peers and management found previously (Oreg, Vakola, & Armenakis, 2011; Weber & Weber, 2001).

Change in higher education institutions. In investigating the effect of change in higher education, researchers often focus on the introduction of education technology or the curricular

change process, especially from the faculty perspective. For example, Blin and Munro (2008) investigated faculty's uptake of a new learning management system at an Irish university through the lens of Engeström's (1987, 2014) activity theory. The authors monitored usage statistics of the newly-introduced learning management system for one academic year and triangulated these data with a survey of 143 users of the system. The researchers concluded that very little transformation took place, with only 43.2% of faculty seeking out training on the new tool and most faculty simply transferring existing instructional techniques into the new learning management system. These results may suggest that for significant change to occur in higher education, more intentional change management must be planned beyond than the offering faculty development workshops.

Cooper (2017) conducted a qualitative study documenting the process of revising the curriculum of a bachelor's degree program in youth work at a university in Australia. Using action learning, a methodology similar to grounded theory in which findings emerge from the data collected, Cooper focused on barriers to change in this setting. In her data analysis, Cooper noted a tacit conflict between the pedagogical philosophy espoused by university faculty and staff revising the curriculum, which was social constructivist in nature, and the implicit philosophy embedded in university systems, which was more behaviorist-oriented. The act of inputting learning outcomes into the university course catalog raised awareness that the university's systems did not adhere to the pedagogical approach used to revise the curriculum. Equally important, the increasing use of "casual labor," or what is known in the United States as non-tenure track faculty, also posed challenges in getting curricular renewal efforts done in a timely manner.

In a case study of what the authors called “radical curricular change” (Galea, Fried, Walker, Rudenstine, Glover, & Begg, 2015, p. S17) at Columbia University’s School of Public Health, a team of faculty and administrators reported on the two-and-a-half year process by which the graduate school redesigned its master’s degree in public health (Galea et al., 2015). The team detailed a timeline that included setting up a website that collected feedback from over 400 internal and external stakeholders. They also emphasized the critical importance of commitment of time and budgetary resources from leadership, including faculty monetary incentives for participation. Unlike Cooper (2017), Galea et al. (2015) did not appear to encounter as many structural issues or challenges, perhaps due to the full support of the dean of the school. In both cases, these studies focused primarily on the faculty perspective without much reporting on any implementation challenges, particularly on the operational side as opposed to the instructional domain. Many case studies have investigated how change affects faculty members (i.e., de Freitas & Oliver, 2005; Reyna, 2016; Yeo, Bennett, McNichol, & Merkley, 2015), yet, my literature review failed to find empirical research into the how change affects staff members in higher education settings.

The Managerial Subsystem: Leadership in Times of Change

According to Katz and Kahn (1978), there is a managerial subsystem within an organization that can be observed at every level. The role of the managerial subsystem is threefold: to direct the organization, to manage conflict between other subsystems, and to coordinate activities across the organization. The managerial subsystem consists of two substructures: a *regulatory mechanism* that monitors the performance of the organization as it relates to its external environment, and an *authority structure*, in which decision making resides. The authority structure of an organizational can range from strict authoritarianism to

representational democracy. In what ways does the managerial subsystem respond to and affect the organization in times of change? From the field of general management, researchers have defined and examined many management styles. One style that may be most relevant to this discussion is transformational leadership.

In her overview of the cultural conflict that results from many mergers in higher education, Harman (2002) highlighted the need for “visionary, transformational leadership” (p. 110) during these mergers, yet she did not empirically investigate such leadership. Later, in an investigation of a proposed merger of two art schools in the United Kingdom, Locke (2007) also called for the need for a transformational leadership style, yet there has been little research in the higher education context regarding the role of transformational leadership to date. Bass (1990) defined transformational leadership as having four components: charismatic role modeling, inspirational motivation, intellectual stimulation, and individualized consideration.

While the term “leadership” may lead readers to think the style may only be used by managers at the top of the institutional hierarchy, this leadership style could be diffused throughout an organization. In an investigation of transformational leadership in times of change, Carter et al. (2012), measured the relationship between transformational leadership and relationship quality among low-level managers in two Chinese manufacturing firms during times of incremental change. The authors found a statistically significant correlation ($\gamma = .77, p < .001$) between transformational leadership characteristics in low-level managers and relationship quality between the managers and their employees. Carter et al. (2012) concluded that both the leadership style and the positive relationship quality contributed to better employee performance in times of frequent change.

Harman (2002) and Locke's (2007) calls for transformational leadership styles during the process of mergers in higher education, may be implying that there is a high need for clear vision and communication from leadership to employees during times of change. Many qualitative researchers continue to focus on how leadership communication contributes to organizational effectiveness in times of change. For example, Thurab-Nkhosi (2018) examined the success of the implementation of a new blended learning policy at a university in Trinidad and Tobago. Her interviews with academic administrators, particularly department chairs who had been tasked with implementing the new policy, found that senior leadership had failed to clearly communicate the role of department chairs in the rollout of the new policy. Despite having defined the new policy very clearly and having set a timeline for implementation, only three out of seven departments had successfully met the timeline. The program chairs attributed lack of clarity regarding the policy, the timeline, and their role in implementing the policy as barriers to their ability to successfully implement blended learning on the campus.

In a qualitative study of leadership during a merger process in the higher education context, Kamarudin and Starr (2014) conducted a case study of the amalgamation of two disparate faculty departments at an Australian university. In semi-structured interviews with study participants, they reported a deep lack of trust of leadership among faculty members to the point that their distrust galvanized them to some extent against the leadership. According to the authors, faculty members became more socially bonded together in opposition to what they viewed as an autocratic leadership. Additionally, they reported on the emergence of informal leaders among the faculty who worked to ensure that faculty voices were heard during the change process. Across these studies, the researchers found that clear communication and the

establishment of trust between leaders and employees are critical elements to effective leadership in times of change.

Summary

Through this discussion, I have examined both external sectors and internal factors that affect a higher education institution's readiness for change. In terms of influence from the external environment, I covered four sectors within which an organization operates: the sociocultural, political, economic, and technological sectors. From my stance within the organization as a middle manager, it would be difficult to influence these external sectors. Therefore, in considering how to address the problem of practice, I will focus on those factors that are more actionable within the organization.

In this chapter, I illustrated that a merger between two higher education institutions is both a significant change itself and also that merged organizations face unique challenges that may inhibit their ability to adapt to changes in the external environment. By investigating the current external environment as well as empirical research into these topics, four main issues emerge as having critical influence on the organizational readiness for change of a multicampus higher education institution.

Firstly, an understanding of *organizational culture* may inform an organization's ability to innovate, maintain homeostasis (Katz & Kahn, 1978), and adapt to changes in the external environment. Organizations that possess a culture that emphasizes external relationships and flexibility may be more inclined to innovate (Cameron & Quinn, 2011). However, organizational effectiveness may be better served by organizational cultures that prioritize internal relationships over external (Cameron & Freeman, 1991; Gregory et al., 2009).

Relatedly, case studies examining mergers in higher education have a recurring theme regarding the *challenge of integrating disparate organizational cultures* as administrators tend to focus initially on organizational infrastructure and economies of scale before turning to the human side of the merger (Buono et al., 1985; Harman 2002). Even 10 years after the merger, Leslie et al. (2018) found significant resistance from faculty and staff to consider themselves part of an organization with a new identity. Likewise, in her case study of a merger between a research institute and a French *grande école*, Evans (2017) suggested that feelings of disappointment and resistance to integration came primarily from participants' perception of a conflict between the mission of the two institutions.

Thirdly, *trust* plays an important role in organizational effectiveness, especially in distributed organizations such as a multicampus higher education institution. As Evaristo et al. (2004) illustrated, low trust among employees working together on virtual teams can lead to additional monitoring, which slows down productivity and organizational effectiveness. Conversely, strong trust across virtual teams can minimize perceived distance among team members, which in turn may strengthen organizational outcomes (Pournaras & Lazakidou, 2008).

Lastly, the *leaders of the organization* are viewed as having strong influence on organizational readiness for change (Carter et al., 2012; Lehman et al., 2002). For example, a critical element of a transformational leadership style is clear communication of a future vision for the organization (Bass, 1990). Without a clear mission and vision, organizations may find low readiness for change among their employees (Lehman et al., 2002). On the other hand, when employees see themselves as having input into the future directions of the organization, they appear to be more likely to have readiness for change (Carter et al., 2012, Lehman et al., 2002).

An examination into leadership styles and perceptions as well as an assessment of organizational culture may lead to insights into one higher education institution's organizational readiness for change. Through a mixed methods approach, I will explore both the perceived goals and outcomes of the merger from the perspective of senior leadership, as well as the perceived organizational culture of staff working across two campuses of a multicampus higher education institution. By gathering these qualitative and quantitative data, I hope to establish a sense of the current organizational culture within the institution and to determine the organizational culture that staff members wish to see in the future.

Chapter Two

Empirical Examination of the Factors and Underlying Causes

In the previous chapter, I synthesized extant literature related to the contributing factors of a problem of practice. In determining which of these factors might be actionable, I have decided to focus on internal factors rather than external influences because external conditions would be difficult to change. Hence, the empirical examination described herein focuses on two separate but related factors. First, I investigate the viewpoint of senior administrators with regard to the goals and outcomes of a merger in the higher education context. Second, I triangulate these viewpoints with a broader look at the perceived organizational culture of the institution as viewed by staff members. Combined, these data sets aim to provide empirical evidence of factors contributing to low organizational readiness for change in a multicampus higher education institution.

Context of the Study

This study takes place at a multicampus higher education institution in the United States formed in 2010 through a merger between two existing institutions. One campus is an elite liberal arts college in New England founded in 1800 and frequently ranked as one of the top ten liberal arts colleges in the country, and the second campus is a professional graduate school in coastal California, founded in 1955 with an international focus. Prior to the merger, the West Coast graduate school had been struggling financially for many years and sought a partner institution that could ensure its viability. The liberal arts college, known hereafter as the “East Coast campus,” acquired the graduate school in what started as an affiliation in 2006. During the affiliation phase, the graduate school maintained autonomy for its accreditation, financial chart of accounts, administration, and operations. Upon full integration in 2010, the whole institution

fell under one accreditor, one financial chart of accounts, and the same 501(c)3 not-for-profit status. For the purposes of this study, the acquired graduate school will be called the “West Coast campus.”

Purpose of the Study

The purpose of this study is to examine how tensions between perceived organizational cultures in a multicampus higher education institution may hinder the organization’s ability to innovate. To explore these issues, I investigated both the merger and the resulting organizational culture of the newly-formed institution using a mixed methods approach. This study includes senior leadership’s perceptions revealed through semi-structured interviews to shed light on the process of the merger and its outcomes. Additionally, staff input from both campuses collected through an online survey instrument explores the current and aspirational organizational cultures as perceived by staff members.

Merged higher education institutions may struggle to create a well-integrated organization or what Martin and Samels (1994) call a coherent educational community. Without such integration, employees of the new institution may not exhibit readiness for change (Lehman et al., 2002). This study used both qualitative and quantitative methods to identify the organizational culture(s) of the institution. The premise is that a well-integrated organization would be reflected in similar perceptions of the organizational culture across members of the organization. Cameron and Quinn (2011) define organizational culture as the explicit behaviors, artifacts, conscious contracts and norms, and implicit assumptions about an organization. Organizational culture may influence organizational innovation, which can be defined as an organization’s ability to take risks, try new processes, or develop new products (Obendhain &

Johnson, 2004). In the case of a higher education institution, such products might be new academic programs or new modes of instruction.

Research Questions

This needs assessment seeks to answer four interrelated questions. The first question focuses on the goals and outcomes of the merger between two higher education institutions as perceived by senior administrators. The remaining questions examine elements of organizational culture within a multicampus institution. The four questions are articulated as follows:

RQ1: In what ways do senior administrators perceive that the goals of the merger have been achieved or not been achieved?

RQ2: How do the perceived organizational culture profiles of staff at the East Coast campus and staff at the West Coast campus compare?

RQ3: How do the perceived organizational culture profiles of staff in academic departments and staff in operations departments compare?

RQ4: Across the whole institution, how do the perceived current organizational culture profile and the perceived aspirational organizational culture profile compare?

Method

This section outlines the procedures followed in the needs assessment, including the participants, the instrumentation used, and the data collection and data analysis procedures employed. As stated previously, this study used a mixed methods approach to examine the problem of interest. Qualitative data has been collected via interviews with the senior leadership team of the institution. Quantitative data was collected via an online survey of staff from both the East Coast and the West Coast campuses. Taken together, these data help to provide a more holistic picture of the institution than would be possible using one method alone.

The choice to employ a mixed methods design in this study is rooted in the pragmatist paradigm that rejects dichotomies such as subjectivity versus objectivity, enabling the researcher to choose the methods that make the most sense to explore the topics of interest (Johnson & Onwuegbuzie, 2004). Johnson and Onwuegbuzie (2004) suggest that a mixed methods approach may help the researcher compensate for the weaknesses of using qualitative or quantitative methods in isolation. For instance, qualitative methods may enhance understanding within the local context, while quantitative methods can strengthen the study's credibility for external stakeholders and allow greater generalizability of the results (Johnson & Onwuegbuzie, 2004). Additionally, a convergent design such as this one, in which both quantitative and qualitative data are collected simultaneously, allows the researcher to compare the results of both strands to create a greater understanding of the overall research focus (Creswell & Plano Clark, 2018). In the current study, the qualitative interviews with senior administrators reflect the deep perspective of leadership, while the quantitative survey responses allow for an examination of the broader perceptions of staff members throughout the organization.

Participants

As this study intends to hear from both institutional leadership and a wide cross-section of staff from both campuses, purposive sampling techniques were used to recruit participants. For qualitative data, senior administrators on both campuses were invited to participate in semi-structured interviews, and for a wider sample of quantitative data, staff from particular departments on both campuses were included.

Interview participants. A pool of interview participants was identified using purposive sampling, focusing on senior leadership on the East Coast campus (the institution's president and her cabinet of senior administrators) and academic administrators and department managers on

the West Coast campus. The decision to interview senior administrators and managers was made as organizational culture is highly influenced by leadership within an organization (Buono et al., 1985; Cameron & Quinn, 2011). The original pool of interview candidates included 17 individuals on the East Coast campus and 10 on the West Coast campus, for a total of 27 potential participants identified by the researcher.

Initial invitations to participate in the interviews were sent by email, starting with senior-most leadership (i.e., the president and her direct reports and the senior administrator on the West Coast campus). All of the participants who were initially invited agreed to be interviewed, and therefore, after securing interviews with eight members of senior leadership, additional invitations were not initially extended.

Frequently, during the initial round of interviews, administrators mentioned that valuable input could be obtained from the former president and the former provost of the institution. Therefore, in a case of snowball sampling, I interviewed both of these individuals in addition to the eight current members of the administration. I considered these 10 interview participants to represent sufficient saturation for the qualitative data set: as the senior-most leadership of the institution, these participants would have the most insight into the strategic decisions behind the merger and its outcomes. For a complete list of interview participants, see Appendix A.

Ten current and former senior administrators participated in the interviews, five female and five male. Seven of the participants currently work on the East Coast campus. One interviewee, who has since retired, worked on both campuses throughout her career. One participant currently works at the West Coast campus, and two participants no longer work for the organization.

After the merger, the institution implemented a system of matrix management in which most operational and administrative functions have been “anchored” or centralized at the East Coast campus. Therefore, the majority of senior leaders are based at this site. The sample of interviewees included the current and immediate past presidents of the institution, the current and immediate past provosts, vice presidents for finance, human resources, and communications, the general counsel, and an associate provost, all of whom currently or formerly worked on the East Coast campus. The vice president for academic affairs (e.g., the senior administrator) of the West Coast campus was also interviewed.

Interviews were scheduled to be no longer than 30 minutes in duration, and where possible, were conducted in person. When it was not possible to conduct the interview in person, the sessions were conducted by phone. All interview participants received an email in advance outlining the purpose and the guidelines for the interview, including the participant consent form. The confirmation email reiterated that participation in the study was voluntary and that all data collected would be de-identified. I asked participants for permission to audio record the interviews with an understanding that they could deny permission to record. Participants were asked to read over the consent form in advance and be prepared to sign it at the outset of the interview. In some cases, participants returned the signed consent form electronically in advance, while other participants gave the interviewer their consent form at the beginning of the interview.

Survey participants. In addition to senior administrators, some staff members across both campuses were invited to complete an online survey. In 2017, the institution reported having 1,544 employees, including all faculty and staff members at both campuses (ModernThink, 2018). Purposive sampling identified 427 staff members from across the institution. Staff must have been in regular positions, as opposed to temporary positions, to be

included in the sample. Faculty members were not invited to participate as the problem of practice focuses on staff members' readiness for change.

The sub-populations of interest were staff members and administrators who work in central administration departments on the East Coast campus, and academic and operations departments on both campuses. The choice to select employees from central administration, academic, and operations departments aligns with the focus of this study, which examines obstacles that hinder innovation in the higher education context. Using the institutional directory, departments were chosen for inclusion based on meeting one of the following criteria: (1) the department had employees working on both campuses, such as human resources and information technology; (2) the department was centralized on the East Coast campus and was responsible for supporting employees on both campuses, such as the provost's office; (3) the department has employees who do similar work to counterparts on the other campus, such as the career advisers on each campus. For a complete list of departments included in the sample, see Appendix B.

Prior to opening the survey, approval to administer the instrument was received from the vice president for human resources of the institution. A preview email was sent to prospective participants explaining the purpose of the survey and the voluntary nature of their participation. Subsequently, all eligible participants received a system-generated email with a unique link to the survey. The email reiterated that participation in the survey was voluntary and that survey data would only be reported on an aggregate basis.

Of the 427 staff invited to complete the survey, 208 individuals opened the survey, 145 individuals answered at least one question, and 120 respondents completed all survey items, including demographic questions to identify their location, department, job role, gender, and age range. The response rate for completed surveys was 28%. For a breakdown of participant

characteristics, see Table 2.1. The majority of participants were female (61%), at least 40 years old (66%), and based at the East Coast campus (68%).

Table 2. 1 *Survey Respondent Characteristics (N = 120)*

Participant Characteristic	<i>n</i>	%
Gender		
Female	74	61%
Male	32	27%
Non-binary	2	2%
Declined to state	12	10%
Age		
18-24 years old	1	1%
25-39 years old	24	20%
40-55 years old	46	38%
Older than 55 years old	34	28%
Declined to state	15	13%
Location		
East Coast campus	82	68%
West Coast campus	37	31%
Remote	1	1%
Employed before or after merger		
Before merger	58	48%
After merger	60	50%
Declined to state	2	2%

In terms of location, the West Coast campus employs approximately 10% of the total employees of the institution. Therefore, the higher response from West Coast employees could be seen to slightly skew any results. Regarding gender, the results reflect higher female participation as compared to the gender makeup of staff members at the institution, which is reported as 55% female and 45% male for the 2018–2019 academic year (A. Langrock, personal communication, September 23, 2019). However, the gender breakdown of participants aligns closely with that of the West Coast campus, which is 63% female and 37% male, according to this same institutional research data.

In terms of year of initial employment, 57 respondents (48%) started working prior to the merger (i.e., before 2010). Sixty employees (50%) started during 2010 or later, which is considered post-merger for the purposes of this study. In other words, it is almost an even split between those employees who arrived at the institutions before the merger and those who arrived after. Two out of 120 respondents (2%) declined to state their year of employment. The longest tenured employee started in 1980, and the most recently hired employee started in 2019. Note that because a nonprobability sampling technique (i.e., purposive sampling) was used for both the interview participants and the survey participants, this study has limited generalizability to the larger population of staff members working in higher education institutions.

Measures and Instrumentation

To answer the first research question, a semi-structured interview protocol was adapted from Leslie et al. (2018). To investigate the remaining three research questions, Cameron and Quinn's (2011) Organizational Culture Assessment Instrument was used.

Semi-structured interviews. In order to answer the first research question, an interview protocol was adapted from the work of Leslie et al. (2018) who had performed a case study of a merger between two higher education institutions. The interviews in the previous study were conducted with senior administrators, trustees, and senior faculty members 10 years after the merged institution had been formed. As it has been nine years since the merger at the current institution under study, this interview protocol seemed appropriate for use in this context.

The interview protocol includes 18 open-ended questions organized by phases of a merger including the pre-merger stage, the initial planning and formal combination stage, the operational combination stage, and the stabilization stage (Seo & Hill, 2005). By examining leadership's perceptions of each stage of the merger process, a richer understanding of the

contributing factors that led to present outcomes might be obtained. In order to keep to time constraints, six of the 18 questions were kept in reserve as follow up questions by the interviewer. For the complete interview protocol, see Appendix C.

Organizational Culture Assessment Instrument (OCAI). Survey data were collected using a modified version of the Organizational Culture Assessment Instrument (OCAI) developed by Cameron and Quinn (2011). This instrument has been in use since 1991 to measure organizational culture profiles based on Cameron and Quinn's (2011) competing values framework. The framework illustrates organizational culture profiles by considering two continua that create four graphic quadrants representing four types of organizational cultures. As Figure 2.1 illustrates, clan cultures focus internally and value flexibility and discretion; there is an emphasis on collaboration in clan cultures. The adhocracy culture also possesses flexibility and discretion but has an external focus: adhocracy cultures value creating new things. Market cultures focus externally and value stability and control: organizations that display market cultures focus on achieving goals and beating competitors. Lastly, hierarchy cultures focus internally and value stability and control. Predictability and efficiency are important goals within hierarchy cultures.

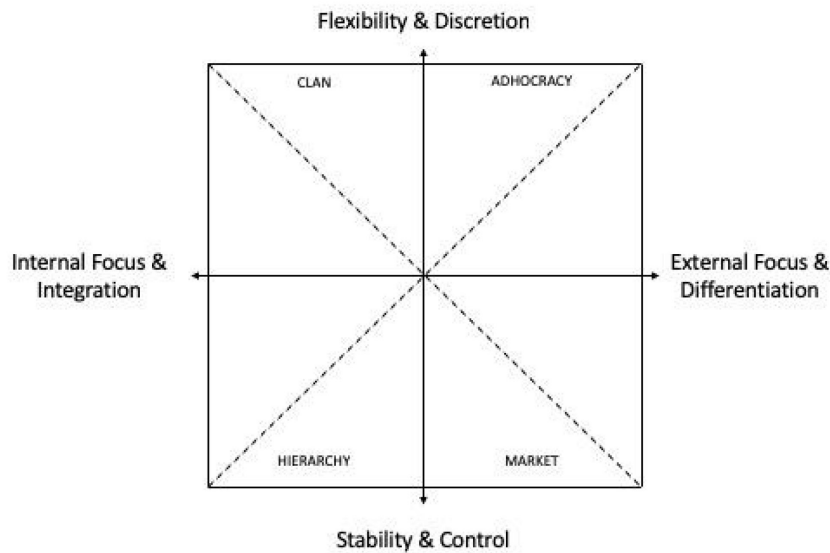


Figure 2. 1. The competing values framework of organizational cultures. Adapted from Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework, by K. S. Cameron and R. E. Quinn, 2011, p. 39. Copyright 2011 by Jossey-Bass.

The OCAI is made up of a series of six items, each with four illustrative statements. The six items measure six content dimensions of organizational culture. Cameron and Quinn (2011) define these content dimensions as follows:

- Dominant Characteristics: The dominant characteristics of the organization, or what the overall organization is like
- Organizational Leadership: The leadership style and approach that permeate the organization
- Management of Employees: The management of employees or the style that characterizes how employees are treated and what the working environment is like
- Organizational Glue: The organizational glue or bonding mechanisms that hold the organization together
- Strategic Emphases: The strategic emphases that define what areas of emphasis drive the organization's strategy

- Criteria of Success: The criteria of success that determine how victory is defined and what gets rewarded and celebrated (p. 173)

The four statements within each item represent the four types of organizational cultures defined by Cameron and Quinn (2011): clan, adhocracy, market, and hierarchy. Survey respondents assigned a point value to each of the four statements, so that the total across all four statements equaled 100 points.

Note that because this instrument was used in the higher education context, the term “organization” was replaced by the term “institution.” Likewise, some statements were adapted based on a version of the OCAI that was specifically used in the higher education context (Cameron & Freeman, 1991). For example, the fourth item of the general OCAI (Cameron & Quinn, 2011) states:

Organizational Glue:

- A. The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.
- B. The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.
- C. The glue that holds the organization together is the emphasis on achievement and goal accomplishment.
- D. The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important.

This item was slightly adapted for the higher education context as follows:

Institutional Glue:

- A. The glue that holds the institution together is loyalty and mutual trust. Commitment to this school runs high.
- B. The glue that holds the institution together is commitment to innovation and development. There is an emphasis on being first.
- C. The glue that holds the institution together is emphasis on achievement and goal accomplishment. A production orientation is commonly shared.
- D. The glue that holds the institution together is formal rules and policies. Maintaining a smooth-running organization is important here.

Respondents were asked to complete all six items twice. In the first round, survey takers answered the questions as they aligned with their feelings about the organization in the present moment. During the second round, respondents then considered how they would like to see the organization in five years' time. The survey instructions for the second round read: "Respond to these items based on how you think [the institution] should be in five years in order to be spectacularly successful, achieve its highest aspirations, become an outstanding example of high performance, outstrip the currently stated goals, or become the benchmark for higher education institutions." The first round of responses built the "present" organizational profile, and the second round of responses created an "aspirational" organizational profile. See Appendix D for the complete survey as administered.

Procedure

Data collection methods. This mixed methods approach includes both qualitative and quantitative data. In this section, I describe the data collection techniques employed for both the interviews and the survey.

Interviews with senior administrators. As described previously, semi-structured interviews were conducted with senior administrators on both campuses following the interview protocol adapted from Leslie et al. (2018). Six of the 10 interviews were conducted in person in the participant's office. Four interviews were conducted by phone. Interviews took place between April 16 and June 5, 2019. All participants agreed to audio recording the interviews, and the iPhone voice memo application generated audio files that were labelled with the participants' initials and stored on a secure laptop. For security purposes, once a complete and accurate transcript of the interview had been generated, the audio file was deleted. I also took notes during each interview on my personal laptop. These notes supplemented the audio recordings.

Organizational Culture Assessment Instrument. The adapted Organizational Culture Assessment Instrument (Cameron & Quinn, 2011) was input into the Qualtrics online survey platform. Two survey distribution lists were generated for the individuals who met the criteria for inclusion in the survey sample, one for East Coast employees and one for West Coast employees. Based on the purposive sampling criteria, invitations included individuals who had staff status and worked in departments that supported employees on both campuses, worked with colleagues on the other campus, or worked in a department that had colleagues doing similar work on the other campus. For a list of all the departments that were included in the survey invitation, see Appendix B.

The survey opened on Monday, May 6, 2019, to participants on the West Coast campus and on Tuesday, May 7, 2019, to participants on the East Coast campus. Participants received an invitation to complete the survey with a unique link through an automated email distribution. Email reminders were sent out one week after the survey opened, and again one day before the survey closed to those participants who had not completed the survey. Thank you emails were sent to all participants who completed and submitted the survey, and the survey closed on Friday, May 10, 2019 at 11:59 pm PDT.

Data analysis. In this section, I describe the data analysis techniques employed for both the interviews and the survey.

Qualitative analysis. 10 interviews were conducted with senior leaders on both campuses. The duration of the interviews was between 23 and 46 minutes, and the average interview duration was 28 minutes and 24 seconds. To maintain anonymity, participants are referred to by the participant number assigned to them (see Appendix A).

A priori codes (Miles, Huberman, & Saldaña, 2020) were established based on a literature review of the contributing factors associated with this study. The codes were organized into themes that map to the contributing factors and align with the research questions posed. The a priori coding process led to five preliminary themes: goals of the merger, organizational culture, leadership, distance collaboration, and change. For a complete list of themes and codes, see Appendix E.

Prior to initial manual coding, each theme was assigned an identifying color. In the first round of coding, I color-coded participant comments relating to the pre-determined themes. In a second round of coding, I uploaded interview transcripts into the NVivo qualitative data analysis software package. This second round of coding enabled comparisons of responses across interviewees, as well as the ability to create a crosstab report of participants to codes. NVivo enhanced the data analysis process by allowing coded excerpts to be pulled across participants to highlight consistent themes.

Quantitative analysis. Cameron and Quinn (2011) argue that data analysis is best expressed through visualization of the data, rather than raw numbers. Each of the four statements within an item of the Organizational Culture Assessment Instrument represents a description of one of the four types of cultures in their typology: clan, adhocracy, market, and hierarchy. To visualize organizational culture profiles, researchers plot the mean scores for each statement on four quadrants of a graph as shown above in Figure 2.1. Just as one respondent's scores across the four statements must add up to 100, the means of all respondents' scores will also total 100. These four plot points are then connected into a quadrilateral diagram that is representative of the organizational culture profile as perceived by survey respondents. For a comprehensive data report of survey results, see Appendix F.

To aid in answering the second, third, and fourth research questions, I used the IBM SPSS Statistics 26 data analysis software package to run inferential statistics. For the second and third questions, I compared responses based on location and department using a Mann Whitney U test. For the fourth question, the present and aspirational organizational culture profiles of all respondents were compared using the paired samples t-test and the Wilcoxon signed ranks test, as appropriate.

Findings & Discussion

In this study, four research questions were articulated to uncover evidence of the contributing factors to the problem of practice. To address the first research question, interview data with senior leaders was coded and analyzed for themes. The remaining three research questions were primarily investigated through the results of the Organizational Culture Assessment Instrument (Cameron & Quinn, 2011). In some cases, I triangulated qualitative interview data to enhance the interpretation of the quantitative survey results. In this section, I discuss data analysis and interpretation for each research question in turn.

Perceptions of Merger Goal Achievement (RQ1)

Mergers in higher education typically have the dual goals of broadening academic programming and ensuring financial sustainability (Cai et al., 2015). Interview participants discussed both of these goals to varying degrees. A side benefit of a merger can also be improved efficiencies and economies of scale (Cai et al., 2015). As economies of scale were not the original impetus for the merger in this case, the discussion focuses on the original goals related to the academic and financial benefits of the merger.

Broadening of academic programming. With regard to academics, the merger partners mentioned goals related to the broadening of academic programming that could result from the

acquisition of the West Coast graduate school. These goals included the expansion of current degree offerings as well as potential for the creation of new programs.

At the outset of merger discussions, there was a sense that the two institutions would complement each other well. The two schools shared a focus on international education, particularly language education, and to some extent environmental studies. As a West Coast administrator reflected “It was really about these complementary assets that we had here in [West Coast campus], added to the affinities in environmental studies, the affinities in language, the affinities in the international education sphere” (Participant 9). The two schools seemed to complement each other nicely: an undergraduate liberal arts college on the East Coast and a professional graduate school on the West Coast. As one of the architects of the merger explained:

The two institutions shared a common emphasis on linguistic and cultural proficiency as a foundation for a, a liberal arts college, or a liberal arts education at the [East Coast campus], and for a graduate study, solely graduate study of the [West Coast campus], so that was an underlying commonality. (Participant 10)

There was hope that such complementarity would lead to new program offerings such as study away experience for undergraduates on the West Coast campus and dual-degree programs where students might obtain a combined bachelor’s and master’s degree in five years.

We could conceive of five-year programs, dual degree programs, of students going through a liberal arts education at [the East Coast campus] with this grounding in languages and culture, and then go on to [the West Coast campus] and be able to hit the ground running to do a master’s program in one of the MA programs out at [the West Coast campus]. (Participant 10)

Early in the relationship, a new master's degree program was created, focusing on international education management (IEM). One interviewee attributed that new program to collaboration between the West Coast graduate school and directors of the East Coast institution's study abroad sites around the world. As he recalled:

When I first met all the schools abroad directors, and we were immediately talking about the kinds of things that we could do with the [West Coast campus]. Some of them unrealistic, but this is where the idea for the IEM degree emerged. (Participant 7)

In fact, undergraduate students from the East Coast campus do increasingly study away for a semester on the West Coast campus, and the leadership hopes to grow those numbers. The five-year degrees are not yet realized. One senior leader sees the expansion as a means "to offer to our students a rich array of possibilities" (Participant 1). However, this same interviewee admits that "We've only begun to scratch the surface of connecting them, integrating them, and finding synergies there" (Participant 1).

An important step toward taking better advantage of those synergies was the creation of a chief academic officer to oversee the post-merger institution. The re-envisioning of the provost position was a recommendation from the institution's accrediting body:

It would have been in the spring of 2012 that we would have gotten the report from the accreditors, and one of the key top-line messages was: you need a provost that is chief academic officer over the whole thing. (Participant 7)

Despite not making much progress on new or dual degree program offerings, several senior administrators pointed to the acquisition of the West Coast graduate school as a means of broadening the global outlook of the institution. Researchers from the West Coast campus are frequently interviewed by national and international news outlets. As one current senior leader

stated “I think the most successful part is that we’ve been able to be much more outward looking” (Participant 8). There is a sense that the acquisition of the graduate school expanded the outlook of the entire institution beyond its rural New England base:

I think living on a small rural, relatively isolated, undergraduate liberal arts campus is an all pervasive kind of experience. The college looms large in the town, and the lives of everyone around it...The [West Coast campus] has enough weight to counter that to some extent, and to pull us out of our myopia and remind us periodically that not everyone is educating 18 to 22 year olds who are at a particular stage in their intellectual development. That certain impacts of national politics that are felt less severely here are felt more severely on the [West Coast campus]. All those kinds of dynamics, so, I think it has, it has a broadening impact in a whole array of ways. (Participant 1)

Several administrators saw that impact reflected in the most recent institutional mission statement that was the result of a years-long strategic planning process. As one East Coast administrator claimed “Well, we would never have the mission statement that we currently have if it weren’t for [the West Coast campus]” (Participant 8). The academic leader of the West Coast campus mentioned something similar, stating “I think everybody would say that the system-wide mission and vision statement sound like us, sound like the [West Coast campus]” (Participant 9). Such beliefs appear to reflect both the influence of the West Coast campus on the overall institution as well as its integration into the identity of the institution at the highest levels. Yet, this same West Coast administrator admits that the academic integration is not yet complete:

I’m not sure from the headquarters perspective whether it’s a success yet, because we’ve moved slower than we might have. But I think that what we’re looking at in the strategic

plan now is a major bet on more coordinated action across this global network that will make our contribution more valuable to the whole system. (Participant 9)

Ensuring financial sustainability. Along with academic goals, financial incentives appear to have motivated both partners in the merger. In this section, I discuss the original financial motives and goals of each school, the challenges faced in achieving those goals, and the current perceptions of leadership with regard to the achievement of financial goals set forth in the original merger agreement.

For the East Coast college, the acquisition of a West Coast graduate school appealed as it would create an “alternate revenue stream” (Participant 5) for the institution. This expansion was perceived as a means to “ensure its long-term competitiveness and survival by broadening out of being exclusively a liberal arts college” (Participant 1).

On the other side, the West Coast school had been struggling financially for many years, and leaders of the graduate school were seeking a partner to ensure its long-term sustainability. The continued existence of the West Coast school was seen as the main achievement of the financial goals on that side of the merger. As Participant 3 stated:

The benefit to the [West Coast campus] of the acquisition has clearly been the financial capacity of the [East Coast campus]. Had the [West Coast campus] continued to operate as it has through the last ten years, given the size of the losses, there is no model that says it would still be around. So, the [West Coast campus] has benefitted from that financial presence. (Participant 3)

However, the exact business model and goals for the financial aspect of the partnership appear to have been unclear and perhaps unrealistic. A leader who had served throughout the process of the merger explained: “I think back to the reasons for the merger in the first place. I

don't think that they were ever well articulated at a level beyond things like an additional revenue stream" (Participant 5). Those leaders who joined the organization after the merger, expressed uncertainty about the exact models or financial agreements that were initially set by the two parties. The chief financial officer, who joined the organization seven years after the official merger, stated "If there were any financial goals outlined in the original concept, I've never seen those" (Participant 3). Likewise, another administrator who came on board six years into the merger stated that the institution would have benefited from "a clearer financial strategy and a clear set of metrics to understand when there would have been an expectation that the [West Coast campus] would have been self-sufficient" (Participant 4).

According to an administrator who had experienced the merger process firsthand, the board of trustees had commissioned a report to project future enrollments of the newly acquired graduate school, but she felt that the institutional leadership was "operating on wildly wrong assumptions" and indicated that "the worst-case scenario in those enrollment projections was better than almost any of the numbers that have, you know, have played out in the years since then" (Participant 5). Financial goals became more challenging when the United States suffered a financial crisis in 2007–2008, just three years into the initial affiliation between the two schools.

Perhaps in anticipation of these difficulties, the faculty at the East Coast campus took a Sense of the Faculty vote prior to the merger and overwhelmingly voted against proceeding: "So, they [East Coast faculty] were vehemently opposed to this because, in fact, they voted 80-22, I think, against this in a straw vote" (Participant 10). Participant 10 is quick to point out that "It wasn't a binding vote." Three of the interviewees attributed this resistance to concerns over losing resources to the new campus. As one participant opined "I think a lot of the controversy

about the decision since then has to do with the degree to which the resources are flowing west or flowing east within the system” (Participant 9).

Ultimately, while most see the continued existence of the West Coast campus as an indicator of success, some stated the belief that until the West Coast campus was financially self-sustaining, or as Participant 4 put it “a tub on its own bottom,” the two campuses could never feel fully integrated. As one participant articulated “I don't think we're fully stabilized, and I think that we won't be until we're fully financially sustainable, and all of the units are contributing to a positive bottom line” (Participant 2).

Taken together, despite the aspirations of both sides coming into the relationship, many of the academic and financial goals of the merger have yet to be achieved. This perception reflects the slow pace at which change happens in the higher education context: it had been 15 years since the two parties started working together and 10 years since the formal merging of the two institutions.

Senior administrators also seemed to think that the initial goals of the merger were either vague or unrealistic. In fact, some leaders who joined the organization after the merger were unclear on the details and agreements that had initially been set. Despite these issues, most leaders expressed that the relationship held potential, differentiated the institution from its peers, and that the decision to merge would bolster the longevity of both parties.

Perceived Organizational Culture Based on Location (RQ2)

This section addresses the second research question as to whether there exist different perceptions of the organizational culture for East Coast or West Coast employees. I compare the reflections of leaders from the qualitative data to the survey responses of staff members in the quantitative data set.

In the qualitative interview data, some participants described a tension that existed between staff members on the two campuses. Participant 3 stated:

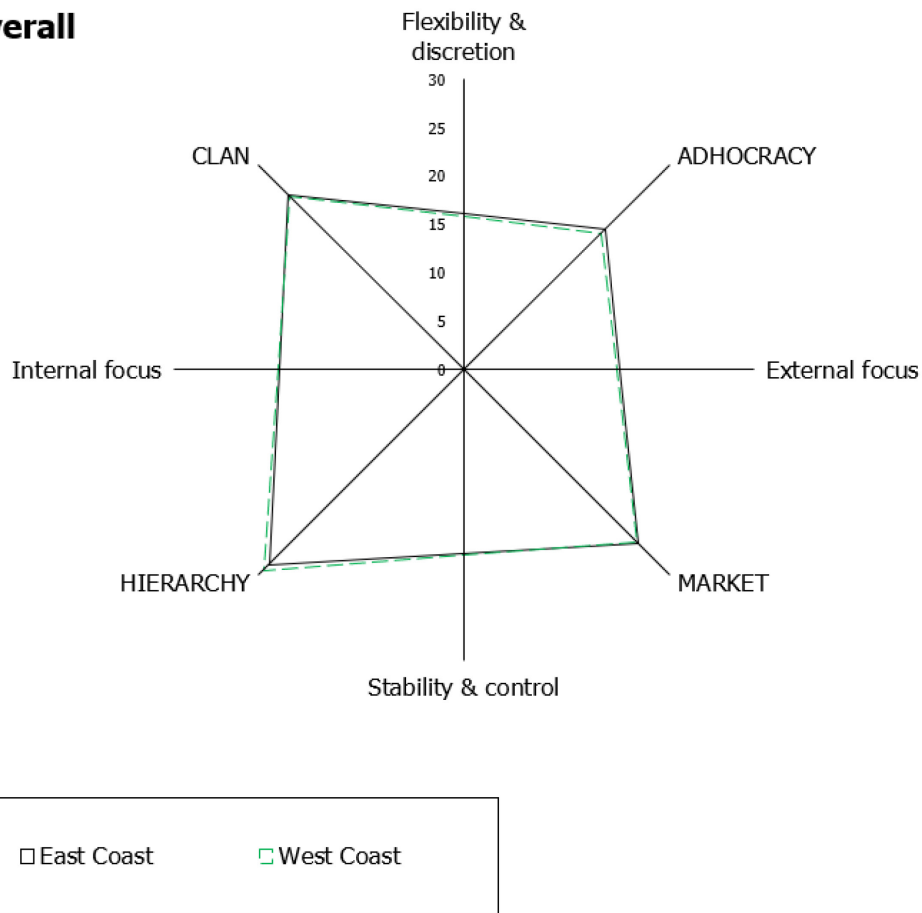
I think it's choppy, right? I do think there's some really strong relationships, where it, well, where both sides are benefitting from the relationship, and I think in other areas, it's just more of an inconvenience for the [West Coast campus]. It feels like, oh, we gotta tell mom and dad. (Participant 3)

Another interviewee stated “I hear on both campuses a, for lack of a better phrase, an ‘us and them’ perspective that really kind of makes moving initiatives and doing the day-to-day work sometimes difficult” (Participant 4).

Despite these concerns voiced by leaders in the organization, there is little observable difference between the organizational culture profiles of staff based on the East Coast campus compared to staff based on the West Coast campus. Survey respondents reported the location from which they primarily work. Eighty-two respondents who completed the survey reported working primarily from the East Coast campus, and 39 respondents who completed the survey reported working primarily from the West Coast campus.

As discussed earlier, each item response of the online survey was aggregated as mean scores. These means were calculated for East Coast respondents and West Coast respondents, respectively. Data visualization enables an easy comparison of responses from those staff members working primarily from the East Coast campus with colleagues working primarily from the West Coast campus. Figure 2.2 illustrates this comparison between East Coast employees and West Coast employees with regard to the overall present organizational culture profile.

Overall



*Figure 2. 2. Comparison of present organizational culture profile by campus location. Compares responses of East Coast staff members (n = 82) and West Coast staff members (n = 39). Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2011. Copyright 2011 by Jossey-Bass.*

Similarly, a comparison of mean scores by staff member location was calculated for the aspirational organizational culture profile, meaning the organizational culture that staff members wished to see in five years' time. See Figure 2.3 for a visual comparison of responses by staff member location for the organizational culture profile respondents hoped to see five years in the future.

Overall

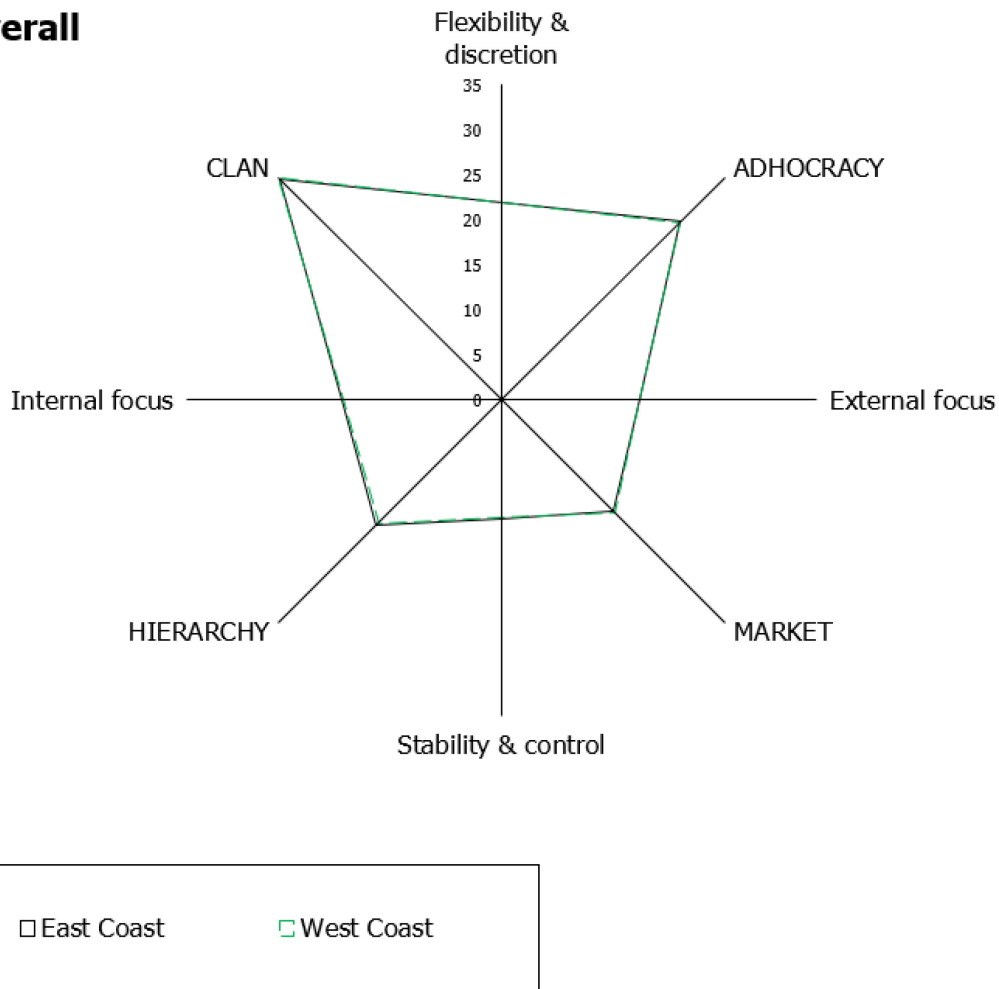


Figure 2. 3. Comparison of aspirational organizational culture profile by campus location. Compares responses of East Coast staff members (n = 82) and West Coast staff members (n = 39). Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2011. Copyright 2011 by Jossey-Bass.

To determine if there was a statistically significant difference between responses based on participant location, Mann-Whitney U tests were run for all data points to compare the composite scores of East Coast respondents with West Coast respondents. I employed this non-parametric test as the data sets were not normally distributed. In all cases, results of the Mann-Whitney U tests indicated no significant difference between responses from East Coast respondents and West Coast respondents ($p < .05$) See Table 2.2 for results of the Mann-Whitney U tests.

Table 2. 2 *Mann-Whitney U Test Results for Location*

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Clan Present is the same across categories of location.	Independent-Samples Mann-Whitney U Test	.45	Retain the null hypothesis.
2	The distribution of Adhocracy Present is the same across categories of location.	Independent-Samples Mann-Whitney U Test	.82	Retain the null hypothesis.
3	The distribution of Market Present is the same across categories of location.	Independent-Samples Mann-Whitney U Test	.90	Retain the null hypothesis.
4	The distribution of Hierarchy Present is the same across categories of location.	Independent-Samples Mann-Whitney U Test	.05	Retain the null hypothesis.
5	The distribution of Clan Future is the same across categories of location.	Independent-Samples Mann-Whitney U Test	.42	Retain the null hypothesis.
6	The distribution of Adhocracy Future is the same across categories of location.	Independent-Samples Mann-Whitney U Test	.46	Retain the null hypothesis.
7	The distribution of Market Future is the same across categories of location.	Independent-Samples Mann-Whitney U Test	.62	Retain the null hypothesis.

8	The distribution of Hierarchy Future is the same across categories of location.	Independent-Samples Mann-Whitney U Test	.15	Retain the null hypothesis.
---	---------------------------------------------------------------------------------	-----------------------------------------	-----	-----------------------------

Asymptotic significances are displayed. The significance level is .05.

The difference between the profiles in Figure 2.2 (present) and Figure 2.3 (aspirational) shows a shift upward that may indicate staff members’ desire to relinquish some stability and control in favor of more flexibility and discretion. The aspirational organizational culture profile in Figure 2.3 illustrates a hope that the organization would become more focused on internal relationships, teamwork, and employee development, the hallmarks of the clan culture (Cameron & Quinn, 2011). Cameron and Quinn (2011) describe such a culture as having a humane and empowering work environment for employees that “facilitates participation, commitment, and loyalty” (p. 46).

The data visualizations in Figures 2.2 and 2.3 suggest that survey respondents perceive similar organizational cultures regardless of location. These results may be somewhat surprising as in the qualitative data analysis, interview participants recounted the prevalence of an “us” versus “them” attitude among employees across the two campuses. The quantitative data do not support this perception.

What may be at play here is what Schein (2010) defines as levels of organizational culture. In his work, Schein posited that organizational culture possesses three levels: the surface level are the artifacts of the organization (i.e., what can be seen, such as structures and processes), the mid-level represents the espoused values of the organization, and at the deepest level are the underlying assumptions by which the organization operates. In comparing leadership’s perceptions via the qualitative data and staff members’ perceptions via the

quantitative data, it may be that underneath the surface the organizational values are quite similar despite the location from which employees work.

It is also important to note that the survey was conducted during a process of workforce reduction in which management had the goal of cutting labor budgets by 10%. The institution was in the process of offering voluntary severance packages to about 50 staff members across the institution during the time of the survey. This process may have influenced staff responses and could account for the similarity in responses of East Coast and West Coast employees since the staff reductions took place on both campuses.

Perceived Organizational Culture Based on Department (RQ3)

This section addresses research question three. Of the departments selected for participation in the survey, I categorized each department as being “academic” or “operations.” Academic departments are those responsible for the creation and delivery of academic programming for students. These functions would include curriculum design, instruction, and administrative support for academic programs. Operations departments are those responsible for supporting the efficient functioning of the organization and would typically be found in any organization, not just in higher education institutions. Such departments include information technology services, accounts payable, human resources, and the general counsel’s office. See Appendix G for department categorizations.

Based on these categories, 28 respondents were identified as working in academic departments, and 43 respondents were identified as working in operations departments. During the categorization process, a third category emerged of those departments offering student services not related to academics ($n = 41$). The responses from staff members in student services departments were excluded from the data analysis.

Present profile. Some differences can be observed when we compare survey responses based on the type of department in which staff members work. As seen in Figure 2.4, staff respondents shared similar views regarding the organization’s internal versus external focus. The profiles generated by respondents from academic departments and respondents from operations departments are fairly similar. However, the two profiles trend differently on the vertical axis. Staff respondents from academic departments appear to perceive the organization’s culture as favoring flexibility and discretion over stability and control. In other words, staff in academic departments view the organization as more inclined toward the clan and adhocracy cultures. Conversely, staff in operations departments seem to view the organization as favoring the hierarchy and market cultures to some extent.

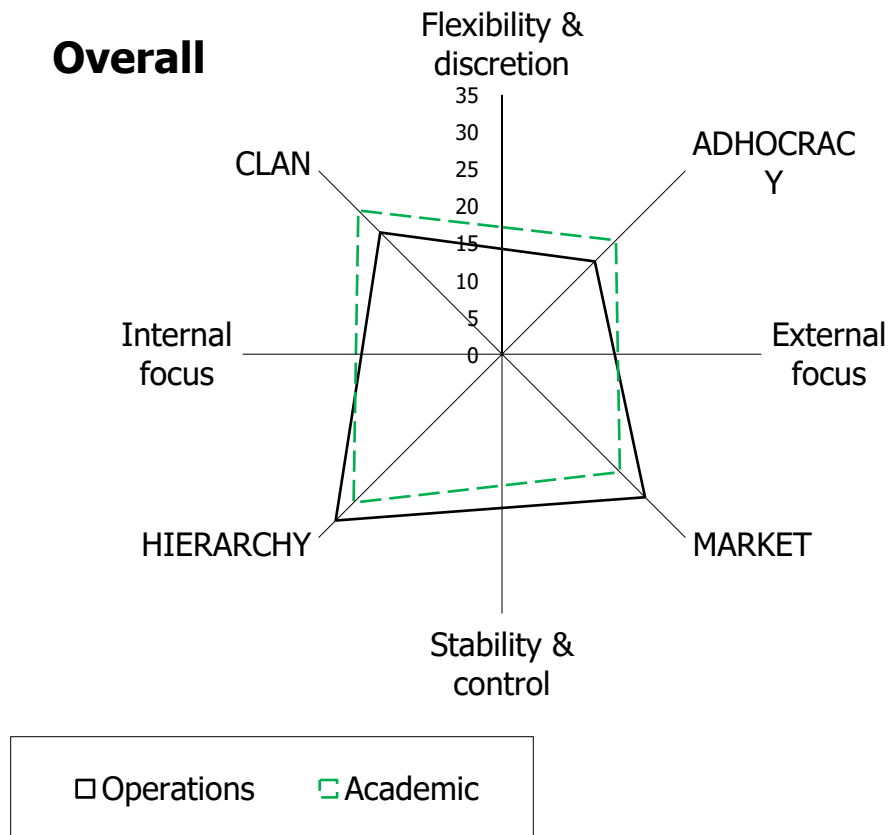


Figure 2. 4. Comparison of present organizational culture profile by department type. Compares responses from staff members in academic departments (n = 28) and staff members in operations

departments (n = 43). Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2011. Copyright 2011 by Jossey-Bass.

Despite some differences appearing in the data visualization, statistical analyses revealed no significance between the responses from staff in academic departments and those in operations departments. The data were not distributed normally, and therefore, Mann-Whitney U tests were conducted to compare composite score results from staff members in both types of departments. See Table 2.3 for the results of the Mann-Whitney U tests. In all cases, no significant difference was found ($p < .05$).

Table 2. 3 *Mann-Whitney U Test Results for Present Profile by Department*

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Clan Present is the same across categories of department.	Independent-Samples Mann-Whitney U Test	.40	Retain the null hypothesis.
2	The distribution of Adhocracy Present is the same across categories of department.	Independent-Samples Mann-Whitney U Test	.22	Retain the null hypothesis.
3	The distribution of Market Present is the same across categories of department.	Independent-Samples Mann-Whitney U Test	.14	Retain the null hypothesis.
4	The distribution of Hierarchy Present is the same across categories of department.	Independent-Samples Mann-Whitney U Test	.48	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

These results should not be reflective of how employees view their own departments, as survey directions specifically asked respondents to think about the entire institution while rating the statements. Rather, it appears that employees' view of the institution's organizational culture may be influenced by the role they play in the organization. Those staff members involved in delivering academic programming to students view the organization as having greater flexibility than staff members who support operations.

Aspirational profile. Figure 2.5 shows a visual comparison of the aspirational organizational culture profile for respondents from academic departments and respondents from operations departments.

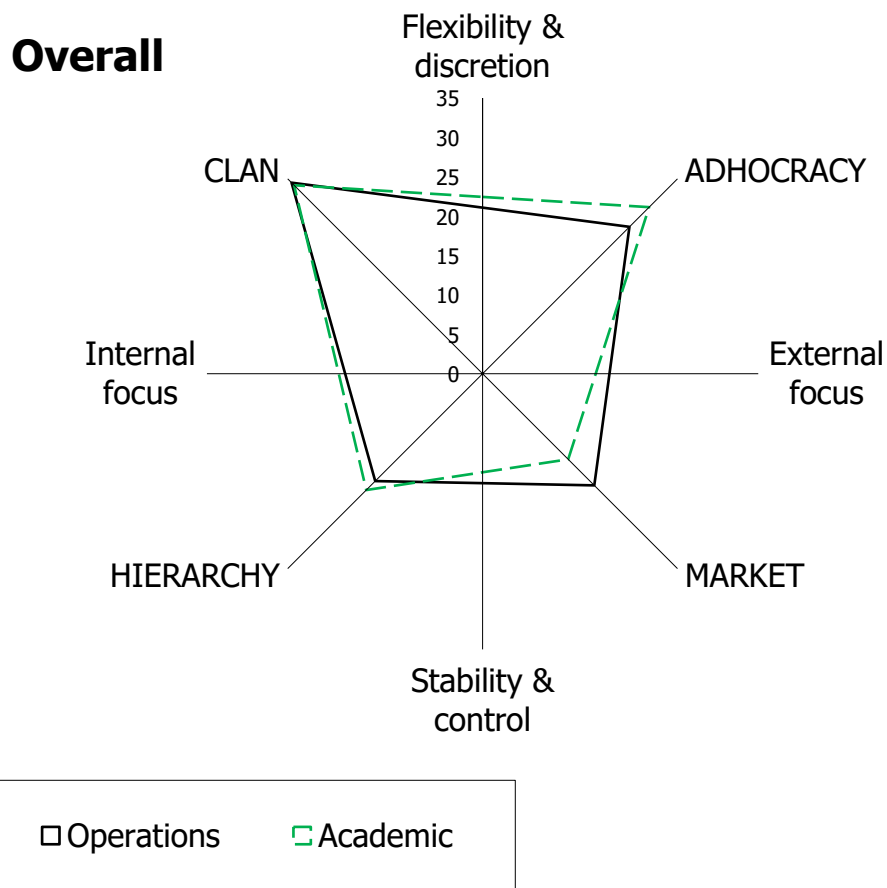


Figure 2. 5. Comparison of aspirational organizational culture profile by department type. Compares responses from staff members in academic departments (n = 28) and staff members in

operations departments (n = 43). Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2011. Copyright 2011 by Jossey-Bass.

Looking at the aspirational profile, the left side of the profile becomes more fully aligned. It appears that staff regardless of department have a desire to see the organization shift more toward the clan culture. This shift may be interpreted as a natural reaction to the workforce reduction that took place around the time of the survey. All staff members who participated in the survey may hope that the institution will refocus its efforts on supporting employees after successfully achieving the intended budget cuts.

Yet, the right-hand side of the profile tells a different story. The department in which staff members work does appear to influence what kind of external focus they hope to see in the future. Staff respondents from academic departments appear to place greater emphasis on the adhocracy culture, which is characterized by risk-taking, innovation, and creativity (Cameron & Quinn, 2011). These results may indicate academic staff members' interest in creating new programs and services for learners and a desire to be on the cutting edge of the higher education industry. Conversely, staff respondents in operations departments indicated that they hoped to see more emphasis on the market culture quadrant, which translates into a push for goal achievement and competitive edge (Cameron & Quinn, 2011).

As the data were not normally distributed, I conducted Mann-Whitney U tests to determine if significant differences existed between responses from staff in academic and operations departments for the aspirational organizational culture profile. See Table 2.4 for test results. For all four culture profile quadrants, no significance was found between responses from staff in academic departments and staff in operations departments ($p < .05$).

Table 2. 4 *Mann-Whitney U Test Results for Aspirational Profile by Department*

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Clan Future is the same across categories of department.	Independent-Samples Mann-Whitney U Test	.79	Retain the null hypothesis.
2	The distribution of Adhocracy Future is the same across categories of department.	Independent-Samples Mann-Whitney U Test	.06	Retain the null hypothesis.
3	The distribution of Market Future is the same across categories of department.	Independent-Samples Mann-Whitney U Test	.24	Retain the null hypothesis.
4	The distribution of Hierarchy Future is the same across categories of department.	Independent-Samples Mann-Whitney U Test	1.00	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

The two aspirations of staff members in different types of departments – to be more innovative and to be more market-driven – may not be mutually exclusive. However, the aspirational organizational culture profile illustrated in Figure 2.5 does identify a tension that could pull the institution in two directions. If staff from academic departments are looking for more creativity, innovation, and experimentation while staff in operations departments are primarily focused on meeting targets (i.e., enrollment targets or revenue targets), these two forces may come into conflict.

Present Organizational Culture Versus Aspirational Organizational Culture (RQ4)

In answering the final research question, I start with an analysis of the quantitative data and employ the qualitative data later to further the discussion. As stated earlier, survey respondents completed all survey items twice. During the first round, respondents indicated their perceptions of organizational culture based on the present moment, and in the second round, they indicated the organizational culture they would like to see five years in the future. Here I report on the three most salient results found when comparing the present organizational culture profile to the aspirational profile. These results are for the content dimensions of institutional glue and institutional leadership, and the overall organizational culture profile.

Institutional glue. Figure 2.6 includes the present ($n = 132$) and aspirational ($n = 119$) organizational profiles of respondents to the statements describing the institutional glue content dimension. As a reminder, Cameron and Quinn (2011) define the glue as the “bonding mechanisms that hold the organization together” (p. 173). To test the significance of the differences between the present and aspirational profiles for this dimension, I ran Wilcoxon signed ranks tests comparing all four quadrants (see Table 2.5). As reflected in the data visualization for this dimension, the smallest difference between present and aspirational responses appears in the market quadrant. The Wilcoxon test results confirm that there is a significant difference between the present and aspirational responses on the institutional glue content dimension for the clan, adhocracy, and hierarchy quadrants ($p < .05$). However, no significant difference exists between the present and aspirational responses for the market quadrant.

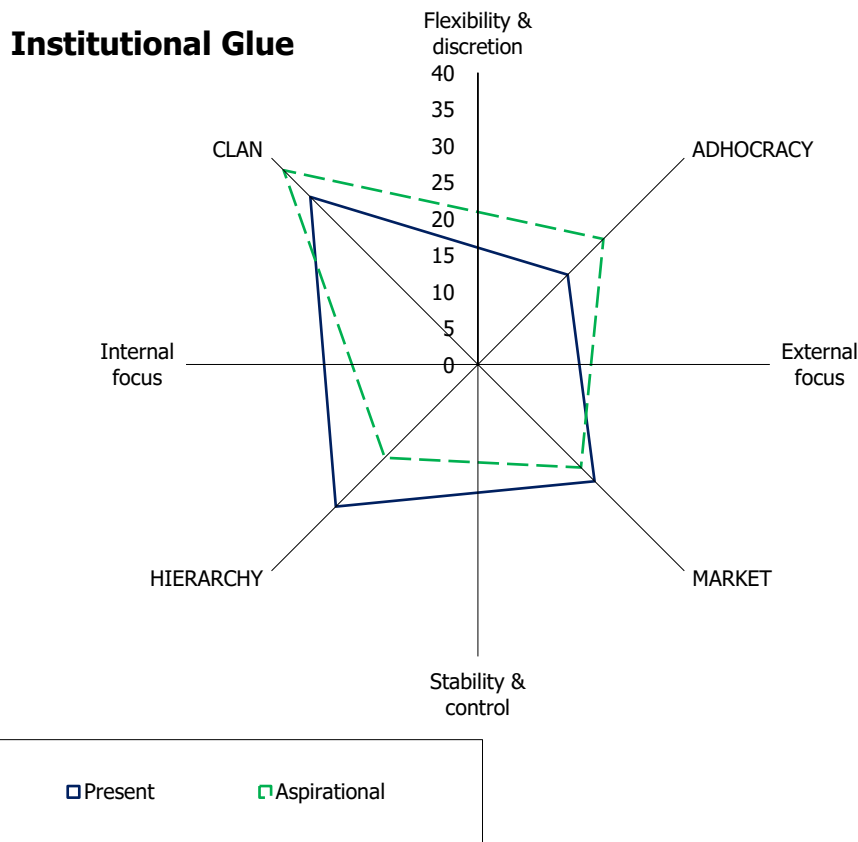


Figure 2. 6. Comparison of present and aspirational organizational culture profiles on the content dimension of institutional glue. Compares all responses for the present moment (n = 132) and for five years in the future (n = 119). Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2011. Copyright 2011 by Jossey-Bass.

Table 2. 5 Wilcoxon Signed Ranks Tests for Institutional Glue, Present versus Aspirational

	Clan Culture	Adhocracy Culture	Market Culture	Hierarchy Culture
Z	-2.01 ^b	-3.40 ^b	-.38 ^c	-3.03 ^c
Asymp. Sig. (2-tailed)	.04	.00	.72	.00

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.

As seen in Figure 2.6, both the present and aspirational organizational culture profiles tend toward the clan culture. This tendency represents a culture with an orientation toward

collaboration (Cameron & Quinn, 2011) and is described by the statement: “The glue that holds the institution together is loyalty and mutual trust. Commitment to this school runs high.” Of all six content dimensions of organizational culture, respondents rated institutional glue as being the most similar currently to what they hoped for in the future. Despite the similarities between the present and aspirational profiles, staff respondents still appear to want increased solidarity among colleagues, as indicated by the aspirational profile shifting further into the clan quadrant. Nonetheless, this result may indicate that staff members are relatively satisfied with this dimension of the organizational culture.

Institutional leadership. In contrast to the profile for institutional glue, the results for another content dimension of organizational culture, institutional leadership, show a markedly different profile (see Figure 2.7). Once again, I administered Wilcoxon signed ranks tests to compare the scores for each quadrant (see Table 2.6). In the case of the content dimension institutional leadership, the Wilcoxon tests indicated significant differences between the present and aspirational profiles scores for the clan, adhocracy, and market cultures ($p < .05$). However, no significant difference was found between the present and aspirational scores for the hierarchy quadrant.

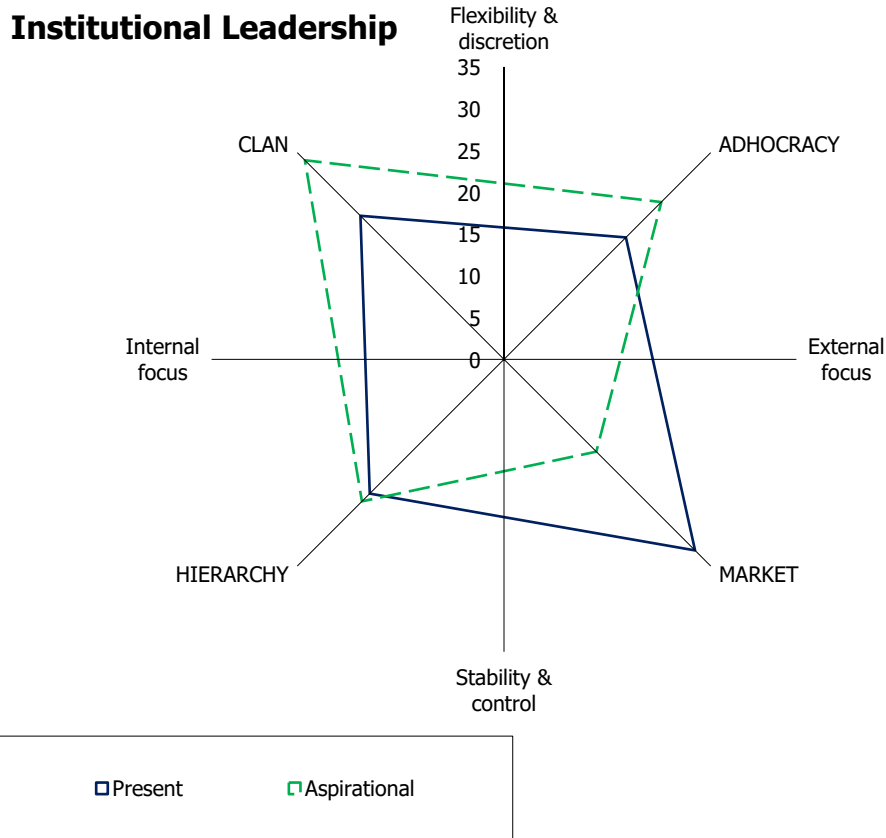


Figure 2. 7. Comparison of present and aspirational organizational culture profiles on the content dimension of institutional leadership. Compares all responses for the present moment (n = 142) and for five years in the future (n = 120). Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2011. Copyright 2011 by Jossey-Bass.

Table 2. 6 *Wilcoxon Signed Ranks Tests for Institutional Leadership, Present versus Aspirational*

	Clan Culture	Adhocracy Culture	Market Culture	Hierarchy Culture
Z	-4.14 ^b	-3.14 ^b	-5.01 ^c	-.15 ^b
Asymp. Sig. (2-tailed)	.00	.00	.00	.88

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.

For this content dimension, respondents appear to want to see a more dramatic shift in terms of institutional leadership as shown in Figure 2.7. Data visualization offers a noticeable

contrast between the present profile as perceived by staff respondents and what respondents hope to see in the future. The aspirational profile shows a preference to move away from the market culture's focus on external relationships and control and toward clan and adhocracy profiles, especially on the vertical continuum toward more flexibility and discretion. These results indicate a strong current tendency toward market-based culture, with an emphasis on goal accomplishment (Cameron & Quinn, 2011). In comparing the two profiles, it appears that employees would like leadership to shift attention away from "meeting the numbers" and more toward staff support and development. This shift could also develop additional creativity and innovation in the organization by placing more emphasis on the adhocracy quadrant.

Overall profile. Figure 2.8 shows the overall present and aspirational organizational culture profiles as reported by respondents who completed all survey items ($n = 119$). As the data were normally distributed for the clan quadrant scores, I ran a paired samples t-test to compare the present scores to the aspirational scores in that quadrant. For the clan scores, there was a significant difference between the present and aspirational scores, $t(124) = -6.17, p < .05$. The data in the other three quadrants were not normally distributed, so I used related-samples Wilcoxon signed ranks tests to compare the present and aspirational scores for the adhocracy, market, and hierarchy quadrants. In each case, there was a significance difference between the present and aspirational scores ($p < .05$) (see Table 2.7).

Overall

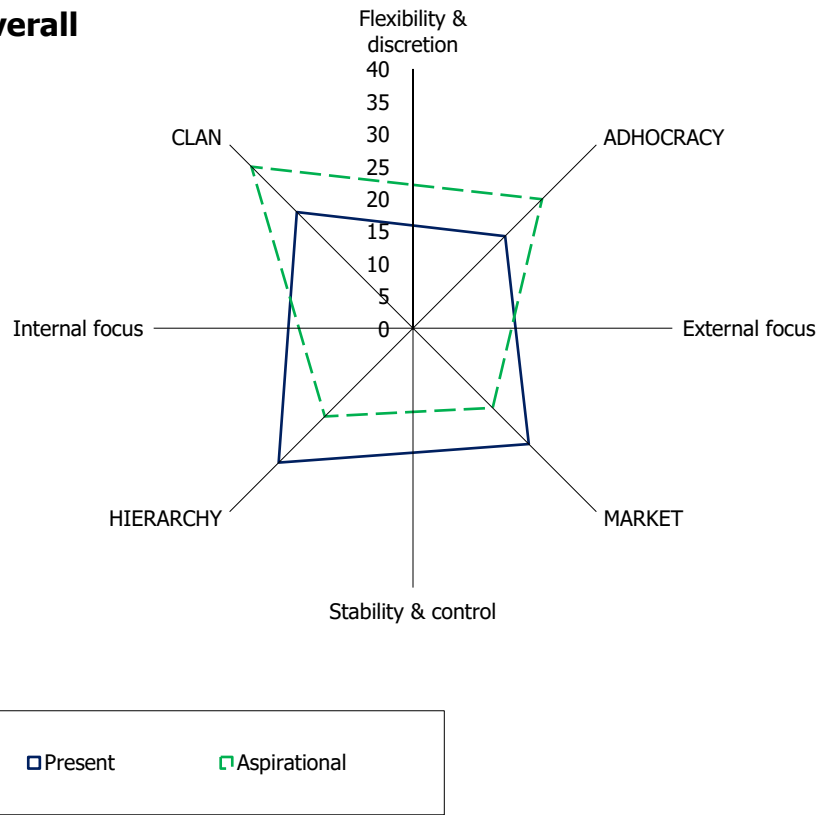


Figure 2. 8. Present and aspirational profiles based on all six content dimensions of organizational culture (n = 119). Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2011. Copyright 2011 by Jossey-Bass.

Table 2. 7 Wilcoxon Signed Ranks Test Comparing Present and Aspirational Scores for Adhocracy, Market, and Hierarchy Quadrants

	Adhocracy Culture	Market Culture	Hierarchy Culture
Z	-5.45 ^b	-4.11 ^c	-5.48 ^c
Asymp. Sig. (2-tailed)	.00	.00	.00

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.

Looking at the data visualization in Figure 2.8, the aspirational profile appears to be an inversion of the present profile. In other words, the aspirational organizational profile signals a decided shift away from hierarchy and market cultures toward clan and adhocracy cultures.

Across the organization, it may be that staff would like to see the institution and its leadership place greater value on flexibility and discretion rather than stability and control.

Both the present and the aspirational organizational profiles have a balance among the four quadrants, with no one culture dominating. As noted in the previous chapter, Gregory et al. (2009) believed that such balance in the organizational culture profile better prepares an organization to respond to changes in the external environment. The current institution appears to have a balanced culture, which can serve it well in times of change. That being said, for higher education institutions, clan cultures may support higher rates of student success and employee satisfaction (Cameron & Freeman, 1991). Therefore, staff members' desire to see more emphasis on internal relationships and employee support could lead to more organizational effectiveness.

The overall aspirational profile should give members of the organization a good sense of the organizational culture staff members hope to see in the future. This future profile does not represent a dramatic shift. However, across both campuses, staff members generally would like to see an organizational culture that frees them to do their work in more creative and innovative ways while maintaining a focus on interdepartmental collaboration and staff support.

Conclusion

In summarizing the findings of this needs assessment, it is informative to examine each research question in turn and then as a whole. With regard to the first research question regarding senior administrators' perceptions of the goals and success of the merger, interviewees seemed to express that the one goal the merger had achieved to date was the continued existence of the West Coast campus. Without the financial support of the East Coast campus, the graduate school on the West Coast may well have ceased operating. Members of leadership appeared to feel that true integration of the academic community would not take place until the West Coast campus

was financially self-sustaining. This focus on financial goals aligns with the view that leadership is currently market-oriented as reported by staff members in the Organizational Culture Assessment Instrument survey.

In terms of the second research question, a discernible difference does not appear in the perceptions of organizational culture based on employee location. This result is somewhat surprising because anecdotally there is the feeling of an East Coast/West Coast divide in the organization. This divide was not evident in the data collected. Perhaps this “us versus them” mentality is superficial and does not reflect the underlying norms, beliefs, and values of the organization across the institution. It appears that, regardless of location, staff members share the same cultural values.

Turning to the third research question, there is an observable difference in perceptions of organizational culture based on the department in which staff members work. Regardless of department, all staff respondents showed an inclination toward having more of a clan culture that values collaboration and employee development. However, operations department staff seemed to aspire to a market orientation while academic department staff were more inclined to the adhocracy culture. This difference might identify a healthy tension that could reside in the institution if it were to balance the creation of new programs with the achievement of financial targets.

Lastly, in looking at the direction that staff members wish to see the organizational culture take in five years, there was a decided shift upward in the organizational culture profile. This upward shift indicates a desire on the part of staff members across the organization to have more flexibility and discretion in their work. Staff respondents appear to want a relinquishing of control that may give them more autonomy in job performance.

Taken together, these findings may at first seem to create an untenable division between the goals of leadership and that of staff members. Leadership view achieving financial sustainability as the way toward successful integration of the multicampus institution. This view is aligned with a market culture that values goal achievement. However, staff members generally appear to want to move toward the clan and adhocracy cultures which emphasize autonomy, mutual support, creativity, and innovation. Can these competing values be reconciled? Perhaps if senior leaders work intentionally to build an organizational culture that supports employee development and innovation, they can achieve the financial results they seek. By creating a culture that provides flexibility to staff members, these employees might become more engaged with and committed to the institution. In turn, staff members' increased commitment could lead to the financially-sustainable organization that leaders are looking for.

Chapter Three

Synthesis of Literature Addressing the Problem of Practice

As outlined in the previous chapter, I conducted a mixed methods needs assessment study using a survey instrument for the quantitative strand and semi-structured interviews for the qualitative strand. In the quantitative strand, I administered the Organizational Culture Assessment Instrument (Cameron & Quinn, 2011). Staff members from both campuses of the institution ($N = 120$) completed an online survey that identified four types of organizational cultures: clan, adhocracy, market, and hierarchy (Cameron & Quinn, 2011). Survey respondents perceived institutional leadership as having a market orientation with a focus on goal achievement (see Figure 3.1).

Survey data were cross referenced with semi-structured interviews of senior leadership across both campuses. Results identified a tension between the goals of leadership and those of staff members. Interview comments revealed that many senior administrators believed that full integration between the two campuses could not be achieved until the West Coast campus was financially self-sustaining. As one participant put it “I don't think we're fully stabilized, and I think that we won't be until we're fully financially sustainable, and all of the units are contributing to a positive bottom line” (Participant 2).

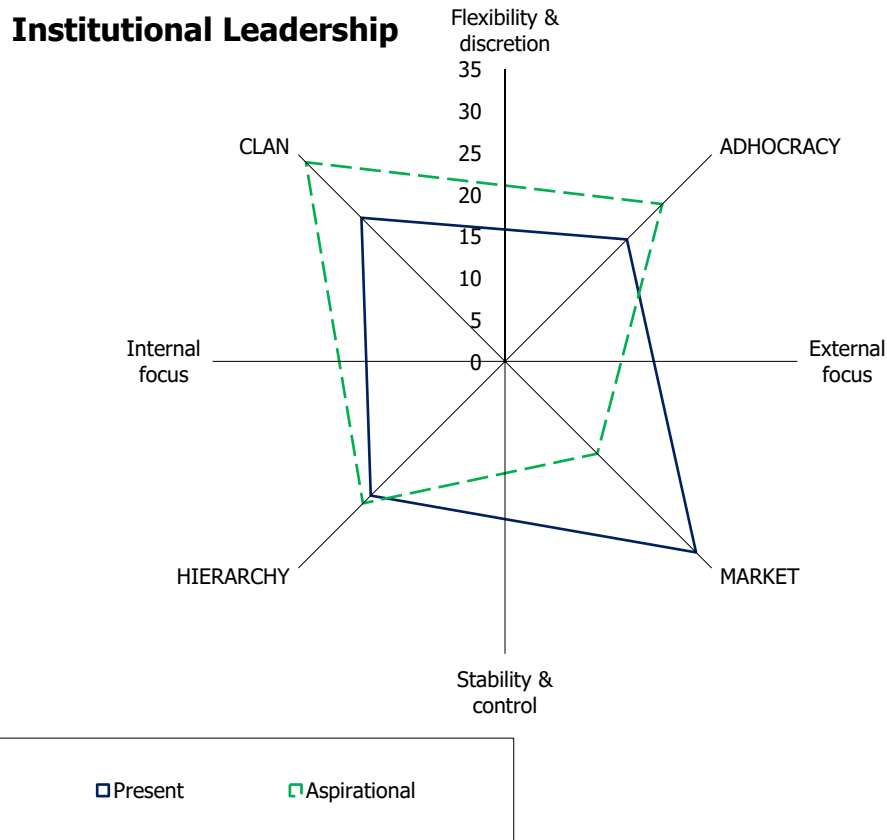


Figure 3. 1. Comparison of present and aspirational organizational culture profiles on the content dimension of institutional leadership. Compares all responses for the present moment ($n = 142$) and for five years in the future ($n = 120$). Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2011. Copyright 2011 by Jossey-Bass.

Leadership’s focus on goal achievement, in this case financial sustainability, appears to be in conflict with staff members’ desire for more flexibility and discretion in their work. Cameron and Quinn (2011) define such tensions as competing values held within the organization. Staff survey respondents indicated that the glue that holds the institution together was a focus on internal relationships and flexibility. Respondents showed both a current perception of and a future orientation toward an emphasis on the clan culture, which values personal relationships and employee development. Additionally, staff members indicated that they would prefer more autonomy and creativity in their work than is presently available to them, as illustrated by the

shift toward greater emphasis on adhocracy culture in the aspirational profile portrayed by the dotted line in Figure 3.1 above.

In their book on diagnosing and changing organizational culture, Cameron and Quinn (2011) outline what it looks like for an organization to shift toward greater clan and adhocracy cultures (see Table 3.1). Of particular interest to this discussion, increasing clan culture means increasing employee empowerment, participation, involvement, and the creation of cross-functional teams (Cameron & Quinn, 2011). Additionally, increasing adhocracy culture includes process innovation, support of thoughtful risk taking, and tolerance for first-time mistakes (Cameron & Quinn, 2011).

Table 3. 1 *What it Means to Increase Clan and Adhocracy Cultures*

Increasing Clan Culture Means	Increasing Adhocracy Culture Means
<ul style="list-style-type: none"> ● More employee empowerment ● More participation and involvement ● More cross-functional teamwork ● More horizontal communication ● A more caring climate ● More recognition for employees 	<ul style="list-style-type: none"> ● More employee suggestions ● More process innovativeness ● More thoughtful risk taking ● Tolerance for first-time mistakes ● More listening to customers

Note. Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2005. Copyright 2005 by Jossey-Bass.

Based on these needs assessment results, this synthesis of literature considers interventions that might meet the needs of both staff members and senior administrators. This chapter considers interventions that build organizational innovation and employee creativity via increased entrepreneurial culture within the organization and increased entrepreneurial mindsets within employees. Using the model of strategic entrepreneurship as a framework (Ireland, Hitt, & Sirmon, 2003), I posit that by developing and fostering their entrepreneurial mindsets, staff members will become more engaged and innovative, and in turn, the organization will ultimately

achieve its financial goals.

Theoretical Frameworks

To frame this discussion, I introduce three theoretical frameworks. The first considers the means by which innovations are diffused within organizations (Rogers, 2003). Next, the model of strategic entrepreneurship (Ireland et al., 2003) describes how increased entrepreneurial culture and entrepreneurial mindset lead to wealth creation for organizations. Lastly, Senge's (1995) notion of the learning organization provides a possible basis for intervention design.

Centralized versus Decentralized Diffusion of Innovations

Many theorists have considered how innovations become diffused throughout systems. Perhaps the most prevalent is Rogers's (2003) diffusion of innovations theory, which categorizes individuals along a bell curve from innovators to laggards. Rogers (2003) defines an innovation as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (p. 32). Pertinent to the current discussion, Lundblad (2003) extends Rogers's theory to the diffusion of innovations within organizations, and she defines diffusion of innovations as "the adoption and implementation of new ideas, processes, products, or services" (p. 51).

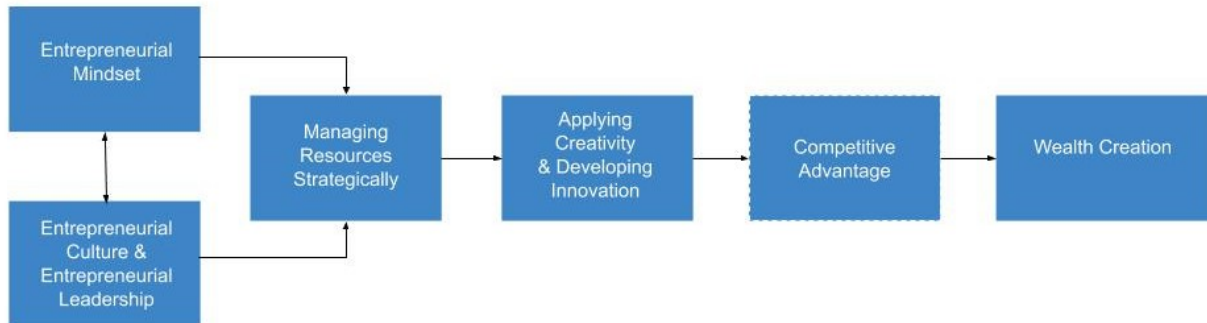
Rogers (2003) outlines that diffusion may occur as a top down, centralized process, or a more organic, decentralized process. Rogers based his theory on how new processes and ideas were diffused within the field of agriculture, and historically, farming innovations came from a centralized authority, typically technical experts. The individual adopter was a passive recipient of such knowledge. However, Schön (1971) questioned whether the top down model was truly the only approach. Schön (1971) posited that diffusion may also occur in a decentralized mode by which individuals share innovations through horizontal networks. Rogers (2003) also found examples of decentralized systems in which local change agents shared their new ideas across

peer networks. Such decentralized diffusion systems enabled shared decision making and adaptation of the new ideas to fit the parameters of the local context. Lundblad (2003) suggests a negative correlation between centralized diffusion systems in an organization and its innovativeness. In other words, a decentralized diffusion system may lead to higher organizational innovativeness (Lundblad, 2003). Rogers (2003) is careful to point out that the concept of centralized versus decentralized diffusion systems is a misleading dichotomy, and in fact, most diffusion systems are a hybrid of the two, situated somewhere on a continuum between a totally centralized system and a totally decentralized system.

Entrepreneurship of Individuals and Organizations

In assessing any dynamic in an organization, one must recall that organizations are made up of individuals. Therefore, when considering a phenomenon such as innovativeness, it is best to consider both the individual and the organizational levels of analysis. In their model of strategic entrepreneurship, Ireland et al. (2003) draw the distinction between entrepreneurial *mindset* and entrepreneurial *culture*. Entrepreneurial mindset is “a growth-oriented perspective through which individuals promote flexibility, creativity, continuous innovation, and renewal” (Ireland et al., 2003, p. 968). Alternatively, an entrepreneurial culture is an organizational culture in which “new ideas and creativity are expected, risk taking is encouraged, failure is tolerated, learning is promoted, product, process and administrative innovations are championed, and continuous change is viewed as a conveyor of opportunities” (Ireland et al., 2003, p. 970). Such a culture embodies many of the same characteristics of Cameron and Quinn’s (2011) adhocracy culture previously described, particularly a tolerance for mistakes and a focus on risk taking and creativity. Taken together, the entrepreneurial culture of an organization fosters individuals with entrepreneurial mindsets (Ireland et al., 2003), and the combination of organizational culture and

individual mindsets should lead to long-term wealth creation for the organization (see Figure 3.2). Ireland et al. (2003) describe the two concepts as being “inextricably interwoven” (p. 971).



*Figure 3. 2. Model of strategic entrepreneurship. Adapted from “A Model of Strategic Entrepreneurship: The Construct and its Dimensions,” by D. R. Ireland, M. A. Hitt, and D. G. Sirmon, 2003, *Journal of Management*, 29, p. 967. Copyright 2003 by the Journal of Management.*

Further examining the relationship between an individual’s entrepreneurial mindset and an organization’s entrepreneurial culture, Shepherd, Patzelt, and Haynie (2010) applied the notion of feedback loops that shift between the individual and the organization. In the case of entrepreneurship, the authors called these loops “entrepreneurial spirals” that amplify entrepreneurialness in organizations by creating a reciprocal relationship between the individual and the organization. According to Shepherd et al. (2010), these spirals can enhance the entrepreneurialness of an organization: for instance, an increase in a manager’s entrepreneurial mindset should cause a subsequent increase in his or her team’s entrepreneurial culture. Conversely, a decrease in an individual’s entrepreneurial mindset may create a subsequent decrease in the organization’s entrepreneurial culture (Shepherd et al., 2010).

Learning Organizations and Team Learning

As previously outlined, innovation can come from the top down or the bottom up (Rogers, 2003). It operates at both the individual and the organizational levels (Shepherd et al., 2010). How, then, does an organization move itself forward toward greater innovativeness? One

approach is to develop into what Senge (1990) calls a learning organization. A learning organization is one “in which people at all levels are, collectively, continually enhancing their capacity to create things they really want to create” (O’Neil, 1995, p. 20). The five components of Senge’s learning organization theory are: systems thinking, personal mastery, mental models, shared vision, and team learning. Learning operates at both the individual and the organizational level. According to Senge (1990), individuals must achieve personal mastery, which involves openness to new ideas, self-knowledge, and an attitude toward lifelong learning. Yet, Senge (1990) extends learning to something that has greater impact if done by teams rather than individuals. In applying the concept of learning organizations to educational institutions, Senge stated:

Our fundamental challenges in education are no different than in business. They involve fundamental cultural changes, and that will require collective learning. They involve people at multiple levels thinking together about significant and enduring solutions we might create, and then helping those solutions come about. (O’Neil, 1995, p. 21)

Senge’s (1990) notion of team learning harkens somewhat to Vygotsky’s (1978) sociocultural theory, applied to individuals within an organization. Vygotsky’s work focused on how children learn and develop, particularly in relation to their interaction with their parents. His zone of proximal development (ZPD; Vygotsky, 1978) is the intangible space in which an individual’s capability is extended beyond their individual competency due to social interaction with more capable others. Senge’s (1990) team learning might be seen as the ZPD in the organizational setting. In other words, by working and learning together, individuals are able to achieve more than they would on their own based on the diverse knowledge, skills, and attitudes each team member contributes. According to Senge, to achieve a shared vision for the institution,

people need to come together from all levels of the organization and cross disciplinary boundaries (O'Neil, 1995).

Synthesis of Literature

In this paper, I outline various theories and interventions that might address the problem of practice of low readiness for change in a multicampus higher education institution. First, I consider how higher education institutions might measure their entrepreneurial culture. Next, I review organizational structures that support centralized diffusion systems (Rogers, 2003) in private, public, and educational institutions. In the next section, I shift to the individual level of analysis to consider means to develop employees' entrepreneurial mindsets. Lastly, I discuss hybrid diffusion systems that support employees' professional development, empowerment, and team learning (Senge, 1990). After considering the various intervention models, I recommend an intervention to address the problem of practice in the current context.

Measuring Entrepreneurial Culture

In an attempt to quantify what an innovative organization looks like, researchers in Ireland measured the "innovation quotient" of higher education institutions across the country (Zhang, Larkin, & Lucey, 2017). Rao and Weintraub (2013) outlined six building blocks of an innovative culture: resources, processes, values, behavior, climate, and success. Rao and Weintraub (2013) translated these building blocks into a 54-item survey intended to calculate an organization's "innovation quotient." Zhang et al. (2017) administered a survey instrument to measure employee perceptions of the organizational culture of Ireland's higher education institutions.

Zhang et al. (2017) distributed the innovative culture survey to all 21 higher education institutions in Ireland and received 1,461 completed surveys from employees at 19 institutions.

Responses appeared to indicate that staff from universities perceived their organizations to be more innovative than staff from institutes of technology ($p < .01$). Within institutions, support staff perceived their institutions to be more innovative than academic staff (e.g., faculty members). Perhaps most interestingly, employees within arts, humanities, and social sciences programs perceived their institutions to be more innovative than employees affiliated with science, technology, engineering, and math (STEM) programs. The authors suggest that this finding may buffet arguments for interdisciplinarity and the need for broader academic foci to support innovation (Zhang et al., 2017) in the higher education context. Overall, Zhang et al. (2017) recommend institutions use the innovation quotient survey to diagnose strengths and weaknesses within the institution and to create subsequent plans of action in response to the results.

Organizational Structures for Innovation

In considering how to diffuse innovation within higher education institutions, it is beneficial to explore the structures by which for-profit entities support radical innovation. In the private sector, radical innovation is defined as the creation of new products, services, or businesses and contrasted with the smaller impact created by incremental innovation (McLaughlin, 2016). One method to diffuse innovation is through the creation of organizational structures: such structures enable teams to work outside the norms and constraints of the traditional organization. For instance, creating a research and development department within a company is a means of centralizing the diffusion of innovations (Rogers, 2003).

In this section, I explore the origin of the “Skunk Works” model (Lockheed Martin, 2021) as well and the dimensions that define such an endeavor (Larsson, 2019). I then describe four types of Skunk Works employed by the private sector (Greenstein, 2016). An extension of this

concept is the innovation lab, or “i-lab”, which has been implemented by social enterprises and the private sector to solve wicked problems (Tönurist, Kattel, & Lember, 2017). A wicked problem is one that is complex, difficult to articulate, has multiple root causes, and potentially multiple solutions (Camillus, 2008), such as climate change or poverty. After defining both of these models, I consider the applicability of these types of entrepreneurial structures to the higher education context.

Skunk Works. In 1943, the Lockheed Martin aviation company set up a secret laboratory in Burbank, California. They gave their small team of engineers just 150 days to develop a new fighter jet for the United States military; the team finished in 143 days (Lockheed Martin, 2021). Formally, the project was called Advanced Development Programs, but over time, it became known as the “Skunk Works,” a pop culture reference to a secret moonshine still in the *Lil’ Abner* comic strip (May, 2012). Eventually, due to copyright issues, the name evolved into the Skunk Works, a reference to the putrid smell that emanated from a nearby factory (Greenstein, 2016).

The founder of the Lockheed Martin Skunk Works, lead engineer Kelly Johnson, developed a list of 14 rules for the team (Lockheed Martin, 2021). While some of the rules are specific to military contract work, management researchers and professionals find the core concepts relevant to any organization interested in creating radical innovation (May, 2012). In a conceptual study of the Skunk Works model, Larsson (2019) consolidates Johnson’s rules down to seven essential dimensions that are necessary for entrepreneurial activity. These dimensions include isolation from the main organization, critical analysis of customer needs, singular focus, up-front planning, a trusted project manager, cross-functional teams, and the ability to leverage overlapping projects (Larsson, 2019). The author goes on to suggest that these seven dimensions

may be a better model for collective (i.e., team-based) entrepreneurship than the more commonly applied construct of entrepreneurial orientation employed by many researchers (Larsson, 2019).

In his primer on Skunk Works, Greenstein (2016) defines the concept simply as “an organizational home for high-priority original thinking and projects” (p. 70). Greenstein goes on to explain the four types of Skunk Works typically found within the for-profit and governmental sectors. The first type is the “science model” in which engineers and computer scientists work to prototype new technologies. An example is the Xerox Palo Alto Research Center created in the 1970s and credited with discoveries such as the mouse and local-area networks (Greenstein, 2016). The second type is the “research community”, which, as it implies, emphasizes the creation of a community of researchers where the focus is on a greater mission to support innovation rather than individual projects. Greenstein attributes the success of the Wi-Fi standard to the existence of such a research community that helped to sustain the protocol. The third type of Skunk Works is the “lead user model” in which an external customer or user drives the innovation process. The original Lockheed Martin Skunk Works described above is an example of a lead user model, in which the lead user was the U.S. military (Greenstein, 2016). Finally, the fourth type that Greenstein illustrates is the “moon shot model” in which an organization establishes an audacious goal and then dedicates financial and human resources toward achieving it. Google’s autonomous car project can be considered a moon shot goal (Greenstein, 2016). I next discuss the related concept of innovation labs implemented in the public sector.

Innovation labs in the public sector. Similar to the notion of a Skunk Works, some public sector entities have supported the creation of innovation labs, or i-labs, in recent years (Tönurist et al., 2017). In their examination of i-labs around the world, Tönurist et al. (2017) reported that 35 i-labs were established at the city, state, or national level between 1999 and

2013. Tying the establishment of i-labs to organizational theories of change, Tõnurist et al. (2017) put forward four propositions as to why i-labs were created in reaction to both external and internal forces on public sector organizations. These propositions include 1) coping with external complexity, such as government austerity measures; 2) coping with internal learning for creating better efficiencies; 3) to shield the structure from traditional, change-resistant norms; and 4) to emulate similar organizations in the private sector (Tõnurist et al., 2017).

After conducting a mixed methods study with participants from 11 i-labs in North America, Europe, and Australia, the researchers found that often the original reasons for forming the i-labs may not have been why they continued (Tõnurist et al., 2017). Like Skunk Works, most of the i-labs studied operated with very small teams, averaging between six and seven people, with significant autonomy for decision making. Through survey responses and interviews with executives from the i-labs, the researchers learned that most labs were established in reaction to external forces or to create “citizen-driven” solutions (Tõnurist et al., 2017, p. 1466). However, after being established, most of the labs turned their attention internally toward supporting innovation efforts within the organization (Tõnurist et al., 2017).

Data analysis from this study revealed that along with creativity and innovation, the most commonly self-reported characteristics of the i-labs included interpersonal skills, such as cooperation with colleagues, team orientedness, and empathy with employees (Tõnurist et al., 2017). In other words, many leaders of i-labs found that building relationships with those outside the lab was key to their success. Relatedly, the authors noted that three of the 11 labs had closed after the study was completed, and the researchers pointed out that in most cases, the closures were due to a change in government leadership (Tõnurist et al., 2017). The researchers concluded that the generous autonomy to make decisions that resided within the i-labs was typically

attributed to support coming from a high-level politician or ministry official. The small size and independent nature of the labs also made it easier for them to be at risk of closure due to changes in leadership (Tönurist et al., 2017).

Innovation structures in higher education. Both the Skunk Works and the innovation lab models appear as viable means to support radical change and innovation in the private and public sectors. The question remains if such a model could work for a higher education institution. In her examination of organizational theory and change in higher education, Kezar (2016) outlines some unique aspects of this context that may inhibit radical innovation. These characteristics include loosely coupled structures that decentralize decision making, the shared governance model, conflicting values between administrators and faculty, and limited employee turnover (Kezar, 2016).

A cursory search of how innovation labs are implemented within this context shows an emphasis on student skill development, such as Stanford University's well-known d.school (Hasso Plattner Institute of Design at Stanford University, 2020). However, limited empirical research exists on the implementation of a Skunk Works or innovation lab model in higher education. Well-publicized failures, like the implosion of the University of Texas at Austin's Project 2021 (Ellis, 2019), may leave higher education leaders understandably wary. The required resources – financial, human, and structural – may be a difficult sell to leaders embedded in the often risk-averse culture of higher education. However, it is worth considering how the creation of an educational Skunk Works team could benefit an institution looking for radical curricular change. By establishing a temporary, interdisciplinary team to rapidly prototype a new program, higher education institutions might be able to pull ahead in the competitive market in which they operate.

Innovations initiatives at higher education institutions can draw a lot of press for good and for ill. While much empirical research for these initiatives has yet to be published, trade publications such as the *Chronicle of Higher Education* follow the innovations efforts of higher education institutions quite closely. For instance, McMurtrie (2018) highlighted the structure and projects of Michigan State University's Hub for Innovation in Learning and Technology. These projects included a revamp of the university's Doctor of Veterinary Medicine program curriculum as well as process innovations in student advising and record-keeping. The author warned: "Innovation centers are susceptible to failure if they don't clearly identify goals, integrate their work into campus life, and prove their worth" (McMurtrie, 2018, p. 10).

A case study of Southern New Hampshire University's (SNHU) competency-based College for America addresses how one institution has developed new programs that are the first of their kind in the higher education landscape. Hansen (2018) conducted interviews with 10 senior leaders of the university and the College for America program looking at eight organization factors: "strategic vision, processes of implementation, locus of control, leadership support, structure, infrastructure, culture, and social networks" (p. 151). SNHU's College for America was the first competency-based program to receive approval from the U.S. Department of Education for Title IV financial aid. Competency-based education is an employer-driven education model in which students must meet learning outcomes based on skills required to perform a particular kind of job (Hansen, 2018). The creation of this new educational model was an outcome of an innovation lab established by leadership at SNHU. The original team of four staff members selected by the university's president to launch the innovation lab became the core group to launch the College for America program. While not labelled so, the College for America organizational structure followed a Skunk Works model as described previously in that it was a

wholly separate operation with a separate location away from the university's traditional on-ground degree programs. Interview respondents characterized the offset organization as fostering autonomy and freedom for employees. As one participant stated:

At no time were we told that, "You have to use Blackboard," or "You have to use university systems." We were really just given complete freedom to do this... We were told, "Just do this the best way that you can think about doing it. (Hansen, 2018, p. 154)

Participants also related how the team had a cohesive culture that was embodied in a "not yet" mindset that permeated the organization (Hansen, 2018). Competency assessments taken by students in the program gave a result of "Yes" for pass and "Not Yet" if the student had not achieved the competency. This "not yet" attitude became a mantra for the employees within the institution that one respondent characterized as illustrating their "growth mindset" (Hansen, 2018, p. 153). In an effort to diffuse the lessons learned from this unit back to the more traditional units within the university, SNHU established a cross-functional working group to consider how the competency-based model might be applied in the other units. Participants also emphasized the importance of a non-profit higher education institution supporting and maintaining its mission of improving people's lives: as one participant reiterated, the organization was "mission driven first and business driven second" (p. 154).

Risks and rewards of innovation structures. With regard to the opportunities of implementing a Skunk Works model, the main advantage appears to be the ability to operate outside of the confines of the traditional organizational system. The role of autonomy was highlighted as an advantage in both the private and public sectors (Larsson, 2019; Tönurist et al., 2017). Larsson (2019) likens this freedom to an emancipation from the rest of the organization in that the Skunk Works team is both theoretically and physically separated from the traditional

structures. For instance, in creating the Macintosh division at Apple, Steve Jobs moved a small group of 20 employees to a building three blocks away (Larsson, 2019; May, 2012). Likewise, in the public sector study of i-labs, most executives reported having decision-making control over setting salaries, employee evaluation, setting organizational goals, and negotiating with parties (Tönurist et al., 2017). Such autonomy may allow organizations to pivot more quickly in response to market forces than traditional systems. Additionally, this sense of autonomy encourages the Skunk Works to be more risk tolerant as the autonomy in some ways protects the team from the main organizational culture that may be more risk averse (Larsson, 2019).

However, the Skunk Works model is not without its drawbacks. In theory, the Skunk Works is meant to act as a research and development team that can pilot and prototype new products, processes, and ideas, and those projects that succeed can be integrated back into the main organization: “With radical innovation, you have to incubate, then integrate” (Collis, 2016, p. 3). Yet Greenstein (2016) warns that integrating such projects back into the main operation is challenging as most organizations do not plan for this critical final step. This challenge may highlight a weakness of a centralized diffusion system, such as innovation labs: Rogers (2003) warned that the centralized model may hinder employee buy-in.

Additionally, the very nimbleness that makes Skunk Works and innovation labs appealing can lead to their demise. The autonomy and small team size make these teams easy targets for elimination, especially when new leadership comes on board (Larsson, 2019; Tönurist et al., 2017). In fact, Denmark’s MindLab, which was held up as a prime example of the effective functioning and longevity of an i-lab in the Tönurist et al. (2017) study, was later disbanded when a new minister came into the division under which they operated (Guay, 2018). In some cases, the teams were intentionally formed to be temporary from the outset, and a planned

sunsetting occurred (Tõnurist et al., 2017). In these cases, the understanding that the i-lab would only operate for a limited period of time helped to set expectations of both team members and their stakeholders (Tõnurist et al., 2017). In the next section, the discussion moves from the organizational level of analysis to the individual level of analysis and considers how a more decentralized diffusion system might drive employee empowerment and innovation.

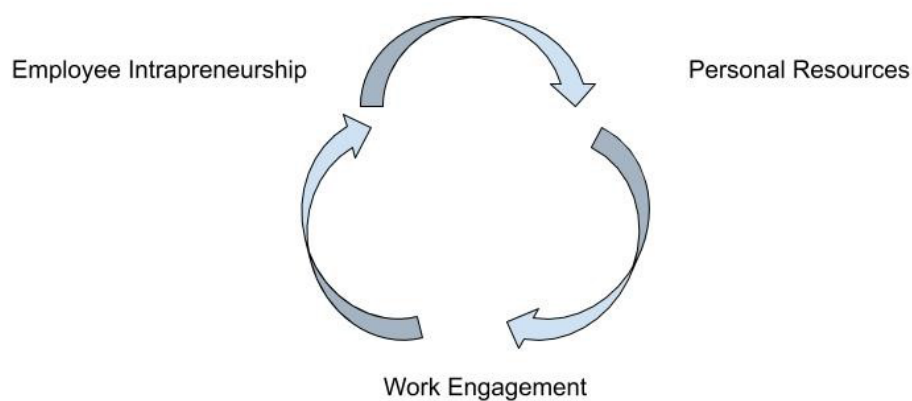
Developing the Entrepreneurial Mindsets of Individuals

Having looked at ways to structure organizations to foster entrepreneurial culture and innovation, I now turn attention to how to develop entrepreneurial mindsets in individuals within the organization. Ireland et al. (2003) define an entrepreneurial mindset as “a growth-oriented perspective through which individuals promote flexibility, creativity, continuous innovation, and renewal” (p. 968).

Fostering employee intrapreneurship. Employees working for established organizations may display intrapreneurial behaviors rather than entrepreneurship. Entrepreneurs are commonly described as those individuals who identify, evaluate, and exploit opportunities to create new products and services (Shane & Venkataraman, 2000). Pinchot (1985) is credited as the first person to define intrapreneurs as “those who take hands-on responsibility for creating innovation of any kind, *within* a business” [emphasis added] (ix).

Employee intrapreneurship in the public sector. Expanding on Pinchot’s (1985) definition, Gawke, Gorievski, and Bakker (2017) draw a distinction between employee intrapreneurship, at the individual level, and firm intrapreneurship, at the organizational level. Gawke et al. (2017) define employee intrapreneurship “as an individual employee's agentic and anticipatory behaviors aimed at creating new businesses for the organization (i.e., venture behavior) and enhancing an organization's ability to react to internal and external advancements

(i.e., strategic renewal behavior) (p. 89). Gawke et al. (2017) went on to describe a cyclical relationship among employee intrapreneurship, an employee's personal resources (i.e., optimism, resiliency, and self-efficacy), and their work engagement. In other words, as an individual's intrapreneurial behaviors increase, so do their personal resources, which in turn increase their work engagement. The authors call this cyclical relationship the resources gain cycle (see Figure 3.3.)



*Figure 3. 3. Resources gain cycle. Adapted from “Employee Intrapreneurship and Work Engagement: A Latent Change Score Approach,” by J. C. Gawke, M. J. Gorgievski, and A. B. Bakker, 2017, *Journal of Vocational Behavior*, 100. Copyright 2017 by the Journal of Vocational Behavior.*

To test this hypothesis, Gawke et al. (2017) conducted a longitudinal, quantitative study with public sector employees from five organizations in the Netherlands ($N = 351$). The researchers administered a pre-test and post-test survey with a 12-week interim period. The instrument included measurement of the three constructs in the resources gain cycle: employee intrapreneurship, personal resources, and work engagement. Personal resources were further sub-categorized as optimism, resilience, and self-efficacy. Using latent change score analysis to compare pre-test and post-test responses, the authors concluded that employees who demonstrate intrapreneurial behaviors can increase their personal resources over time, which in turn, may create increased work engagement (Gawke et al, 2017). The study suggests that interventions on

any dimension of the resource cycle may lead to gains in the other dimensions. For example, interventions that develop intrapreneurial behaviors in employees may create subsequent increases in those employees' work engagement.

Employee intrapreneurship in the education sector. Noting the dearth of research on intrapreneurial behaviors in the education context, Boon, Van der Klink, and Janssen (2013) set out to explore what competencies were possessed by employees who displayed intrapreneurial behaviors in this sector. Using the integrated model of entrepreneurial leadership (Bagheri & Pihie, 2011), Boon et al. (2013) conducted a qualitative study interviewing both employees and managers in a variety of education settings. The model consists of five competencies of entrepreneurial leadership: proactiveness, innovativeness, risk taking, commitment building, and specifying limitations (Bagheri & Pihie, 2011). The other component of the model, the process of entrepreneurial learning, is comprised of four elements:

- Experience: hands-on learning that takes place when trying to create new ventures,
- Social interaction: the process of negotiating with others when challenges arise,
- Observation: attempts to overcome challenges by following role models and good practice, and
- Reflection: lessons learned from reflecting on these experiences. (Boon et al., 2013)

To examine these phenomena, the authors conducted interviews with employees known for displaying intrapreneurial behaviors ($n = 9$) and managers from the same educational organizations ($n = 3$). Participants came from secondary, professional school, and university contexts. The researchers used the critical incident method to explore situations in which employees were able to develop and demonstrate their intrapreneurial competencies.

Boon et al. (2013) broke down the analysis into *scenario* enactment, which focuses on the intrapersonal competencies (e.g., proactiveness, innovativeness, and risk taking), and *case* enactment, which focuses on the interpersonal competencies (e.g., commitment building and specifying limitations). With regard to scenario enactment, participants reinforced the notion that those with intrapreneurial tendencies used creativity to solve problems faced within the organization. They noted a tendency to pursue lifelong learning and that such learning was also dependent on support from management and the organization more broadly. In terms of risk taking, participants were more prone to take reputational risks by putting forth their own, perhaps unconventional, opinions, but were less likely to take chances that would create financial risks for themselves or others. Regarding case enactment, interviewees emphasized the role of empathy and social skills in building commitment from others but felt that the commitment from management in creating an environment that fostered intrapreneurship was more important than buy-in from peers. The authors conclude that while intrapreneurship may be linked to individual characteristics, employees in this context underscored the importance of the organization creating a space for developing and demonstrating intrapreneurial behaviors (Boon et al., 2013). The next section considers means by which organizations can foster employee empowerment, which in turn may lead to more intrapreneurial behaviors.

Fostering employee empowerment. Using a case study approach, Verhulst and Boks (2014) examined the role of employee empowerment within product design firms in the Benelux region of Europe. Using semi-structured interviews with company employees, the researchers considered how employee empowerment supported the implementation of sustainable design within these firms. Their model for employee empowerment consisted of three aspects: authority, specialization, and self-determination. By authority, they meant employees' roles in the decision

making process. In terms of specialization, the authors considered the type of training and support that employees received to implement sustainable design. With regard to self-determination, Velhurst and Boks (2014) looked at the amount of latitude or autonomy employees were given to use what they had learned on product design projects. The authors concluded that first and foremost, leadership needs to develop and communicate a clear mission and vision and to establish a network of ambassadors to spread that message throughout the organization. The premise is similar to Armenakis et al. (2011) notion of cultural carriers within an organization that reinforce the thoughts and actions of the organization's leader.

Additionally, Velhurst and Boks (2014) found that companies that succeeded in implementing sustainable design provided training to staff, first from external experts, and later from internal ambassadors, as well as ongoing support by way of documentation, such as manuals and checklists. The support from experts appeared to have an outward to inward movement, starting with bringing outside experts into the company and then over time, supporting such training in-house as internal employees became more familiar with the subject matter. As one participant put it, such training programs allow the change to “spread as an oil slick through the firm” (Velhurst & Boks, 2014, p. 92). Lastly, in terms of self-determination, the authors recommended finding and supporting “champions” for the change and giving such champions latitude to experiment with bottom-up projects that can be used as pilot programs for the innovation. The next section considers how innovation frameworks created by an organization may aid the development of entrepreneurial mindsets of employees.

Decentralizing Innovation Diffusion Systems

Previously, I covered how organizational structures create top down or centralized diffusion systems. Rogers (2003) points out that diffusion systems are rarely wholly centralized

or wholly decentralized. Rather, these systems may combine elements of both centralization and decentralization to create a hybrid model that leverages the strengths of each approach. In a decentralized system, Rogers (2003) describes innovations as bubbling up from local change agents. However, without support and guidance, such organic efforts may stall out or fail due to a lack of technical acumen on the part of local innovators (Rogers, 2003).

Whirlpool's I-mentor program. One successful example of a hybrid approach is the I-mentor program at Whirlpool Corporation (Rao & Weintraub, 2013). In their detailed case study of the program, Snyder and Duarte (2008) described the intention, design, and implementation of the innovation effort at Whirlpool. First, the chief executive officer of the company created and communicated a simple vision “innovation from everyone, everywhere” (Snyder & Duarte, 2008, p. 106). To achieve this vision, leadership selected a small group of the company's employees to participate in an innovation mentorship program, naming participants of the program “I-mentors.” In the first round of the program, 75 employees from across the multinational corporation became I-mentors. Program participants represented a cross-section of roles and levels throughout the company (Snyder & Duarte, 2008).

The program consisted of three phases: first, employees attended an intensive three-week training program; next, they went back and applied what they had learned in their jobs; and lastly, they could apply to become certified I-mentors, a process that entailed a peer review process that evaluated the results of the employee's innovation work (Snyder & Duarte, 2008). During the training, participants learned five important competencies: how to link innovation to company processes, how to incorporate the voice of the customer in new product development, how to ideate and brainstorm, how to create a migration path to the dream state, and how to develop a business model (Snyder & Duarte, 2008).

As the program progressed, more than 1,100 of Whirlpool's 73,000 worldwide employees (1.5%) completed the I-mentor training (Snyder & Duarte, 2008). The authors conducted a post-training survey of 100 I-mentor program participants to examine the impact of the program on those individuals who had participated. When asked why these employees chose to become I-mentors 70% of survey respondents cited a chance to create and try new things, and 65% cited a work environment that allowed them to create and think (Snyder & Duarte, 2008). I-mentors received no additional compensation for participating in the program, and when asked about monetary incentives, one respondent stated: "Well, I always thought 10 percent of earnings would be nice . . . but the excitement from working in a 'skunk-works' kind of environment beats the money aspect!" (Snyder & Duarte, 2008, p. 112). The authors concluded that an emotional desire to be part of something important within the organization outweighed financial incentives for most program participants. While a model such as the I-mentor program can be a means for diffusing innovation across the organization, institutions frequently use other types of initiatives beyond employee professional development to increase their organizational innovativeness. The next section considers how a team learning approach might increase the clan and adhocracy cultures of an organization (Cameron & Quinn, 2011).

Changing organizational culture through team learning. In thinking about how an organization can set up innovation initiatives, McLaughlin (2016) reports on an action research project to support radical innovation within a small but mature manufacturing firm in the United Kingdom. While not expressly stated by the author, this approach reflects Senge's (1990) concept of team learning in which the change efforts taken by an entire department are greater than what might be achieved at the individual level. Similar to the current case, a diagnosis of the organizational culture within the firm revealed an interest in moving more toward the clan and

adhocracy cultures, or what McLaughlin coined the “do different” (as opposed to “do better”) model. McLaughlin (2016) used March’s (1996) organizational action model to differentiate between supporting incremental innovation through development of employee’s “exploitation competencies” and radical innovation through development of employee’s “exploration competencies” (p. 5). In the first stage of the action research project, McLaughlin (2016) created cognitive maps of the organizational culture with 14 engineers within the firm’s product development group. This mapping identified nine themes that influence radical innovation in the firm: freedom/latitude, attitude to risk, growth/development, external confidence (outside the design team), internal confidence (within the design team), external perspective, clear objectives, team constitution, and company infrastructure (McLaughlin, 2016, pp. 8-9). In response, the team created a seven-stage process that would take place over a period of four years to lead to more product innovation within the development team: 1) alter the team’s makeup; 2) create a knowledge gathering system; 3) seek external input; 4) create an idea gathering process; 5) identify new product areas; 6) show and tell presentations to gather input from the rest of the company; and 7) implementation of a “do different” project that had been identified through the first six stages (McLaughlin, 2016, p. 14).

The firm launched the initiative in 2004 and reported results in 2008. During that period, the number of patent applications rose from 0 to an average 24 per year, and the number of new product launches rose from 0 to 18 annually. With regard to shifts in organizational culture, a new administration of the Organizational Culture Assessment Instrument (Cameron & Quinn, 2011) indicated that employees achieved their goal of increasing clan culture: the clan score before the intervention was 16, and after the intervention, employees indicated that they had met the goal of a clan score of 28. However, the subsequent increase in adhocracy culture was not as

strong: the score moved from 15 to 23 but did not reach the aspirational goal of 32. Nonetheless, the increased productivity and creativity indicated through the growth in patent applications and new product launches appears to demonstrate that the staged intervention did move the organization toward more radical innovation than it had previously experienced.

Proposed Intervention

This synthesis of literature highlights a few principles on which to base an intervention to address the problem of practice of low organizational readiness for change. First, efforts to diffuse innovation throughout an organization may be best served through a hybrid diffusion system that combines elements of centralized and decentralized systems (Rogers, 2003). Second, employees demonstrating intrapreneurial behaviors emphasized the need to have space and managerial support to experiment and innovate (Boon et al., 2013). These two concepts reiterate the notion that the organization's entrepreneurial culture influences employees' entrepreneurial mindsets and vice versa (Ireland et al., 2003; Shepherd et al., 2010). The entrepreneurial learning model proposed by Bagheri and Pihie (2011) can offer a framework for building the space that intrapreneurial employees seek. Such a space should include opportunities for experiential learning, social interaction, observation of more capable colleagues, and time to reflect on what employees have learned (Bagheri & Pihie, 2011).

In comparing these principles to the recommendations from Cameron and Quinn (2011) on how to increase clan and adhocracy cultures, there are many similarities (see Table 3.2). As indicated by the needs assessment results discussed at the beginning of this chapter, staff members of the higher education institution under examination desire more flexibility and discretion in their work. Any proposed intervention should aim to achieve greater employee

empowerment, participation, cross-functional teamwork, employee recognition, innovativeness, and thoughtful risk taking (Cameron & Quinn, 2005).

Table 3. 2 *What it Means to Increase Clan and Adhocracy Cultures*

Increasing Clan Culture Means	Increasing Adhocracy Culture Means
<ul style="list-style-type: none"> ● More employee empowerment ● More participation and involvement ● More cross-functional teamwork ● More horizontal communication ● A more caring climate ● More recognition for employees 	<ul style="list-style-type: none"> ● More employee suggestions ● More process innovativeness ● More thoughtful risk taking ● Tolerance for first-time mistakes ● More listening to customers

Note. Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2005. Copyright 2005 by Jossey-Bass.

As a first step toward addressing the problem of practice, I propose implementing a small-scale version of Whirlpool’s I-mentor program adapted to the higher education context. As a pilot program, a small group (e.g., eight to 12) of self-nominated staff members from across the institution would participate in a 12-week experience. In the first phase of the program, participants will attend introductory workshops covering the basic principles of program and process innovation. These workshops will also serve to build community among participants and project coaches. Participants will then form cross-departmental project teams to continue working together for the remainder of the program. Project teams will work with the guidance of a dedicated project coach to create a proposal for a new process or program innovation for the institution. The program culminates with teams presenting their innovation proposals to a panel of evaluators, comprised of institutional leaders. Teams will receive an evaluation of their proposal as to how well it demonstrates the principles of innovation covered in the program. Upon successful completion of the program, participants will receive the official designation of

“Innovation Mentor,” which they can share in their annual performance review and on their resume.

Program design and implementation would align both with the recommendations from Cameron and Quinn (2005) outlined in Table 3.2 as well as the entrepreneurial learning model proposed by Bagheri and Pihie (2011). The implementation of an Innovation Mentor program may satisfy the goals of both staff members and leadership by enhancing the entrepreneurial culture of the organization and the entrepreneurial mindset of program participants. Staff members would gain more flexibility and discretion in their work, and the development of innovation skills in employees should ultimately lead to stronger financial performance for the institution as proposed in Ireland et al.’s (2003) strategic entrepreneurship model.

Chapter Four

Intervention Procedure and Program Evaluation Methodology

As evidenced in the needs assessment study conducted previously, staff members of a multicampus higher education institution expressed an interest in having more flexibility and discretion in their work. Such attributes are associated with the clan and adhocracy organizational cultures in Cameron and Quinn's (2011) competing values framework. Simultaneously, senior administrators articulated a need for the West Coast campus to be financially self-sustaining. Ireland et al.'s (2003) model of strategic entrepreneurship outlines how increases in the entrepreneurial mindsets of individuals and the entrepreneurial culture of an institution may lead to increased creativity and innovation, which in turn should ultimately lead to long-term wealth creation. In order to meet the needs of both staff members and administrators, any intervention addressing the problem of practice should increase the entrepreneurial mindset of individual staff members in order to increase organizational readiness for change. Through feedback loops, or what Shepherd et al. (2010) called entrepreneurial spirals, between the individual staff member and the organization, an increase in the entrepreneurial mindsets of individuals may also increase the overall entrepreneurial culture of the organization. Additionally, as outlined in Ireland et al.'s (2003) model of strategic entrepreneurship, I posit that increased creativity and innovation among staff members in the current context may lead to an increase in long-term revenue generation for the institution.

In this chapter, I propose an intervention that may help move the organization forward in achieving the goals of both staff members and senior administrators. The intervention program outlined herein is adapted from the I-mentor program employed by the Whirlpool Corporation (Snyder & Duarte, 2008). By training staff members in the principles of process and program

innovation, as well as encouraging them to apply such principles to their unique work contexts, the goal is to increase entrepreneurship at both the individual and the organizational level with the long-term goal of financial growth for the institution. In this chapter, I first outline the details of the proposed intervention. I then discuss the purpose, research design, and procedures for evaluating the process and outcomes of the intervention program, which is intended to address contributing factors to the problem of practice in the current context.

Proposed Intervention

I have adapted the proposed intervention from the I-mentor program employed at the Whirlpool Corporation (Snyder & Duarte, 2008). In the current context, the program will be known as the Innovation Mentor program, and I have designed it to take place over 12 weeks. For an outline and timeline of program components, including workshop topics, see Appendix H.

The program consists of three phases. In the first phase, participants attend a series of initial workshops that introduce the salient innovation principles that participants will apply throughout the program. Each workshop lasts for three hours, and a total of six workshops are delivered over a two-week period. In other words, participants complete 18 hours of workshops during the first phase of the program.

A team of two program coaches, including the researcher, facilitate the workshops that cover six innovation principles: linking innovation to organizational processes, incorporating the voice of the user for process innovation, incorporating the voice of the student for program innovation, ideation and brainstorming, planning a path to the dream state, and developing a business model (Snyder & Duarte, 2008). Workshop topics have been adapted from the Whirlpool program for the higher education context.

Workshops were designed according to the principles of entrepreneurial learning articulated by Bagheri and Pihie (2011): namely, hands on experience, social interaction, observation, and reflection. For instance, the act of observation plays a critical role in understanding the needs of your user or customer. In Session Two on how to incorporate the voice of the user for process innovation, participants learn how to observe processes in action. Document analysis of procedures manuals can also aid participants in understanding these processes. This observation technique is related to the first stage of design thinking, empathy (Brown, 2008). Brown (2008) encourages innovators to observe the world, including how users behave, prior to coming up with solutions to problems. While the Innovation Mentor program is not a design thinking program, the two approaches share some core principles, such as deeply understanding the end user's perspective.

At the beginning of the program, the intensive time spent together in the workshops and the initial activity design give participants a space in which to build community with their colleagues and coaches. By the end of the workshops, participants will form cross-departmental project teams of three or four individuals. In an effort to increase the clan culture of the organization (Cameron & Quinn, 2011), teams should include participants from a variety of levels, backgrounds, and functions within the organization. The community building and team formation support Bagheri and Pihie's (2011) component of social interaction. By working in teams, program participants gain self-awareness of their own strengths and weaknesses and learn to compensate for knowledge and skills they may not individually possess (Bagheri & Pihie, 2011). The work of project teams is also designed to emphasize team learning in which "the intelligence of the team exceeds the intelligence of the individuals in the team" (Senge, 1990, p. 12).

In phase two, project teams work together to build a proposal for a program or process innovation relevant and feasible for the institution. Phase two takes place over a 10-week period, and each project team is assigned a project coach who will guide them through this phase of the program. There are two deliverables at the end of phase two: a short written proposal for a process or program innovation, and an accompanying 30-minute presentation that project teams deliver to a panel for feedback. An evaluation rubric outlining the required components for the proposal is provided to the teams at the beginning of this phase. This analytic rubric covers the seven elements that teams will be evaluated on in their final proposal presentations. To meet the standards set in the rubric, proposals must be mission aligned, forward driving, solution oriented, feasible, scalable, sustainable, and cost saving for process innovations or revenue generating for program innovations. See Appendix I for the project evaluation rubric.

Teams will work under the supervision and guidance of their assigned project coach, who will meet with them for 90 minutes on a bi-weekly basis to get updates on team progress, answer questions, and provide feedback. Coaches will provide written feedback on the project proposal to ensure the team's proposal meets all the required elements. Toward the end of phase two, teams should rehearse their presentation with their coach, and their coach can provide feedback based on the evaluation rubric. This dress rehearsal enables teams to make any necessary revisions to strengthen their proposals prior to their final presentation. By the end of phase two, teams should be prepared to present their innovation proposal to a panel of institutional leaders.

Throughout the program, participants will keep a weekly reflection log. They will respond each week to a simple prompt that asks them to think about something that surprised, challenged, or intrigued them about that weeks' activities or content. A critical component of Bagheri and Pihie's (2011) entrepreneurial learning model is reflection. The authors highlight the

importance of entrepreneurs connecting their past experiences and social interactions to new learning through metacognition (Bagheri & Pihie, 2011). The reflection logs prompt participants to consolidate old and new information into mental models that, in turn, enable learners to consider how to improve when faced with similar challenges in future (Brown, Roediger, & McDaniel, 2014).

In the third and final phase of the program, project teams present their innovation proposal to a panel for evaluation and feedback. The panel is comprised of institutional leaders and the subject matter experts. The project evaluation rubric previously shared with participants will be used to provide feedback to teams on their proposals. The rubric includes scores on each of the seven elements, an overall score, as well as comments from each panelist.

Participants who successfully complete all required components of the program (i.e., the initial workshops, the project team work, and the final proposal presentation) will receive the designation of “Innovation Mentor,” which they can share in their annual performance review and on their resume. The intervention design and implementation are intended to align with the recommendations from Cameron and Quinn (2005) on how to increase clan and adhocracy cultures and the entrepreneurial learning model proposed by Bagheri and Pihie (2011). The implementation of an innovation mentor program may satisfy the goals of both staff members and leadership by enhancing the entrepreneurial culture of the organization and the entrepreneurial mindset of program participants, ultimately leading to the stronger financial sustainability for the institution as outlined in the model of strategic entrepreneurship (Ireland et al., 2003).

Purpose of the Study

The purpose of this study is to evaluate and assess the process of implementation and the proximal outcomes of an intervention addressing the stated problem of practice: namely, low readiness for change among staff members in a multicampus higher education institution. Five research questions will guide the evaluation of the program's process and outcomes. The first two questions focus on the process of implementation, and the last three questions explore the proximal outcomes for the intervention program. A summary matrix that outlines each question, its constructs and measures, and the data collection and analysis procedures may be found in Appendix J.

RQ1 To what extent did the intervention reach its intended audience?

RQ2 What factors did participants identify as motivating them to finish the program or inhibiting them from completing the program?

RQ3 To what extent do participants demonstrate increased knowledge of innovation principles?

RQ4 How do participants describe their experiences of working and learning with their project teams?

RQ5 In what ways do participants intend to use innovation principles in the future?

Research Design

To answer the above research questions, I employed a mixed methods convergent design. Creswell and Plano Clark (2018) describe that in a convergent design, the researcher collects both quantitative and qualitative data simultaneously and then compares the data to completely understand the problem being examined. For this study, I notate the design as quan + QUAL (Creswell & Plano Clark, 2018) specifying that the data collection, analysis, and interpretation of

the quantitative and qualitative strands occur in parallel and that the qualitative strand takes precedence due to the small sample size and a focus on participants' experience of the intervention program.

A practical reason for choosing the convergent design is that one can collect both the quantitative and qualitative data simultaneously, thus shortening the total duration of the research process (Creswell & Plano Clark, 2018). Beyond this practical consideration, a main strength of the convergent design is the ability to triangulate the quantitative data collected, which may reflect the researcher's view, with the qualitative data that better illuminate the participants' views (Creswell & Plano Clark, 2018). The intent of the convergent design is to create a holistic understanding of the topic of interest (Creswell & Plano Clark, 2018), and in that vein, Johnson and Onwuegbuzie (2004) assert that researchers may in fact produce a "superior product" (p. 17) by mixing quantitative and qualitative approaches. This claim is based on the underlying paradigm associated with mixed methods research, pragmatism: mixed methods researchers combine deductions made from the quantitative strand with inductions made via the qualitative strand to create abductions, or the best explanation for the results (Johnson & Onwuegbuzie, 2004). I next describe the research design for the process evaluation and outcome evaluations, respectively. A logic model for this study is found in Appendix K.

Process Evaluation

Process evaluation seeks to measure fidelity of implementation, that is, the extent to which a program is implemented as the program developers intended (Dusenbury, Brannigan, Falco, & Hansen, 2003). Process evaluation is a mechanism by which evaluators assess how well a program operates (Rossi, Lipsey, & Henry, 2019). Rather than focusing on the outcomes of a program, a process evaluation compares the program as designed to the program as implemented

and enables the researcher to check assumptions made in program design. In the process evaluation of this intervention, I focus on program reach, participant responsiveness, and participant maintenance. This section describes how these three process evaluation components might be measured through process evaluation indicators. These indicators are aligned with each of the two process evaluation questions articulated above and detailed in the summary matrix in Appendix J.

Program reach and participant responsiveness. Baranowski and Stables (2000) define program reach as the “extent to which the program contacted or was received by the targeted group” (p. 160). The rationale for inclusion of the first research question as a component of the process evaluation is twofold. First, the intervention seeks to create cross-functional teams as a means to increase clan culture in the organization (Cameron & Quinn, 2011). Therefore, the makeup of participants, particularly their role within the organization, is of interest. Second, a distal program outcome is increased employee empowerment (see Appendix K). I hope to influence employee empowerment among varied levels and roles within the organization, including employees in operational or administrative positions who may currently feel the least empowered. An evaluation of program reach, therefore, is a means by which I can ascertain if the program did in fact achieve one of the intended goals.

Dusenbury et al. (2003) define participant responsiveness as “the extent to which participants are engaged by and involved in the activities and content of the program” (p. 244). Two quantitative indicators can measure participant responsiveness to the Innovation Mentor program. Overall, the proportion of participants who successfully complete the program provides a holistic measure of responsiveness. The target for program completion was set at 80% of participants (see the logic model in Appendix K). Additionally, attendance logs were kept as

another measure of participant responsiveness. Attendance from session to session can offer a more detailed understanding of participant responsiveness throughout the program.

Participant maintenance. Another element of process evaluation is participant maintenance, which Baranowski and Stables (2000) define as what keeps participants involved in both the programmatic and data collection aspects of an intervention study. The second research question seeks to understand what motivated participants to complete the program and what factors may have inhibited program completion. In considering how to measure participant maintenance, I have identified two indicators to answer the second research question outlined above. First, participant feedback can assist in identifying what factors aided or inhibited completion of the program. Additionally, the demographic profiles of participants who did not complete the program can be compared to those who did complete the program as well as the general staff member population as a means of determining what participant characteristics may support program completion. This comparison is recommended by Baranowski and Stables (2000) as a way to explore participant maintenance and inform decisions in how to improve maintenance in future iterations of a program.

Outcome Evaluation

Outcome evaluation is a mechanism by which evaluators measure the effect of an intervention program on participants (Rossi et al., 2019). In the current case, the last three research questions examine the proximal outcomes of the Innovation Mentor program. As mentioned earlier, the research design is a convergent parallel design, with precedence on the qualitative strand. In the case of these research questions, both quantitative and qualitative methods were used to collect, analyze, and interpret the data.

As shown in the program logic model (Appendix K), there are three proximal outcomes associated with the three outcome evaluation questions. The three proximal outcomes are increased knowledge of innovation principles, experiences of Senge's (1990) notion of team learning, and participants' intention to use innovation principles in their own work. The third research question considers how participants' knowledge of innovation principles changes before and after the Innovation Mentor program. A quantitative pre-test/post-test comparison best answers this question. The fourth research question examines participants' experiences; as such, a qualitative approach may best answer this question. The final question explores participants' intention to use the principles covered in the program in their future work, and in this last case, a mixed methods approach was taken.

Method

In this section, I describe the study participants and procedures. The procedures include a detailed description of the intervention timeline and the measures and methods employed for data collection and analysis.

Participants

I recruited 11 participants through purposive sampling (Patton, 1990). The population from which participants were recruited included regular staff members from the West Coast campus of a multicampus higher education institution. Recruitment was limited to staff members; no faculty members were invited to participate in the current intervention study. While faculty members are important stakeholders in any educational institution, much research to date has focused on faculty members' experiences with innovation and change. Therefore, I deliberately chose to invite only staff members to participate because less research is conducted on staff members' experience of change and innovation in the higher education context.

Additionally, because the current study is a pilot implementation of the intervention, I decided to limit participation to one campus for ease of implementation and data collection. In future iterations of the program, I hope to include both faculty members from the West Coast campus as well as employees from the East Coast campus.

To compare outcomes from staff members in diverse roles and levels of the organization, stratified purposive sampling was conducted. This sampling technique fits well with the process indicator of program reach, as stratified purposive sampling increases the likelihood of sampling specific groups within the population. Patton (1990) explains that this approach also enables comparisons to be made across subgroups of interest. In the current case, I based the stratification on three factors: the type of departments represented, the job roles of prospective participants, and their Fair Labor Standard Act (FLSA) status. FLSA status determines how employees are paid, either in hourly wages and overtime, or salary and no overtime (United States Department of Labor, n.d.). Typically, salaried workers have more autonomy in decision making than hourly workers, as defined by their FLSA status.

I launched participant recruitment after receiving Institutional Research Board approval for my study in August 2021. A recruitment email was shared with managers across campus, and I submitted an announcement in the monthly newsletter distributed to all West Coast staff members on September 3. I also made a verbal announcement about the program at a leadership group meeting, which is a monthly meeting that includes academic leaders and department managers. Likewise, individuals who seemed promising fits for the program were individually encouraged to participate by myself and my co-facilitator. A final reminder to join the program was sent to the list of all regular staff working on the West Coast campus on September 14.

With regard to population size, there were 116 full-time staff members working for the West Coast campus. 37% male and 63% female, during the academic year 2018–2019. By purposively building the cohort of program participants, I hoped to encourage program completion for a variety of employees across the organizations as well as compare outcomes for different types of employees who participated.

During the recruitment phase, 11 staff members consented to participate in the intervention study, nine women and two men. Gender representation slightly skewed toward female participants, with 82% female participants in the sample as compared to 63% in the staff member population. Regarding payroll status, seven participants (64%) were salaried or exempt employees, and 4 participants (36%) were hourly or non-exempt employees. Participants represented eight departments on campus, including digital learning, the provost's office, institutional advancement, a research center, the library, the advising center (2), graduate school administration (2), and recruiting (2). Employment tenure of participants ranged from less than one year to 20 years working for the institution. For a complete list of intervention study participants, see Appendix L.

Measures

For this study, I employed a variety of methods, both quantitative and qualitative, to measure the process and outcome indicators relevant to the study. Figure 4.1 outlines the timeline for when each measure was used.

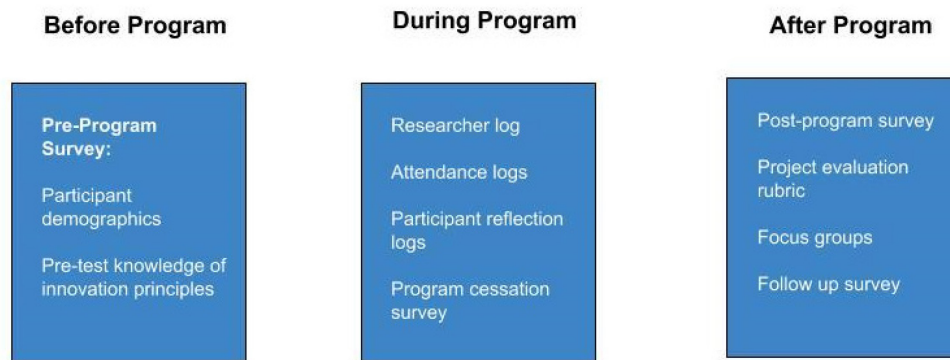


Figure 4. 1. Data collection sources and timeline

Quantitative measures. Several quantitative data sources enabled me to measure both process and outcome indicators. Each measure is described in more detail in this section.

Pre-program, post-program, and follow up surveys. Before the program began, participants completed a pre-program survey. The survey included three parts. The first section was a self-assessment of participants' knowledge of the innovation principles covered during the program. The second section asked participants to state their goals and concerns for the program. The last section collected demographic information for each participant, including their role in the institution (e.g., staff or faculty), department, job title, payroll status, year of employment, and gender. See Appendix M for the pre-program survey.

Upon successful completion of the Innovation Mentor program, participants completed a post-program survey. The post-program survey served partly as a post-test to measure the proximal outcome of knowledge of innovation principles. The first part of the survey matched items from the pre-program survey, and responses to the post-program survey were compared with participants' responses on the pre-program survey. Additionally, open ended responses asked participants to consider how they intended to apply innovation principles to their personal work contexts. For an example of the post-program survey, see Appendix N.

About two months after the program ended, a short follow up survey was distributed online to program participants. This final survey sought to hear from participants as to how they were able to apply the concepts learned in the Innovation Mentor program to their work contexts. See Appendix O for the follow up survey.

Attendance logs. I tracked participant attendance for the initial workshops in the first phase of the program as well as participation in the bi-weekly check in sessions during the second phase of the program.

Program cessation survey. Participants who decided to cease participation at any point during the program were asked to complete a short online survey. The intention of the survey was to collect information on what factors inhibited program completion (see Appendix P).

Project evaluation rubric. Panelists who evaluated the final program proposals completed an analytic rubric to provide feedback on the process and program innovation proposals presented by project teams. The rubric included elements such as mission alignment, scalability, feasibility, equity, potential for costs savings for process innovations, and potential for revenue generation for program innovations. See Appendix I for the original project evaluation rubric.

Qualitative measures. As a convergent mixed methods design, the study also included qualitative measures to measure the process and outcome indicators. These measures included participant reflection logs, a researcher log, open-ended questions from the program surveys described above, and a focus group protocol.

Participant reflection logs. Throughout the Innovation Mentor program, participants were encouraged to complete weekly reflection logs. Logs were loosely structured but could include reflections on concepts learned, the project team experience, questions or concerns with

program content, challenges encountered, considerations on how the participant might apply program content to their own job role, and progress toward personal goals. Each entry was about 100-200 words in length.

Researcher log. Guba (1981) emphasizes the importance of practicing reflexivity in qualitative research to enhance the confirmability of a study, and he recommends that researchers keep a journal of their insights and reflections throughout the research process. I maintained a researcher log for the duration of this study. The log included analytic memos written during the qualitative data analysis. Saldaña (2013) encourages researchers to stop and document insights and questions that arise during the coding process in analytic memos.

Focus group protocol. After the program, I conducted four focus groups with participants who successfully completed the program. Questions focused on topics relevant to answering the research questions, especially focusing on the experience of working in project teams and participants' intention to use innovation principles in their work. For example, participants were asked "What challenges did you face in working with your team?"; "Were there things that were easier to do with your team than would be on your own?"; and "What elements of innovation could you see yourself using in your own work?" The complete focus group protocol may be found in Appendix Q.

Procedure

This section outlines the procedures by which the study was conducted. First, I describe the proposed timeline for the Innovation Mentor program. Then, I explain the data collection and data analysis procedures employed for both the quantitative and qualitative strands of the study.

Proposed intervention timeline. The Innovation Mentor program is designed to run for 12 weeks from September to December 2020. In the first phase, participants attend a series of

workshops to familiarize them with program concepts. After completion of the initial workshops, participants work with their project teams for 10 weeks to create their program or process innovation proposal. Bi-weekly check ins with project coaches occur during this second phase of the program. In the final phase, teams present their proposals to the panelists for review and feedback in mid-December. For a complete outline and timeline of the Innovation Mentor program, see Appendix H.

Data collection. As a convergent design, both quantitative and qualitative data sets were collected throughout the intervention program. Figure 4.1 illustrates which data sources were employed before, during, and after the program. Details of data collection sources and analyses are included in the summary matrix in Appendix J. In terms of answering the five research questions, RQ1 and RQ3 were primarily quantitative in nature, RQ4 was primarily qualitative in nature, and RQ2 and RQ5 used mixed methods. I outline the specific data collection procedures below, describing the quantitative strand and qualitative strands in turn.

Quantitative data collection. As outlined in Figure 4.1, six quantitative data sources were used before, during, and after the intervention program: the pre-program survey, the post-program survey, the follow up survey, the program cessation survey, attendance logs, and the project evaluation rubric. The Qualtrics online survey tool was employed to design and administer all surveys.

To assess program reach, data collection began with a pre-program survey that documented participants' demographics, including gender, age, role in the organization, department, and payroll status. The goal, as outlined in the logic model in Appendix K, was to ensure program participation from staff members representing a diverse array of functions,

levels, and departments within the institution. Attendance logs maintained by the author were also employed to verify program reach.

In addressing the program maintenance aspect of the second research question, data from the pre-program survey, post-program survey, and the program cessation survey were employed to understand the participant characteristics of those who successfully completed the program and those that opted out of participation. Participants who chose to leave the program completed a program cessation survey. The survey helped to identify what types of participants chose not to finish the program as well as the anticipated and unanticipated reasons for ceasing their participation.

To measure the proximal outcome of knowledge of innovation principles, participants completed two online questionnaires that served as a pre-test and post-test for comparison. Likert scale items measured participants' knowledge of innovation principles before and after the Innovation Mentor program. Demographic information collected in the surveys enabled comparisons across subgroups of interest. At the end of the program, feedback from panelists was collected via an analytic project evaluation rubric.

With regard to intention to use the innovation principles introduced in the program, participants indicated their intention to use in the post-program survey. About two months after successful completion of the program, participants completed a short follow-up survey to measure their current use of the innovation principles in their own work contexts.

Qualitative data collection. As noted previously, the research design is a convergent mixed methods design with an emphasis on the qualitative strand, or a quan + QUAL design. Emphasis is on the qualitative strand due to the small sample size and the focus on participants' experience, especially in the fourth research question. In terms of the process evaluation, open-

ended survey responses to the post-program survey and the program cessation survey helped identify what supports aided program completion and what barriers inhibited program completion. Likewise, the researcher log maintained throughout the study helped to examine fidelity of implementation and was used as part of an audit trail for the qualitative aspects of the study.

To examine proximal outcomes of the intervention, several data sources collected qualitative data. During the program, participants completed short weekly reflection logs. Each of the four online surveys included open-ended questions. Additionally, I conducted focus groups with participants at the end of the program. Focus group protocols explored participants' intention to use the innovation principles introduced in the program in their own work contexts as well as illuminated their experiences throughout the program more generally.

Data analysis. Mixed methods data analysis included statistical analysis for the quantitative data sets and thematic analysis and coding of the qualitative data sets. Additionally, comparison between the quantitative and qualitative data sets enabled a more comprehensive understanding of both the process and outcome aspects of the study.

Quantitative data analysis. For the quantitative strand, descriptive and inferential statistics were calculated using the IBM SPSS Statistics 26 software package. With regard to the process evaluation indicators, one goal of the study was to encourage participation from a diverse sample of participants, representing various roles, departments, and statuses among the staff. Demographic data from the pre-program survey was analyzed via descriptive statistics to determine the depth and spread of program reach. The demographics of participants were also triangulated with attendance logs to verify program participation.

In terms of barriers to program completion, the program cessation survey aided in identifying what types of participants chose not to finish the program as well as the anticipated and unanticipated reasons for ceasing their participation. Descriptive statistics were used to evaluate both the demographic profiles of participants who left the program and their reasons for leaving.

To measure the proximal outcome of knowledge of innovation principles, participants completed the pre-program survey and the post-program survey that measured their knowledge of innovation principles before and after the intervention. Due to the small sample size, a nonparametric statistical test compared responses before and after the intervention. Foster (2011) suggests that a Wilcoxon rank sum test can compare the mean scores of an individual before and after a stimulus, such as the Innovation Mentor program. Demographic information collected in the pre-program survey enabled comparison across subgroups.

Statistical test results were also triangulated with the evaluation ratings that participants received on their final project presentation. At the end of the program, a panel of evaluators gave feedback to participants via an evaluation rubric, and rubric ratings were compared with participants' self-reports on the post-program survey to further explore this research topic.

Regarding the proximal outcome intention to use innovation principles, responses to the post-program survey and the follow up survey were analyzed. Responses regarding *intention to use* innovation principles from the post-program survey and the *actual use* of innovation principles from the follow-up survey were compared. Descriptive statistics from the follow-up survey demonstrated how many participants successfully applied innovation principals in their work.

Qualitative data analysis. Three sources of qualitative data were analyzed to help answer the process and outcome evaluation questions: participants' responses in their weekly reflection logs, open-ended responses to surveys, and the end-of-program focus groups. Additionally, I kept a researcher's log throughout the study. Focus group sessions were recorded via the Zoom web conferencing platform, which auto generated voice-activated transcriptions of these sessions. I edited the transcripts manually to ensure clarity and accuracy. An initial round of qualitative coding was done with color coded highlighting in the Microsoft Word application. Based on this round of coding, two emergent codes were added to the a priori code list: time constraints and COVID-19 impact. A second round of data analysis was conducted using the NVivo qualitative data analysis software, which facilitated the storage, coding, and analysis of qualitative data.

In helping to answer the second research question, open-ended responses to the post-program survey and the program cessation survey were compared. In this way, feedback from participants who successfully completed the program and those who opted out of the program were triangulated to determine what factors encouraged or discouraged program participation and completion.

To address the fourth research question, a priori codes were based on the innovation principles covered in the program, Senge's (1990) definition of team learning, and Bagheri and Pihie's (2011) model of entrepreneurial learning. Additional codes emerged during the coding process, and subsequent rounds of coding led to reorganization and revision of a priori codes. See Appendix R for the final list of codes and subcodes. Responses from the focus groups were compared to responses in the participant reflection logs and surveys. Further triangulation took place between the qualitative codes and themes identified and quantitative proposal rubric results to gain a fuller understanding of the participants' experience working with their teams.

In examining the final research question, focus groups conducted after the program explored participants' intention to apply the concepts covered in the intervention program to their work contexts. A priori coding identified participants' intention to use innovation principles in their individual work contexts. These data were triangulated with responses to the open-ended item on the follow up survey administered two months after the program ended. I compared focus group responses to the end of program survey to determine if the intention held once participants had the opportunity to apply what they had learned in their unique job roles.

One final qualitative analysis tool is the researcher's log that I maintained throughout the study. Guba (1981) mentions that in the qualitative paradigm, the goal shifts from the objectivity of the researcher to the confirmability of the research, and a researcher's log is one means of supporting confirmability. Banks (2016) also emphasizes the importance of researchers acknowledging their positionality in relation to their research. In the current study, I was a member of the community under investigation. This emic position can be an asset in obtaining a deeper understanding of the context. However, maintaining a researcher's log aided my ability to consider my position of privilege as a white, cisgender female senior administrator in the organization as it related to the research foci and participants.

Chapter Five

Findings and Discussion

This chapter discusses the findings and conclusions of the intervention study described in the previous chapter. During the fall of 2020, 11 staff members from the West Coast campus of the institution participated in an intervention, the Innovation Mentors program. Due to stay-at-home orders in place because of the COVID-19 pandemic, the entirety of the program was conducted virtually. The bulk of the program ran for 12 weeks between September and December 2020, with three project teams presenting innovation proposals to a panel of academic leaders in December.

The short term outcomes of the intervention program, as outlined in the logic model (see Appendix K), were threefold: that participants would demonstrate increased knowledge of innovation principles, that participants would experience instances of team learning as defined by Senge (1990), and that participants would intend to use innovation principles in their future work. After describing the actual implementation of the intervention program, I explore each of the proposed research questions in turn. The first two questions consider a process evaluation of the study, and the remaining questions explore the proximal outcomes of the intervention. The research design is a convergent mixed methods study (Creswell & Plano Clark, 2018) notated as quan + QUAL as there is an emphasis on the qualitative strand due to the small sample size and a focus on participants' experience of the intervention program. After exploring the study's findings, I summarize the main conclusions drawn from the data analysis, outline study limitations, and recommend further areas of investigation.

Process of Implementation

The co-facilitator of the Innovation Mentor program was a long-time friend and colleague who works in the digital learning team. This colleague has been involved in educational innovation and digital learning for many years, taking on a formal role of establishing the institution's digital media center in 2007. He holds a master's degree in teaching English to speakers of other languages from the institution under study and prior to working in digital learning, he ran the institution's intensive English program. He currently serves as vice president of the representative body for staff on both campuses. Along with his institutional responsibilities, he consults with companies on implementing design learning for institutional change, and he has also co-facilitated a summer program for high school students, which teaches young people how to apply design-thinking principles to solve community issues.

During the recruitment process, it became clear that prospective participants were hesitant due to the perceived intensive time commitment of the program. Some prospective participants also asked about the session schedule because they worked non-traditional hours and were not sure they would be able to participate. For instance, a member of the library staff who worked afternoons and weekends inquired as to her ability to join the program. In order to encourage broader participation, I administered an informal survey of prospective participants to better understand their preferences with regard to the program schedule. Simultaneously, my co-facilitator and I met to begin the planning process for the initial workshops and decided to delay the launch of the program by one week, from September 14 to September 21, to give us additional time to recruit participants. Survey results indicated that the majority of participants would prefer 90-minute sessions rather than two-hour sessions, and the vast majority (91.7%) preferred a less intense schedule over a longer period of time rather than the original intense two-

week workshop schedule. Therefore, my co-facilitator and I decided to redesign the program schedule to meet participants' preferences. The original proposed schedule was six, three-hour sessions over a two-week period for a total of 18 hours of content. To ensure that we were covering the same amount of material, we reorganized the workshop schedule to meet twice a week for 8 weeks in 90-minute sessions. For a comparison of the program timeline as originally designed to how it was delivered, see Figure 5.1.

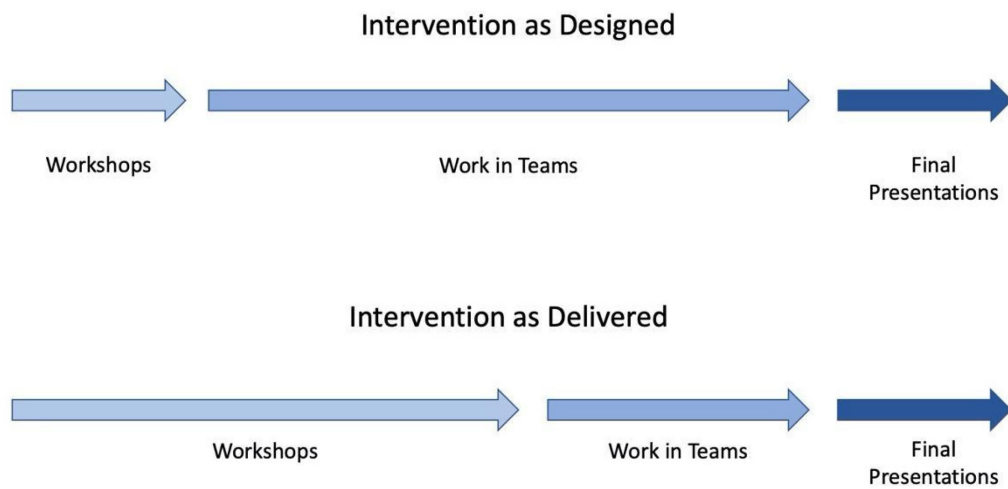


Figure 5. 1. Timeline comparison of intervention as designed and delivered.

Eleven staff members agreed to participate in the intervention program and consent forms were collected from each participant. Each participant also completed the pre-program survey, which was administered via the Qualtrics online survey tool. A kickoff meeting was held on September 22. The remaining series of workshops were scheduled from week to week to accommodate participants' schedules as much as possible. Sessions were recorded and shared with those who could not attend. The final workshop schedule is depicted in Table 5.1.

Table 5. 1 *Final Workshop Schedule of Innovation Mentors Program*

Week	Session	Date	Duration	Topic(s)
Week 1	Session 1	9/22	60 minutes	Program overview and introductions Articulating group values
Week 2	Session 2	9/29	90 minutes	Translating values into behaviors Defining and differentiating innovation and creativity The pandemic as a portal to innovation
	Session 3	10/1	90 minutes	“Yes, and...” to build on others’ ideas Group communication and perception Initial problem identification
Week 3	Session 4	10/5	90 minutes	User-centered design TED talk Higher ed design thinking case study
	Session 5	10/8	90 minutes	Articulating needs statements Co-creation activity using Google Jam Boards
Week 4	Session 6	10/13	90 minutes	Biomimicry/Nature cards Using “How Might We...?” statements for ideation
Week 5	Session 7	10/19	90 minutes	Needs statement pitches to facilitate team formation
	Session 8	10/22	90 minutes	Innovation Guest: Spanish professor who launched a new specialization
Week 6	Session 9	10/26	90 minutes	Innovation Guest: Assistant Dean of Student Services who re-envisioned new student orientation due to pandemic
	Session 10	10/30	90 minutes	Initial team formation
Week 7	Session 11	11/4	90 minutes	Project management Setting measurable objectives
Week 8	Session 12	11/9	90 minutes	Innovation Guest: Public administration professor who shared tools and strategies for organizational innovation
Week 9			30 minutes	Coach check in
Week 10	Session 13	12/3	90 minutes	Team shareout
Week 11			30 minutes	Presentation run through with coach
Week 12	Session 14	12/16	90 minutes	Final proposal presentations with panel
	Session 15	1/13	60 minutes	Program debrief

All live sessions were conducted via the Zoom video conferencing platform. My co-facilitator and I discussed various possibilities for an online platform to share resources and support participants between sessions. Options included Canvas, our learning management system, as well as the Notion online platform. Ultimately, we agreed to use an internal social media platform already employed on campus (see Appendix S for screenshots of platform). This platform is similar to Facebook in functionality, user interface, and navigation. However, access to the platform is limited to only those in the campus community. The benefit of using this platform is that we could create a closed group for program participants and facilitators. Additionally, resources such as readings and videos could be posted on the platform, and participants could use it to communicate between sessions with other participants as well as the program facilitators. I also used Microsoft Outlook email and calendar to communicate with participants, share plans for upcoming sessions, and provide links to recordings for those participants who were unable to attend the live sessions.

As part of the learning process, participants were asked to submit shortly weekly reflection logs. I set up a Google form for the reflection log submissions and sent email reminders to participants toward the end of each week. Each entry could be about 100-200 words in length, and participants were encouraged to write about any questions, challenges, or insights they experienced that week in response to program content. Unfortunately, most participants did not maintain the habit of submitting the reflection entries throughout the program. Only two of the nine participants who completed the program submitted weekly entries for the entire duration, while most participants ceased doing so within the first month. One participant submitted no entries at all. The average number of submissions per participant was four.

Toward the end of the 12 workshop sessions, participants self-selected into teams to create an innovation proposal. Participants shared problem statements with each other and those with affinities formed teams of two to four participants. Each team was assigned a coach to support and provide feedback as teams worked more independently in this second phase of the program. The coaches were the author and my co-facilitator. Team A consisted of four participants, and they focused on supporting students for academic success. Team B was made up of three participants who concentrated on improving the employee onboarding process. Team C had two participants, and they explored how the institution could better support community-based projects, especially partnerships with local governments. The author coached Teams B and C, and my co-facilitator coached Team A.

Each team worked from week eight to week 12 to build an innovation proposal that had three components: a 10-15 minute presentation to be delivered by Zoom to a panel of institutional leaders; a one-page narrative describing the proposal; and a resource grid outlining the time, human, and financial resources needed to implement the proposal. Teams checked in twice with their coach to ask questions and receive feedback and support on their work in weeks nine and 11. Additionally, the group met in a plenary session in week 10 to share their work with each other and receive feedback from other teams.

Final presentations were delivered on December 16. Each team was given 30 minutes to present their proposal and discuss it with a panel. The four-person panel included the institution's vice president for academic affairs, the deans of both graduate schools, and a professor from the public administration program who had previously visited the program as a guest in session 12. Panelists were provided an analytic rubric to complete for each team. Note that this rubric was revised to include an equity category which did not appear in the original program proposal. See

Appendix T for the revised feedback rubric. After the holiday break in December, each team received the four completed rubrics for their project, which also included comments from each panelist. Average scores for each team were 19.75 for Team A, 20.13 for Team B, and 18.00 for Team C out of a possible 24 points on the analytic rubric.

A final debrief and program wrap up was held with all participants on January 13, 2021. At that time, participants were reminded to complete the post-program survey on Qualtrics and to sign up for a focus group, which were scheduled on January 21, 26, and 29. Participants were asked to join a focus group that did not include their teammates. One participant could not make the focus groups and was interviewed by the author individually using the questions from the focus group protocol. As a final data collection point, I asked participants to complete a follow up survey in March 2021.

Research Questions and Findings

As outlined in the previous chapter, this intervention study addressed five research questions, two process-related questions and three outcome-related questions. I report the findings for each research question in turn here, beginning with those related to the process evaluation. As a reminder, the five research questions were:

RQ1 To what extent did the intervention reach its intended audience?

RQ2 What factors did participants identify as motivating them to finish the program or inhibiting them from completing the program?

RQ3 To what extent do participants demonstrate increased knowledge of innovation principles?

RQ4 How do participants describe their experiences of working and learning with their project teams?

RQ5 In what ways do participants intend to use innovation principles in the future?

Program Reach and Participant Responsiveness (RQ1)

The first research question asks if the intervention program reached its intended audience. To answer the question, I consider two program evaluation components: program reach and participant responsiveness.

Program reach. Program reach asks to what extent the program reached the group targeted for the intervention (Baranowski & Stables, 2000). In terms of the number of participants, I had hoped to recruit eight to 12 staff members from the West Coast campus. This goal was achieved when 11 staff members joined the program initially, and nine of them successfully completed the program.

Looking more closely at the characteristics of participants, several goals regarding the sampling were also achieved. The participants came from a variety of departments and roles across campus: eight departments were represented both at the outset and at the end of the program. These departments included digital learning, the provost's office, institutional advancement, a research center, the library, the advising center, academic administration, and recruiting. However, no participants came from departments that might be categorized as strictly operations, such as human resources, finance, or information technology services.

In terms of gender, the sample skewed heavily female at 82% at the start of the program and 78% at the end of the program; however, the staff member population also skews female at 63%. Four of the participants (36%) had a payroll status of non-exempt, meaning they are hourly employees. That percentage was maintained despite two participants leaving the program, as one was salaried, and one was hourly. This level of participation is important in that hourly

employees are often less likely to have the time and autonomy to participate in professional development during work hours.

According to the logic model for the intervention program (see Appendix K), participants should be staff members representing a variety of job roles, both salaried and hourly payroll statuses, and both academic and operations departments. The first and second goals appear to have been met. Yet, the latter goal regarding department representation did not truly include staff members from operations departments, which tend to be more compliance-focused and less desirous of creativity in their work, according to the needs assessment conducted previously.

Participant responsiveness. The second component related to this research question is participant responsiveness. Participant responsiveness considers how engaged participants are in the intervention program (Dusenbury et al., 2003). The participation goal stipulated that 80% of participants receive the Innovation Mentor designation. In this case, 82% of participants successfully completed the program and received this designation; hence, this goal was achieved.

I maintained attendance records for each participant for the 15 live program sessions. For those nine participants who successfully completed the program, attendance ranged from 73% to 100%, with an average attendance of 88%, or 13.2 out of 15 sessions. Note that the participant with the lowest attendance went on medical leave toward the end of the program and missed the last debrief session but fully completed participation in the study. As noted earlier, two participants decided to end participation in the program in weeks three and four, respectively. Their reasons for ceasing participation are explored in the next section. However, it is interesting to note that both participants had 100% attendance at program sessions up until the point they decided to leave the program.

Factors Motivating or Inhibiting Program Completion (RQ2)

The second question focuses on the matter of participant maintenance. Baranowski and Stables (2000) recommend comparing the characteristics of those who complete the program to those who do not complete. I discuss these two sub-samples separately and then compare them.

Those who ceased participation. As mentioned previously, two participants, Participant 10 and Participant 11, left the intervention program, one in week three and one in week four. Both participants were female. Participant 10 was a salaried employee working in the recruiting department who had been with the organization for 20 years. Participant 11 was an hourly employee working in academic administration who had worked for the institution for 18 years. They had each informally expressed some reservations about their ability to join and participate in the program to the author during the recruitment process, but each chose to join the program despite these reservations.

Both participants completed the program cessation survey, which had a multiple choice picklist and an open response item. In response to the question asking why she was leaving the program, Participant 10 chose the option “too busy,” and added the comment: “I really liked the content and wish I could dedicate more time to learning about innovation in higher ed. The only reason I am leaving is I am just swamped and am dropping the ball in my work.” Participant 11 chose the picklist option “Program content not relevant to my work,” and added the comment: “There was too much work for the amount of time I could set aside for the project.”

Those who completed the program. In the post-program survey, participants who completed the program were asked to talk about what motivated them as well as what challenges they faced in completing the program. Eight of the nine participants (89%) completed the survey. In terms of what motivated participants to complete the program, the number one reason was

“interest in program content.” Additionally, half of respondents indicated that the support they received from program coaches aided them in completing the program. See responses to what motivated participants to complete the program ranked in order of most chosen to least chosen in Table 5.2. Note that respondents were instructed to choose all options that applied to them.

Table 5. 2 *What Motivated You to Complete the Program? (n = 8)*

Reason for completing	<i>n</i>	Percentage
Interest in program content	7	88%
Project coach support	4	50%
Enjoyed working in my team	3	38%
Manager support	3	38%
Project team support	3	38%
Other (unspecified)	1	13%

Turning toward the challenges that participants faced in completing the program, all respondents indicated that time constraints inhibited them. In addition to selecting “time constraints” from the list of reasons provided, three respondents also commented that they would have liked to have more time to work in their teams to build a better proposal. As one respondent stated: “I feel like from a time perspective, however, my smaller group could have done more and developed a more detailed plan for our ideas had we had more time to invest.” In addition to time issues, three respondents indicated that they faced challenges within their team. One team member stated: “I understand more about how to propose innovations. However, the specific innovations I wanted got bogged down in group dynamics.” These three respondents were on all on Team A, and this challenge was not identified by members of Team B or Team C. The complete ranking of challenges faced in completing the program is included in Table 5.3. Again, respondents were instructed to select all options that applied to them.

Table 5. 3 *What Challenges did you Face in Completing the Program? (n = 8)*

Challenge in completing program	<i>n</i>	Percentage
Time constraints	8	100%
Challenges working in my team	3	38%
Other (unspecified)	1	13%
Lost interest in program content	0	0%
Pressure from my manager	0	0%
None	0	0%

Taken together, responses from both those who completed the program and those who did not indicate that the primary challenge to participation was limited time. This concern ran throughout the program as six of the 11 initial program participants indicated time as a concern in the pre-program survey. Additionally, in comparing the reasons why two participants left the program to the top challenge facing those who completed the program, the consistent factor across all participants was time constraints.

Overall, the process evaluation indicates that the target audience for this intervention program was reached, yet some departments of interest did not participate. There was strong representation from academic and student services departments and a variety of job roles across the institution. However, staff members from operations departments did not participate. Additionally, the program did meet its participation objectives in that more than 80% of participants completed the program and participants represented both salaried and hourly workers. Time constraints appeared to be the biggest challenge for all participants, both those who finished the program and those who did not. To a lesser extent, conflict within one team also was cited as a challenge to program completion. Taken together, the intervention program was delivered with fidelity and did meet the goals set in the intervention proposal. It should be noted, however, that changes to the program schedule occurred to accommodate greater participation from staff members as indicated in Figure 5.1 above. The remaining three research questions consider the proximal outcomes for participants who completed the program.

Knowledge of Innovation Principles (RQ3)

The third research question asks if program participants perceive an increase in their knowledge of innovation principles after completing the program. As mentioned previously, eight of the nine participants who completed the program responded to the post-program survey. A statistical comparison was made between their responses to items regarding knowledge of innovation principles prior to and after the program. Due to the small sample size ($n = 8$), a nonparametric test was deemed appropriate. In this case, I chose the Wilcoxon Signed Ranks Test to compare dependent group responses before and after the program. Note that respondents rated themselves on a four-point Likert scale with 1 representing “strongly disagree” and 4 “strongly agree”. The results of the statistical test are found in Table 5.4.

Table 5. 4 *Comparison of Participants’ Knowledge of Innovation Principles Before and After the Intervention Program using Wilcoxon Signed Ranks Test (n = 8)*

Innovation Principle	Mean Before Program	Mean After Program	Asymp. Sig. (2-tailed)
Link innovation to institutional processes	2.63	3.63	.02*
Incorporate the voice of the user for process innovation	2.25	3.75	.01*
Incorporate the voice of the student for program innovation	2.50	3.63	.01*
Ideate and brainstorm	3.63	3.75	.56
Plan a path to the institution’s “dream state”	2.00	3.13	.01*
Develop new business models	2.17	3.25	.03*

Note: $p^* < .05$

Based on these self-reports, perceptions of knowledge increased for all six of the innovation principles and a statistically significant difference ($p < .05$) was found for five of the

six principles. Only the principle called “ideate and brainstorm” was found not to have a statistically significant difference in the Wilcoxon Signed Ranks Test comparison. It should be noted that most participants ranked their familiarity with this principle to be quite high in the pre-program survey ($n = 11$, $M = 3.36$, $SD = 0.64$). Therefore, it seems logical that there would not be a significant increase in this topic due to participants’ self-reported familiarity with ideation and brainstorming before the program.

It should be noted that in the follow up survey, which was administered about two and a half months after the final proposal presentations, respondents expressed the least confidence in their ability to develop new business models ($n = 8$, $M = 2.63$, $SD = 0.70$). Four of the eight respondents answered “disagree” with the statement: “I am able to develop new business models.” As one respondent commented: “I’m not sure I understand what ‘business models’ means. I feel comfortable developing new business ideas, but there is a gap in my knowledge around financial modeling and research that I would like to improve.”

Experience of Working and Learning in Project Teams (RQ4)

To answer the question regarding participants’ experiences working and learning in their teams, I conducted a qualitative data analysis of focus group responses. As a reminder, four focus groups were conducted, and no teammates participated in the same focus group. I created an initial list of a priori codes and subcodes based on the research questions of the study. These codes were identified as individual, organization, teams, and learning. After the first round of coding two additional codes emerged, constraints and innovation. The constraints code, which related to both time and pandemic-related reasons that participants felt that they did not do their best work, was more prominent than the innovation code. I coded based on a technique that Miles et al. (2020) define as “concept coding” (p. 66), in which the researcher assigns meaning

to the data as opposed to in vivo coding where codes are taken verbatim from participants' responses. Table 5.5 shows the most frequent codes and subcodes.

Table 5. 5 *Most Frequent Codes and Subcodes from Focus Group Transcripts*

Code and Subcode	Number of References
Team: Synergy or collaboration	42
Team: Knowledge or perspective	30
Constraints: Time*	24
Individual: Intention to use in future	18
Individual: Mindset	14
Team: Attitudes	14
Organization: Entrepreneurial culture	12
Organization: General	11
Team: Roles	11
Team: Skills	10

*Emergent code added after first round of coding.

As with any collaborative effort, participants reported both positive and negative aspects of working in their teams to build an innovation proposal. Positive aspects included the expansion of knowledge, skills, and attitudes, the ability to cover more ground than on one's own, the merging of internal and external perspectives, and the enjoyment of meeting and working with people from across the organization. Negative aspects included conflicts which arose within the groups around roles and project focus. Additionally, participants reported some frustrations with external factors that impacted their ability to do their best work for the team. These external factors were primarily the impact of the COVID-19 pandemic and related time constraints. I explore these themes in more depth below.

Positive aspects of working in teams. When thinking about learning outcomes, educators often consider knowledge, skills, and attitudes. In the case of the project teams' work in the Innovation Mentors program, participants reported enhancements in all three of these areas due to collaboration among team members. Specifically, participants described how working with teammates in different job roles and from different departments broadened their knowledge

or perspectives on their innovation project. Additionally, participants shared how team members skills and attitudes influenced the teams' overall work and end product.

Emic and etic perspectives that broadened team knowledge. In all three teams, participants noted that the varied background and experience of team members helped teams to explore their problems from both an inside, or emic, perspective as well as an outside, or etic, perspective. For members of Team B who explored how to improve the employee onboarding experience, having two relatively new staff members contributed a fresh outsider's perspective compared to the third team member who had been at the institution for several years:

I felt like [Participant 3] and I both sort of had, were more recent hires, and so we sort of came with that perspective, whereas [Participant 2] had a history, so she was able to contribute, you know, here's what I've seen done, you know, here's struggles maybe we've had in the past that still haven't been addressed. (Participant 8)

Likewise, Team A, which was looking at student success, had a mix of insider and outsider perspectives and knowledge, including one member's work outside the organization that informed the team's project:

I felt like [Participant 1] had the historical knowledge that we were relying on. I was probably the newbie of the group. But then, also [Participant 4] in terms of being new to [the institution] and...[Participant 9] brought some kind of more professional knowledge about work, in her work with, you know, homeless and just mental health issues.

(Participant 7)

The two members of Team C, who were exploring how to partner with community organizations, also considered the emic and etic perspectives of the teammates as a benefit to their work:

So I'm, I'm kind of like, looped up in it a lot in my world with the students that I work with because they all do client-based projects and a lot of the faculty do, and I could see the problem pretty clearly. [Participant 5] did not have any experience with this at [the institution]...But you know, so he had a lot of this other information and, and sort of what, how it would work in like a large, state-funded institution, it's a lot different than [the current institution]. However, you know, he was effectively like an outsider, you know, and, and so he could sort of, you know, there was a combination of him trusting me because of my position and what, where, you know, my history with [the institution] compared to him. (Participant 6)

Enhancing the team's work with individual skills. In some cases, participants reported that teammates brought certain skills and abilities, especially those related to their job role, that enhanced the team's work. For example, in Team A, Participant 7 commented on how her teammate's background as a librarian contributed to the team's final presentation: "And then [Participant 4] from her background of being a librarian was really confident about putting presentations together, so she wanted to do that." Similarly, in Team B, Participant 3 mentioned how her teammate, an instructional designer, supported the team's brainstorming efforts:

One thing I really enjoyed was, [Participant 8] had this really incredible ability to just take all of the brainstorming that we were doing and organize it in a way, like on a doc. So, we were able to all kind of contribute these ideas, but the way we would finish speaking, and I would go to write things down, and it would already be done so beautifully. [*laughs*] It's like, oh, my goodness, lifesaver! (Participant 3)

Additionally, Participant 3 noted that her teammate's technical skills also enhanced the team's efforts: "[Participant 8] having a background in, like, website design really helped integrate a lot of our ideas into how we could organize that journey path [of new employees]" (Participant 3).

Team's positive impact on affect. For some participants, the work in the team not only created synergies of knowledge and skills, but also attitudes. In Team B, one teammate reported how the positive attitude that she and her second teammate brought to the project may have changed the attitude of a third team member:

I know [Participant 2] made this comment at one of our meetings, that she's like, 'I was really hardened of the idea that this was never going to happen, so being with two new members makes me feel like it's possible.' So, I think that that synergy also was really key in our group success. (Participant 3)

In other words, according to her teammate, Participant 2 may have felt that change was more possible due to the influence of her team members on her own attitude toward the problem of employee onboarding. In Team C, Participant 5 indicated that the two team members positively affected each other's enthusiasm for their project:

I think one reason why [Participant 6] and I worked well on this project is, it was low stakes for us. It wasn't something we had emotional investment in when we initially proposed it, but once we began seeing traction we were like, yeah, this is gonna be really cool. So our interest evolved with the project. (Participant 5)

Negative aspects of working in teams. While there are many positive advantages of working in a team, there are also disadvantages. As previously noted, three of the nine participants indicated that they faced challenges working in their team in the post-program survey. All three participants were on Team A. In the focus groups, it became apparent that the

main reasons for the conflict were a lack of agreement on the team members' roles and conflicting project goals among team members. With regard to team roles, Participant 1 admitted: "I was purposefully trying not to take on the leadership of the team role. I wanted people not to assume because I was the highest position of power that I was in charge of it." However, as the work progressed, she stepped in as she felt that "you got to have somebody in charge, and you got to have defined roles and understand who's going to be doing what on the team and who's making the final call" (Participant 1). Katz and Kahn (1978) discuss how role ambiguity, which they define as when an individual has unclear expectations regarding their responsibilities, can lead to conflict, stress, and low performance. In Team A, another team member characterized Participant 1 becoming the leader of the group as a team decision: "We decided that basically [Participant 1] was the de facto leader of the group, it was mainly her proposal" (Participant 7). Yet, Participant 4 found her teammate's leadership style somewhat overbearing:

She felt so passionately, she felt so strongly about this, but I don't think that she had it in her to like, kind of, be able to allow other voices at all, you know, and I think that's, that's what it came down to. (Participant 4)

During the team's final presentation, two of the four participants did not speak. For Participant 4, it was a deliberate decision as she felt the final proposal did not reflect the outcomes she was hoping for:

I will say that, that what we ended up presenting was, we had this very sort of, this group dynamic where one person in particular really kind of took over, and what was presented as our final presentation was really something that on a lot of levels, I was not, I wasn't even comfortable with it, let alone happy. (Participant 4)

For this participant, not speaking during the final presentation was a deliberate choice on her part, a kind of protest: “You specifically said I'd like to hear some, from some other members of the group [*laughs*], you know, because we weren't saying anything. That wasn't, that wasn't accidental” (Participant 4).

It should be noted that the fourth member of the team did not make any direct statements about conflicts in the team, other than to characterize them as typical group collaboration. In fact, this fourth team member stated that feeling a bit uncomfortable with the process pushes one toward more growth:

The collaboration of things is so, can sometimes be so mind blowing because a person just works or lives or thinks in their silo and for some people that's all that matters. But then, when you get on a team, it almost forces individuals, or hopefully, it helps people move past that uncomfortableness to be able to work with others. (Participant 9)

In other words, she welcomed the discomfort as a sign of personal growth.

For one participant, a secondary negative impact of working with a team was that the team collaboration led to a broader scope of the project. She reflected:

But that was like an area of frustration for when it became the group project. It became something bigger. And now I'm like, oh, I don't know if I can, I'm hopeful we can make progress on that, but it's, there is more question marks for me. (Participant 2)

External constraints affecting team performance. As evidenced elsewhere in the data analysis, there was a pervading frustration with time among all participants. Time constraints were a recurrent theme mentioned by participants in limiting their ability to do their best work. Additionally, as the program took place during the COVID-19 pandemic, participants also noted

the effect that these unique conditions had on their overall experience during the program. These constraints were both for individuals as well as due to the redesign of the program schedule.

Individual time constraints. One participant noted a feeling of disappointment that he had let his teammate down due to feeling overwhelmed:

I personally feel bad that he shouldered a lot of the work at the end there, and I wasn't able to contribute as much, mostly because it was just one of those crazy semesters where I just didn't have any extra time at all. So, I think if I were to do this again, you know, if this had not been like a COVID time... (Participant 6)

However, his partner stated that he felt that both teammates were too busy to give the project their full attention: “And then, as it happened, the next challenge was our work cycles [*phone rings*], in that the research program cycles slammed me with a lot of work and the school cycle also slammed him with a lot of work” (Participant 5). In fact, in one focus group that was scheduled for 30 minutes, two of the three participants were distracted by other responsibilities, one taking a phone call and the other answering online chat questions from a student. As Participant 4 stated: “Well, the problem is this was the only focus group that was during my work hours, so I kind of need to do this.” As an hourly employee, she could not attend a focus group outside working hours but also had to maintain her primary work responsibilities during the focus group session.

Program time constraints. Participants described their time in their teams as being “compressed” (Participant 2) and “a time crunch” (Participant 1). In order to recruit a sufficient number of participants, the program schedule was revised, and this change meant teams had less time in the second phase of the program to work on their final proposals. Participant 2

elaborated: “I actually feel like the time with the team went by so fast. I think it felt brief. Maybe that was one of the challenges.” Participant 1 agreed:

I agree with the comment that [Participant 2] made about just the time crunch. I think we really were getting into strong working timeframe late in the game. And I think it would have worked better had we had the teams much earlier on, and the ideas of the project much earlier on to work throughout the whole semester as opposed to that time crunch at the very end. (Participant 1)

Participant 8 similarly stated: “And I wish we would have had a little more time to work with our teams.”

However, some participants pointed out that the teams enabled them to do more than they would have been able to accomplish on their own:

I felt like that's really where the team really came in, timewise compressed. I felt like, you know, for example, [Participant 3] facilitated a survey, and then did some, like, follow up interviews with people, and I just didn't have the capacity to do that at the time. And so, it's like, there was that, like, actual ability to accomplish more. (Participant 2).

Similarly, a participant from another team stated:

It was such a busy time for everyone, what we got working out, working in a team is that we just got much more accomplished, because there's just no way I would have had the time to do all the parts of what we did. (Participant 7)

And in fact, Participant 2’s teammate saw time as a challenge but not as a barrier to success:

One of my challenges personally was scheduling. So, just making sure that I was able to dedicate the time to it, but we were always able to find a time to meet, and we were always able to kind of communicate and distribute tasks. (Participant 3)

Fatigue due to the COVID-19 pandemic and other external factors. A couple of participants expressed regret that they did not do their best work or in some way let their teammates down on the project due to the mental pressures associated with the COVID-19 pandemic in 2020, working from home, and supporting family members, especially children, at home. As Participant 8 stated:

You know, both the combination of time and then just having the mental energy with everything that was going on last fall, both from the COVID perspective, and for me, the, all the political stress that was going on as well... (Participant 8)

This participant even expressed feeling that in the New Year we had turned a corner which reenergized her: "Like, even this year, like this now, like, I don't know, like we got through January. I, like, I'm finding myself...I feel much more energized, like, I don't know, relaxed whatever." (Participant 8).

Another participant also expressed the notion that he had not done his best work due to the pandemic and related impacts:

As it is now, every spare second I have where I'm not like, you know, responding to emails, in an appointment, writing up an appointment, or doing something that I'm otherwise assigned to do where I have to do it, I'm like, doing dad stuff. (Participant 6)

In both cases, these participants appeared to think that had they had the chance to participate in the program without the effects of the pandemic, they would have done better work:

So, I think if, if I were to do this again, you know, if this had not been like a COVID time, if, if I had, if we had made this entire process into the sort of, you know, one long day or two long days that you would originally envisioned, [researcher], I think it would

have been probably, it would have worked better with the way I was prepared to work.

(Participant 6)

Overall, participants expressed both positive and negative aspects of working in their project teams. Positive aspects were related to the broadening of their perspectives and understanding of their problem statements when collaborating with teammates. Negative aspects were primarily related to conflicts within one team as well as time pressures felt by many participants.

Intention to Use Innovation Principles in Future (RQ5)

The final research question explores participants' intention to use program concepts in the future. The data sources included the post-program survey, the follow up survey, and the post-program focus groups. Table 5.6 compares participant responses in the post-program survey conducted in January to the prompt "I intend to apply this skill in my future work," to their responses from the follow up survey conducted in March to the prompt "I am able to..." In each case, the mean response was lower in the follow up survey. Most notably, the mean for the last principle, developing new business models, decreased the most. It appears that, over time, participants became less confident in their ability to develop new business models. Results of a Wilcoxon signed ranks test indicated there was no statistical significance between the means of post-program survey responses and follow up survey responses ($p < .05$).

Table 5. 6 *Comparison of Post-Program Survey (“I intend to apply...”)* and *Follow Up Survey (“I am able to...”)* (n = 8)

Innovation Principle	Post Program Survey “I intend to apply...”		Follow Up Survey “I am able to...”	
	Mean	SD	Mean	SD
Link innovation to institutional processes	3.75	0.43	3.50	0.50
Incorporate the voice of the user for process innovation	3.88	0.33	3.75	0.43
Incorporate the voice of the student for program innovation	3.88	0.33	3.63	0.48
Ideate and brainstorm	3.88	0.33	3.88	0.33
Plan a path to the institution’s “dream state”	3.50	0.50	3.25	0.66
Develop new business models	3.25	0.66	2.63	0.70

These quantitative results were reinforced in the open response comments of the follow up survey. An open response prompt asked participants how they had or had not applied program concepts in their work. Two participants expressed uncertainty in being able to create business models in their work context. Participant 2 was still unsure how to apply this principle stating: “I’m not sure I understand what ‘business models’ means. I feel comfortable developing new business ideas, but there is a gap in my knowledge around financial modeling and research that I would like to improve.” Participant 5, on the other hand, expressed the feeling that it would not be possible to propose new business models in his work context, commenting “I have not been so able to develop new business models because my department operates differently from the rest of the [institution].”

Another participant who works in the recruiting department indicated that she had been able to incorporate the voice of the student in her work with prospective applicants. In the post-program focus group, she shared:

So, I've learned to use the users that are already interested in us, even if they may have found us through a different partnership years later, to find undergrad programs that are like, really related to what we're doing. And so that's a new approach that I've kind of just started taking on in the past two weeks or so. (Participant 3)

Her follow up survey comments also indicated an interest in incorporating the voice of the student. Two months after the program ended, she stated: "I am learning how to maximize different events [sic] to center student's voices in front of the people making institutional decisions (program chairs, etc.) to employ user-centered design" (Participant 3).

However, two of the participants expressed that they did not feel able to apply innovation principles in their work due to time constraints and pandemic conditions. As Participant 7 shared in her follow up survey comments:

The opportunity to have the time and space to be innovative does not happen until later in the semester or the summer. However, I am confident that when I do have the opportunity to be innovative, I will have the tools to do so. (Participant 7)

Similarly, Participant 6 simply stated: "I'm only limited by the logistics of quarantine living/working!"

The post-program focus groups also revealed the ways in which program participants intended to use what they had learned moving forward in their jobs. These intentions included sharing what they had learned with their departmental colleagues. One participant described how she learned the importance of pulling others into the conversation earlier when trying to solve a problem to ensure she was seeing the whole picture:

And I think in the future that what I would apply from this program is intentionally seeking out not just, you know, user feedback or like, human-centered design principles,

but seeking out teammates from different departments and making sure that I'm not a solo, you know, ideator or inventing something on my own. (Participant 1)

In fact, at least four of the nine participants were regularly sharing what they learned in their program sessions with their departments. An instructional designer who participated in the program talked about applying program principles to the digital learning team's antiracism work:

I've been sharing everything all along with my supervisor because I meet with her weekly, and I've just been sharing the activities we've been doing there and then the projects that we were all working on. And, but I have shared some, I incorporated some of the activities that we've done or that we did together into like some of our team meetings. Like some, like how [professor guest] had us do the brainstorming with the sticky notes in Mural [Board]. We've been, we, we sort of took that process and that idea of that, and we've been doing antiracism work as a group using that, which has worked out really well. So, I feel like some of the smaller activities that we did, I've taken those and used those in other settings. (Participant 8)

In another example of sharing with colleagues outside the program, a member of the institutional advancement team expressed enthusiasm for the fact that her associate vice president showed great interest in the topics and tools being covered in the program:

So, you know, when I talked to [the advancement associate vice president], who is from [the East Coast campus], and she's over the development team here at [the West Coast campus]. And when I was telling her about what I was a part of, she was excited. I was excited, you know, because I would share what we learned at each session with them when we would have our weekly meeting, you know. And I would see her writing things down, and you know, picking up on the little buzz words. (Participant 9)

Finally, some participants indicated a desire to continue seeing the innovation proposals they developed in the Innovation Mentor program move forward in the organization. Participant 5 expressed interest in seeing his team’s proposal through once things were less hectic: “So, [my teammate] and I, once were not so overwhelmed, we're going to try and pick this up again see if we can actually really make that happen.” Likewise, a participant from another team indicated an interest in moving their idea forward: “I think all three of us are very committed. We really would like to move forward and try to implement some of our ideas and sort of dig into things a little bit more.” (Participant 8). However, she also expressed concern about “stepping on the toes” of the human resources department in her team’s attempt to improve employee onboarding in the organization:

And I would just say in terms of our, the project itself, itself, I feel like our biggest challenge, there is just going to be that, this topic involves so many different departments. It's, it's, and, and I, my biggest fear with this project is I just really don't want HR to feel like we're stepping on their toes, but that we're trying to help. That we see that there's this void there and that we want to try to help. And I’m, that's, I think that's just my biggest, or the biggest unknown. I just don't know if we reach out to them... I feel like we should. Like, if we decide to move forward and do something we shouldn't just do it and say you know, have them hear about it through someone else or just be like, hey, we did this. But by the same token, I just don't know how it's going to be received. (Participant 8)

Overall, participants expressed more confidence in areas like applying user-centered design principles and less certainty about the ability to implement new business models. In some cases, participants were already applying tools and concepts from the program in their work and

sharing with their department colleagues. In other cases, participants expressed perceived constraints, especially time and resources, to implementing their proposals in the organization.

Conclusions

In synthesizing the results of the intervention study, it is helpful to revisit the frameworks introduced in Chapter Three. The Innovation Mentors program was created in response to the needs assessment conducted earlier in which staff suggested a desire for more flexibility and discretion in their work. Such a desired future state would mean increasing what Cameron and Quinn (2011) define as the clan and adhocracy organizational cultures. After considering how the findings relate to a desired shift toward greater clan and adhocracy culture, I consider how the results of the data analysis align with the theoretical frames offered in the synthesis of literature: Rogers's (2003) diffusion of innovation theory, Ireland et al.'s (2003) model of strategic entrepreneurship, Senge's (1990) team learning, and Bagheri and Pihie's (2011) entrepreneurial learning model.

Increasing Clan and Adhocracy Organizational Cultures

In the needs assessment conducted prior to the intervention study, staff members across both campuses expressed a desire to move toward more flexibility and discretion in their work. In Cameron and Quinn's (2011) organizational culture model, such a shift represents a move toward the clan and adhocracy cultures. The Innovation Mentors program was intended to support this shift in organizational culture by addressing some of the principles that Cameron and Quinn outline with regard to making this shift. A reminder of what organizations can do to support a shift toward clan and adhocracy cultures is included in Table 5.7.

Table 5. 7 *What it Means to Increase Clan and Adhocracy Cultures*

Increasing Clan Culture Means	Increasing Adhocracy Culture Means
<ul style="list-style-type: none"> ● More employee empowerment ● More participation and involvement ● More cross-functional teamwork ● More horizontal communication ● A more caring climate ● More recognition for employees 	<ul style="list-style-type: none"> ● More employee suggestions ● More process innovativeness ● More thoughtful risk taking ● Tolerance for first-time mistakes ● More listening to customers

Note. Adapted from *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, by K. S. Cameron and R. E. Quinn, 2005. Copyright 2005 by Jossey-Bass.

With regard to enhancing the clan culture, the structure of the program was intended to facilitate this shift. Participation in the Innovation Mentor program enabled participation and involvement from staff members, cross-functional teamwork, horizontal communication across departments, and recognition for employees. The content of the Innovation Mentors program also provided some of the elements that Cameron and Quinn (2011) recommend to move toward a greater adhocracy culture, including listening to employee suggestions, thinking about process innovation, listening to customers (i.e., students), and indirectly, facilitating some risk-taking on the part of the participants.

Decentralized Diffusion of Innovation

In Rogers’s (2003) diffusion of innovation theory, he discusses the difference between centralized and decentralized diffusion. Centralized diffusion occurs in a top-down fashion when leadership impose innovation upon an organization, while decentralized diffusion happens when individuals known as local change agents experiment with innovation. Rogers (2003) describes the advantages of decentralized, or bottom up, diffusion as being support for shared decision making and the ability to adapt the innovation to individual contexts. As reported in the findings,

some participants immediately applied program principles in their work setting, most notably the concept of user-centered design. Two examples of this decentralized diffusion of innovation are the student recruiter who was using user-centered design to inform her recruitment efforts and the instructional designer who introduced program principles into her team's antiracism work. For other participants, such as the two career advisers, they hoped to share program ideas with their department but felt constrained by time.

Even for those participants who may not have immediately applied the principles of the program to their work, sharing such information with their colleagues gave them a voice. The coordinator from institutional advancement expressed the enthusiasm with which her department head was listening to and considering the ideas she reported back to her colleagues. The hope is that for hourly workers such as this participant, the ability to share with colleagues will ultimately lead to enhanced employee empowerment. Velhurst and Boks (2014) emphasize how the use of ambassadors within the organization can lead to diffusion of innovation as well as increased feelings of employee empowerment. Three of the nine participants who completed the program were hourly or non-exempt workers. This level of participation is important in that hourly employees are often less likely to have the time and autonomy to participate in professional development during work hours, and a long-term goal of the intervention program is to empower employees from all levels of the organization.

Entrepreneurial Mindset and Entrepreneurial Culture

In Ireland et al.'s (2003) model of strategic entrepreneurship, the authors describe how the innovativeness of an individual and the organization are inextricably linked. Relatedly, Shepherd et al. (2010) explain that feedback loops between the individual and the organization influence the entrepreneurialness of both. For the current organization, more than one

intervention participant recognized creativity and innovation as part of the organizational culture of the institution. Participant 2 stated that innovation is “part of our organizational DNA,” and Participant 6 referred to the innovation program as “totally in our wheelhouse.” Likewise, participants felt their managers and departments supported their work in the Innovation Mentors program. As previously mentioned, four of the nine participants explicitly stated that they were sharing what they learned with their managers and department colleagues. Additionally, there was a sense that administrative leaders valued the efforts of the participants in the program. As Participant 3 stated:

I think that's really where a lot of magic can happen, especially at a school like this, where people have a lot of, I feel, a lot of, I don't want to say free will. It's not the right word, but flexibility, opportunity. Like we were presenting for the leadership team. That was like super nerve racking for me in a beautiful way. (Participant 3)

On the individual level, data analysis appears to indicate that program participants did increase their knowledge of innovation principles and expressed the intention to use these principles in future. In some instances, participants were sharing what they learned with colleagues outside of the program, which reflects both decentralized diffusion of innovation (Rogers, 2003) as well as feedback loops between employees that may increase the entrepreneurial culture of the organization (Shepherd et al., 2010). The influence of this first iteration of the program may be slight, as the current study sample only represents approximately 8% of the staff member population of the West Coast campus. However, continued iterations of the program should further diffuse innovation across the organization, and extension of the program to participants from the East Coast campus might further increase the entrepreneurial culture of the organization.

Entrepreneurial Learning within Teams

In learning organizations, Senge (1990) emphasizes the importance of learning in teams. He suggests that teams formed across disciplines and organizational roles will enhance the overall learning of individuals, creating a whole that is greater than the sum of its parts. Likewise, in their entrepreneurial learning model, Bagheri and Pihie (2011) highlight the importance of social interaction among learners. Entrepreneurial learning theory suggests that it is the very conflict and discomfort that individuals feel within teams that leads to greater learning (Pittaway & Cope, 2007). As Bagheri and Pihie (2011) state: "...social conflicts and challenges that students experience through developing a new business idea and gaining agreement within their group play a major role in enabling them to reassess their actions and radically change their mindset and behaviour," (p. 455). Participant 9 expressed this very sentiment in her post-program focus group. Reflecting upon her experience working with her team, which happened to be a team with substantial conflict, she stated:

We all came with our own ideas and our own mindset, but working as a team helped us, helped us see someone else's perspective, and helped us open our mind to expand on the topic and to just push past our uncomfortableness of the topic, or our uncomfortableness of learning and using new tools. (Participant 9)

For Teams B and C, team learning seems to have enhanced the overall process and product of the team, in terms of the knowledge gained, the perspectives explored, the skills contributed, and in some cases, attitudes toward their proposals. For at least one member of Team A, however, the conflict and discomfort in her team caused her to step back from applying innovation in her work:

If I'm going to do something further with this, I kind of want to pull back and be like okay, let's go back to what I was, you know, kind of pull back from the group agenda and be like okay, I, you know, I had my own direction that I really wanted this to go, and I kind of feel like I need to disentangle myself from that in order to even be able to make any progress with what I was trying to do. (Participant 4)

For this participant, the conflict she experienced within her team created a resistance to learning from her team.

In the end, this small intervention may have offered program participants a chance to increase flexibility and discretion in their work leading to increased clan and adhocracy organizational cultures, which in turn may lead to greater organizational readiness for change within the institution. Even the tensions felt amid the members of Team A may have been the productive conflict associated with entrepreneurial learning (Bagheri & Pihie, 2011). However, this small pilot study requires additional iterations and exploration. In the following sections, I outline the limitations of the current study, offer suggestions for future iterations of the Innovation Mentor program, and make recommendations for future study.

Limitations of the Study

The main limitation of this study is the small sample size. Participation was deliberately limited to only staff members on one campus of a multicampus institution. External validity, or the ability to generalize to other contexts or populations, is limited by the small sample size of this pilot study (Shadish, Cook, & Campbell, 2002). However, working with a small sample was a deliberate decision I made to learn from the first iteration of the program and feed the results into a wider future iterations. For example, the sample only included staff members and cannot necessarily be generalizable to faculty members. Likewise, participants were only from the

institution's West Coast campus, and therefore, results may not be generalizable to employees at the East Coast campus. Yet, the small nature of this pilot study was an intentional decision to keep the program feasible and to take the lessons learned from the first iteration to inform expanded versions of the program that may include faculty and staff members from both campuses in the future.

This study employed a convergent mixed methods design. Creswell and Plano Clark (2018) outline three challenges related to such a design: having different sample sizes in the quantitative and qualitative data sets, having to merge textual and numeric data, and the need to explain any divergence between the results. As my sample was quite small, the difference between samples in the quantitative and qualitative data was minimal; therefore, this issue is not of primary concern. In terms of merging different types of data, one solution would have been to quantitize the textual data by creating counts of the themes and codes identified during the qualitative data analysis (Teddlie & Tashakkori, 2003) that would then be mixed with the quantitative data sets. While the qualitative data elaborated upon the findings of the quantitative analysis in this study, I did not formally mix quantitized data with the quantitative data. As for the third issue of divergent results, the findings suggest that the qualitative data enhanced and corroborated the quantitative data results. Therefore, this third potential limitation did not arise in this study.

Beyond the limitations of convergent design, it is important to consider how the research design did or did not limit the validity of the results. Shadish et al. (2002) define four types of validity to consider: statistical conclusion validity, internal validity, construct validity, and external validity. With regard to internal validity, the nonexperimental design employed herein does not include a control or comparison group, and therefore, causal inferences regarding the

effect of the intervention and the subsequent results cannot be made (Shadish et al., 2002). However, by focusing on methods to enhance the statistical conclusion validity and construct validity of the study, the overall validity of the research was strengthened. Shadish et al. (2002) define statistical conclusion validity as “the validity of inferences about the correlation (covariation) between treatment and outcome” (p. 38). To strengthen the statistical conclusion validity of the quantitative data analysis, I chose the appropriate inferential statistics, set the confidence level prior to running the tests to avoid “fishing” for significance (i.e., $p < .05$), and used reliable instrumentation (Shadish et al., 2002). For construct validity, the validity of the pre- and post-test measures strengthened the assertion that I measured the construct I intended to measure, in this case knowledge of innovation principles.

Additionally, a threat to both the internal and external validity of the study comes from the extraordinary time in which the intervention program took place. In the fall of 2020, the entire world was experiencing a global pandemic caused by a novel coronavirus known as COVID-19. In the United States alone, this once-in-a-century pandemic would account for over 600,000 deaths (Johns Hopkins University and Medicine, 2021). Shadish et al. (2002) consider history, or external events occurring at the same time as the study, to influence participants’ responses to a program. In qualitative research, Guba (1981) highlights how consistency of a study’s findings enhance its overall truth value. Guba defines consistency as whether or not a study with similar participants and in a similar context would find similar results. As noted in the focus group responses, participants described the impact of the pandemic and its related stressors on their ability to focus on the program. A question remains as to whether similar results would have emerged if the intervention had not taken place during the pandemic, and likewise, whether similar results would be found in future studies that are not conducted during a pandemic.

Lastly, in this study I was both the researcher and the program evaluator. My personal participation in the study could lead to researcher bias. While my emic perspective on the professional context in which the program was executed lent an enhanced understanding to the study, my participation as both program facilitator and evaluator also poses a risk to what Guba (1981) calls the confirmability of the findings. In discussing confirmability, Guba suggests that qualitative researchers should seek neutrality in the data as opposed to objectivity from the researcher. To strengthen the confirmability of a study, Guba suggests that the researcher triangulate the data and practice reflexivity. With regard to triangulation, my research procedures include both triangulation of data sources (i.e., the various participants of the study) as well as triangulation of data methods (i.e., both quantitative and qualitative approaches) (Teddlie & Tashakkori, 2003).

To practice researcher reflexivity, I kept a researcher's log through the intervention program and as I performed data analysis. The researcher's log was particularly valuable in identifying when I may have let my personal emotions cloud my understanding of the data. For instance, when I was having difficulty recruiting participants for the program, I reflected on how I had to embrace ambiguity and relinquish some control. Later on, after losing two participants, my researcher's log prompted me to check in with the rest of the participants during the next session to better understand how they were feeling about program participation. During the data analysis, as I listened to focus group recordings, I noted in my researcher's log my own emotional reaction to listening to the participants' comments. I recorded how I started to get defensive and found "my emotions rising" when listening to how a participant would have preferred we had done things in the program. The simple act of naming these emotional reactions helped me to identify and work through them. Finally, throughout the qualitative data analysis

process, keeping a researcher's log enabled me to document the coding process from iteration to iteration. Such documentation creates an audit of the data analysis that further enhances the study's credibility (Guba, 1981; Saldaña, 2013).

Implications for Practice and Recommendations

The process and outcome evaluations of the program revealed that the main takeaways for many participants were the roles that team dynamics and time constraints played in their experience of the program. This section considers how participants' experience can inform both future iterations of the Innovation Mentor program as well as the organization's efforts to foster innovation more broadly beyond the program.

One aspect of the program that participants particularly seemed to value was the chance to work with colleagues from different job roles and departments. As outlined in the findings earlier, these collaborative teams enabled participants to broaden their perspectives, leverage skill sets they did not individually possess, and in some cases, even shift attitudes toward problems that might have been previously viewed as intractable. For example, Participant 2 stated: "So, I do think that's the benefit of this program was a great reminder for when you bring in people from different departments, different perspectives, it adds a lot more value to your final product."

Yet, as previously discussed, for one team, the lack of a unified understanding of the roles of team members and the overall goals of the project led at least one participant to have a relatively negative experience. To ameliorate this situation in future offerings of the Innovation Mentor program, more emphasis can be placed on outlining team roles prior to starting the innovation projects. In her exploration of role ambiguity among instructional design teams, Radhakrishnan (2018) employed a role analysis technique to help minimize role ambiguity

among team members. This role analysis exercise was adapted from the work of Dayal and Thomas (1968). In the current intervention, program facilitators led participants through an asset inventory activity to highlight what skills and knowledge team members brought to their teams. However, this exercise could have been supplemented with more norming about team roles and expectations throughout the duration of teamwork. As a certain element of discomfort is conducive to learning (Bagheri & Pihie, 2011; Pittaway & Cope, 2007), coaches might explicitly lead discussions around this discomfort to raise awareness of the positive outcomes associated with team learning.

Beyond the program itself, what measures can institutional leaders take to further foster innovation within the organization? Some important elements are already in place, namely, the support of academic leaders and departmental managers. Participant 6 pointed out the importance of having leadership support for the Innovation Mentor program:

I think we're definitely open to innovation, every, I mean, everything just, just the, the total buy in that you were able to get for this, [researcher]. It was just great, you know. I mean, you had the principals in charge of the... I mean, the only thing that would have made it more powerful maybe is if a couple of [institutional board members] were like in, you know, on the, on the, on the committee. (Participant 6)

In looking at the role of employee empowerment in innovation, Velhurst and Boks (2014) emphasized the importance of managers providing self-determination to employees to pursue their own projects that drive the organization forward. One of the outstanding questions from this study is why time constraints were perceived by program participants to be the top challenge they faced in both completing the program and doing what they felt was their best work. Did participants truly struggle with time management, or did they not feel a sense of self-

determination that would enable them to pursue their innovation projects during working hours? For instance, an hourly employee was distracted during the post-program focus group because she felt she was expected to continue performing her normal job duties during the 30 minutes reserved for the focus group. Was this expectation explicitly made by her manager or was this a perception the employee held?

One approach would be to deliver each of the innovation principles in more “bite-sized” chunks. A trend in education and professional training is the use of digital badges that show that an individual possesses competency in some skill area. If each of the six innovation principles became its own mini course with a smaller time commitment, perhaps more employees would join the program. Over time, any employee who completed all six modules would earn the Innovation Mentor designation. So, for instance, with the topic of business models, which appeared to be the area that got short shrift in the program, a shorter duration course could explore this topic in a modular format. Participants who completed the module could take a short assessment to demonstrate their ability to apply the principle and receive a digital badge, which could then be shared on their LinkedIn profile. This format would give employees flexibility to opt into topics of interest, and a shorter time commitment might be more appealing to prospective participants.

More importantly, if there is a priority across the organization to support employee innovation and empowerment, then leadership and managers need to create the space and time for employees to be able to focus their energies on innovation projects. Google attempted this approach with their 80/20 rule in which employees were encouraged to spend 20% of their work time on any project that was personally motivating to them, regardless of its direct relevance to their job role (Murphy, 2020). This philosophy led to some of Google’s biggest innovations,

including Gmail and Google News (Murphy, 2020). Would such an initiative work in a higher education institution? Perhaps 20%, which is equivalent to one full workday per week, seems daunting to managers, but one small company called MyPlanet carved out five percent of time to support innovation projects (Xu, 2020). In order to ensure employees were able to take advantage of the five percent time, it was treated like a benefit and logged on timesheets (Xu, 2020). If an organization is truly committed to giving employees the time and space for creativity and innovation, that time and space must be built into the work.

Taking a long-term view, this intervention program intended to address underlying factors to the problem of practice of low organizational readiness for change in a multicampus higher education institution. According to the logic model, the distal outcomes for the intervention would be increased employee empowerment, increased innovation within the institution, which in turn would lead to long-term financial sustainability for the organization (Ireland et al, 2003). To more broadly diffuse innovation throughout the institution, future iterations of the Innovation Mentors program should broaden participation to a wider range of employees. The needs assessment conducted with staff members across both campuses showed a desire to increase the clan and adhocracy cultures of the organization (Cameron & Quinn, 2011), yet the Innovation Mentors program did not include participants from operationally-focused departments, such as human resources or information technology, nor did it include participants from the faculty body or the East Coast campus. To support the long-term goals of the intervention and to create an organizational culture that enhances organizational readiness for change, participation must be more widespread throughout the organization. By broadening participation to these additional constituents, employee empowerment would be strengthened (Velhurst & Boks, 2014), innovation should be more widely diffused across the organization (Rogers, 2003), and the

institution as a whole will be better positioned to meet change, maintain homeostasis (Katz & Kahn, 1978), and thrive for years to come.

Future Research

To better understand how the Innovation Mentors program operates in different settings, similar interventions in other higher education institutions, particularly among administrative staff members, would be valuable. In the current context, future iterations of the program should include participants from the East Coast campus as well as faculty members across both campuses. These future offerings would enable the institution to further explore how the Innovation Mentor program influences the organizational culture across campuses and constituencies in the merged institution. Additionally, comparisons between those individuals who participate in the Innovation Mentors program and those who do not could be useful to identify program outcomes more clearly.

More broadly, the role of individual differences on program outcomes should be further explored. In Ireland et al.'s (2003) model of strategic entrepreneurship, the authors posit that it is the entrepreneurial mindset of the individual combined with the entrepreneurial culture and entrepreneurial leadership of the organization that lead to creativity and innovation within an organization. This intervention hoped to impact the individual's entrepreneurial mindset as a distal outcome of participation in the Innovation Mentor program. However, it would be interesting to consider the starting point of individuals' mindsets prior to program participation. In this study, the pre-program survey collected participants' self-reported knowledge of the innovation principles as well as a self-report of how frequently they practice innovation at work. The majority of participants (seven of 11 respondents, or 64%) responded that they sometimes practiced innovation at work. However, a deeper exploration of individuals' mindsets before and

after participation might inform how much influence a program like the Innovation Mentors could have on participants.

Likewise, to measure the long-term impact of the program, longitudinal data could be collected to better understand if program participants did in fact apply the innovation principles to their work and if the perceived organizational culture moved toward greater clan and adhocracy cultures. Future administrations of the Organizational Culture Assessment Instrument (Cameron & Quinn, 2011) could be compared with the original results from the spring of 2019 to see if the aspirational culture that staff members desired was actually achieved. If such a shift were found in future data collection, these results may strengthen the case that the Innovation Mentors program was an effective means of increasing organizational readiness for change within the institution.

References

- Allen, I. E., & Seaman, J. (2017). *Digital learning compass: Distance education enrollment report 2017*. Retrieved from <http://onlinelearningconsortium.org>
- American Association of State Colleges and Universities. (n.d.). *2021 higher education government relations conference*. Retrieved from May 28, 2021 from <https://www.aascu.org/meetings/hegrc21/>
- Armenakis, A., Brown, S., & Mehta, A. (2011). Organizational culture: Assessment and transformation. *Journal of Change Management, 11*(3), 305–328.
doi:10.1080/14697017.2011.568949
- Armenakis, A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations, 46*(6), 681–702. doi:10.1177/001872679304600601
- Bagheri, A., & Pihie, Z. A. L. (2011). Entrepreneurial leadership: Towards a model for learning and development. *Human Resource Development International, 14*(4), 447–463.
doi:10.1080/13678868.2011.601594
- Baker, V. L., & Baldwin, R. G. (2015). A case study of liberal arts colleges in the 21st century: Understanding organizational change and evolution in higher education. *Innovative Higher Education, 40*(3), 247–261. doi:10.1007/s10755-014-9311-6
- Baranowski, T., & Stables, G. (2000). Process evaluations of the 5-a day projects. *Health Education and Behavior, 27*, 157-166. doi:10.1177/109019810002700202
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics, 18*(3), 19–31. doi:10.1016/0090-2616(90)90061-S
- Bharucha, J., Goldstein, M., Grabois, N., Zimmer, R., & Van Zandt, D. (2012). Keynote panel: What ought universities look like in 20 to 30 years? *Social Research, 79*(3), 551–573.

Retrieved from <https://www.socres.org/>

- Blin, F., & Munro, M. (2008). Why hasn't technology disrupted academics' teaching practices? Understanding resistance to change through the lens of activity theory. *Computers and Education, 50*(2), 475–490. doi:10.1016/j.compedu.2007.09.017
- Boon, J., Van der Klink, M., & Janssen, J. (2013). Fostering intrapreneurial competencies of employees in the education sector. *International Journal of Training and Development, 17*(3), 210–220. doi:10.1111/ijtd.12010
- Brint, S. G., Riddle, M., Turk-Bicakci, L., & Levy, C. S. (2005). From the liberal to the practical arts in American colleges and universities: Organizational analysis and curricular change. *The Journal of Higher Education, 76*(2), 151–180. doi:10.1353/jhe.2005.0011
- Brown, T. (2008). Design thinking. *Harvard Business Review, 86*(6), 84–92.
doi:10.5040/9781474282932.0020
- Brown, P. C., Roediger, H. L., & McDaniel, M. A. (2014). *Make it stick: The science of successful learning*. Cambridge, MA: Harvard University Press.
- Buono, A., Bowditch, J., & Lewis, J. (1985). When cultures collide: The anatomy of a merger. *Human Relations, 38*(5), 477-500. doi:10.1177/001872678503800506
- Cai, Y., Pinheiro, R., Geschwind, L., & Aarrevaara, T. (2015). Towards a novel conceptual framework for understanding mergers in higher education. *European Journal of Higher Education, 6*(1), 7–24. doi:10.1080/21568235.2015.1099457
- Cameron, K. S., & Freeman, S. J. (1991). Cultural congruence, strength, and type: Relationships to effectiveness. In R. W. Woodman & W. A. Pasmore (Eds.), *Research in organizational change and development* (Volume 5, pp. 23–58). London: JAI Press Inc.

- Cameron, K. S., & Quinn, R. E. (2005). *Diagnosing and changing organizational culture: Based on the competing values framework* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Camillus, J. C. (2008, May). Strategy as a wicked problem. *Harvard Business Review*. Retrieved from <https://hbr.org>
- Carlson, S. (2016, September 16). Innovation — Everyone says it's the answer, but is it what colleges need? *The Chronicle of Higher Education*, pp. 1–4. Retrieved from <https://www.chronicle.com>
- Carter, M. Z., Armenakis, A. A., Feild, H. S., & Mossholder, K. W. (2012). Transformational leadership, relationship quality, and employee performance during continuous incremental organizational change. *Journal of Organizational Behavior*, *11*(3), 305-328. doi:10.1002/job.1824
- College and University Professional Association for Human Resources. (2020). *2019-20 administrators in higher education salaries survey*. Retrieved from <https://www.higheredjobs.com>
- Collis, D. (2016, August 3). Accepting risk and rejecting the status quo: Fostering an innovative higher ed culture. *The Evollution*. Retrieved from <https://evollution.com>
- Cooper, T. (2017). Curriculum renewal: Barriers to successful curriculum change and suggestions for improvement. *Journal of Education and Training Studies*, *5*(11), 115-128. doi:10.11114/jets.v5i11.2737
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

- de Freitas, S., & Oliver, M. (2005). Does e-learning policy drive change in higher education? Models and practice. *Journal of Higher Education Policy and Management*, 27(1), 81–96. doi:10.1080/13600800500046255
- Dusenbury, L., Brannigan, R., Falco, M., & Hansen, W. B. (2003). A review of research on fidelity of implementation: Implications for drug abuse prevention in school settings. *Health Education Research*, 18, 237–256. doi:10.1093/her/18.2.237
- EAB. (2018). *Designing for competitive advantage*. Retrieved from <http://eab.com>
- EAB. (2019). *Understanding the shifting adult learner mindset: Insights for growth from EAB's adult learner survey*. Retrieved from <http://eab.com>
- Ehrenberg, R. G. (2012). American higher education in transition. *Journal of Economic Perspectives*, 26(1), 193–216. doi:10.1257/jep.26.1.193
- Ellis, L. (2019, March 3). How UT-Austin's bold plan for reinvention went belly up. *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com>
- Engeström, Y. (1987). *Learning by expanding: An activity theoretical approach to developmental research*. Helsinki, Finland: Orienta Konsultit.
- Engeström, Y. (2014). *Learning by expanding: An activity-theoretical approach to developmental research* (2nd ed.). Cambridge, UK: Cambridge University Press.
doi:10.1017/CBO9781139814744
- Evans, L. (2017). The worst of times? A tale of two higher education institutions in France: Their merger and its impact on staff working lives. *Studies in Higher Education*, 42(9), 1699–1717. doi:10.1080/03075079.2015.1119107
- Evaristo, J. R., Scudder, R., Desouza, K. C., & Sato, O. (2004). A dimensional analysis of geographically distributed project teams: A case study. *Journal of Engineering and*

- Technology Management*, 21(3), 175–189. doi:10.1016/j.jengtecman.2003.05.001
- Foster, J. J. (2011). Analyzing nominal and ordinal data. In *Data analysis using SPSS for Windows version 8 to 10* (pp. 218-226). London, UK: Sage Publications, Inc.
- Galea, S., Fried, L. P., Walker, J. R., Rudenstine, S., Glover, J. W., & Begg, M. D. (2015). Developing the new Columbia core curriculum: A case study in managing radical curriculum change. *American Journal of Public Health*, 105, S17-S21.
doi.org:10.2105/AJPH.2014.302470
- Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2017). Employee intrapreneurship and work engagement: A latent change score approach. *Journal of Vocational Behavior*, 100, 88–100. doi:10.1016/j.jvb.2017.03.002
- Goedegebuure, L. (1992). *Mergers in higher education. A comparative perspective*. Utrecht, The Netherlands: Lemma.
- Greenstein, S. (2016). What does a Skunk Works do? *IEEE Micro*, 36, 70–71.
doi:10.1109/MM.2016.23
- Gregory, B. T., Harris, S. G., Armenakis, A. A., & Shook, C. L. (2009). Organizational culture and effectiveness: A study of values, attitudes, and organizational outcomes. *Journal of Business Research*, 62(7), 673–679. doi:10.1016/j.jbusres.2008.05.021
- Guay, J. (2018, June 5). How Denmark lost its MindLab: The inside story. *Apolitical*, 1–6.
Retrieved from <https://apolitical.co>
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Technology Research and Development*, 29, 75–91. Retrieved from <https://link.springer.com/article/10.1007/BF02766777>

- Hansen, S. E. W. (2018). Improving educational and financial effectiveness through innovation: A case study of Southern New Hampshire University's College for America. *International Journal of Educational Development*, 58(April 2017), 149–158. doi:10.1016/j.ijedudev.2017.04.006
- Harman, G., & Harman, K. (2003). Institutional mergers in higher education: Lessons from international experience. *Tertiary Education and Management*, 9(1), 29–44. doi:10.1023/A:1022261409801
- Harman, K. (2002). Merging divergent campus cultures into coherent educational communities: Challenges for higher education leaders. *Higher Education*, 44, 91–114. doi:10.1023/a:1015565112209
- Hasso Plattner Institute of Design at Stanford University. (2020). *Stanford d.school*. Retrieved from <https://dschool.stanford.edu/>
- Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. (2007). Readiness for organizational change: The systematic development of a scale. *Journal of Applied Behavioral Science*, 43(2), 232-255. doi:10.1177/0021886306295295
- Hoxby, C., & Avery, C. (2013). The missing "one-offs": The hidden supply of high-achieving, low-income students. *Brookings Papers on Economic Activity*, 1-50. Retrieved from <http://www.brookings.edu>
- Hussar, B., Zhang, J., Hein, S., Wang, K., Roberts, A., Cui, J., Smith, M., Bullock Mann, F., Barmer, A., & Dilig, R. (2020). *The Condition of Education 2020 (NCES 2020-144)*. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2020144>
- Inside Higher Ed. (n.d.). *Community and government relations jobs*. Retrieved May 28, 2021 from <https://careers.insidehighered.com/jobs/community-and-government-relations>

- Ireland, D. R., Hitt, M. A., & Sirmon, D. G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, 29(6), 963–989.
doi:10.1016/S0149-2063
- Johns Hopkins University and Medicine. (2021). *COVID-19 Dashboard*. Retrieved May 15, 2021 from <https://coronavirus.jhu.edu/map.html>
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed method research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
doi:10.3102/0013189X033007014
- Kamarudin, M. F., & Starr, K. (2014). The effects of major change: A case study in an Australian university. *The Journal of the World Universities Forum*, 6, 1–10. doi:10.18848/1835-2030/cgp/v06i03/56830
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.). New York, NY: John Wiley & Sons, Inc.
- Kelly, R. (2021, May 13). 73 percent of students prefer some courses be fully online post-pandemic. *Campus Technology*. Retrieved from <https://campustechnology.com>
- Kezar, A. (2001). Understanding and facilitating change in higher education in the 21st Century. *Eric Digests*, 1–8. Retrieved from <https://files.eric.ed.gov>
- Kezar, A. (2016). Organization theory and change. In J. H. Schuh (Ed.), *Student services: A handbook for the profession* (pp. 220–235). New York, NY: John Wiley & Sons, Inc.
- Kreighbaum, A. (2018, August 13). For-profits keep access to billions in aid. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com>

- Larsson, A. (2019). The seven dimensions of Skunk Works: A new approach and what makes it unique. *Journal of Research in Marketing and Entrepreneurship*, 21(1), 37–54.
doi:10.1108/JRME-09-2017-0038
- Lehman, W. E. K., Greener, J. M., & Simpson, D. D. (2002). Assessing organizational readiness for change. *Journal of Substance Abuse Treatment*, 22(4), 197–209. doi:10.1016/S0740-5472(02)00233-7
- Leslie, H., Abu-Rahma, A., & Jaleel, B. (2018). In retrospect: A case of merger in higher education. *International Journal of Educational Management*, 32(3), 382–395.
doi:10.1108/IJEM-03-2017-0077
- Levensen, E. (2019, March 20). Students and parents pursue class-action suit against universities linked to admissions scandal. *Cable News Network*. Retrieved from <https://www.cnn.com>
- Library of Congress. (n.d.). *H.R. 4508 – PROSPER Act*. Retrieved from <https://www.congress.gov>
- Locke, W. (2007). Higher education mergers: Integrating organisational cultures and developing appropriate management styles. *Higher Education Quarterly*, 61(1), 83–102.
doi:10.1111/j.1468-2273.2006.00339.x
- Lockheed Martin. (2021). *Skunk Works*. Retrieved from <https://www.lockheedmartin.com/en-us/who-we-are/business-areas/aeronautics/skunkworks.html>
- Lundblad, J. (2003). A review and critique of Rogers' diffusion of innovation theory as it applies to organizations. *Organization Development Journal*, 21(4), 50. Retrieved from https://isodc.org/OD_journal
- March, J. G. (1996). Continuity and change in theories of organizational action. *Administrative science quarterly*, 278-287. doi:10.2307/2393720

- Martin, J., & Samels, J. E. (1994). *Merging colleges for mutual growth: A new strategy for academic managers*. Baltimore, MD: Johns Hopkins University Press.
- Martin, J., & Samels, J. E. (2017). *Consolidating colleges and merging universities: New strategies for higher education leaders*. Baltimore, MD: Johns Hopkins University Press.
- May, M. E. (2012, October 9). The rules of successful Skunk Works projects. Fast Company. Retrieved from <https://www.fastcompany.com>
- McFarland, J., Hussar, B., Wang, X., Zhang, J., Wang, K., Rathbun, A., Barmer, A., Forrest Cataldi, E., & Bullock Mann, F. (2018). *The Condition of Education 2018* (NCES 2018-144). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from <https://nces.ed.gov>
- McLaughlin, P. (2016). Creating a culture for radical innovation in a small mature business. *Journal of Engineering Manufacture*, 232(8), 1471–1483. doi:10.1177/0954405416656907
- McMurtrie, B. (2018, January 21). The hope and hype of the academic innovation center. *The Chronicle of Higher Education*, A14–A17. Retrieved from <https://www.chronicle.com>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed.). Thousand Oaks, CA: Sage Publications.
- ModernThink. (2018). [2017 Employee Engagement Survey]. Unpublished raw data.
- Murphy, B. (2020, November 1). Google says it still uses the '20-Percent Rule,' and you should totally copy it. *Inc*. Retrieved from <https://www.inc.com>
- National Center for Education Statistics. (n.d.). *Fast facts: Distance learning*. Retrieved May 28, 2021 from <https://nces.ed.gov/fastfacts/display.asp?id=80>
- Norgård, J. D., & Skodvin, O. (2002). The importance of geography and culture in mergers: A

- Norwegian institutional case study. *Higher Education*, 44, 73–90.
doi:10.1023/A:1015513111300
- Obendhain, A. M., & Johnson, W. C. (2004). Product and process innovation in service organizations: The influence of organizational culture in higher education institutions. *The Journal of Applied Management and Entrepreneurship*, 9(3), 91–113.
<http://www.whitneypress.com/jame/>
- O’Neil, J. (1995). On schools as learning organizations: A conversation with Peter Senge. *Educational Leadership*, 52(7), 20–23. Retrieved from
<http://www.ascd.org/publications/educational-leadership>
- Online Learning Consortium. (2020, April 20). Digital Learning Pulse Survey: 90% of U.S. higher education institutions used emergency distance education to complete spring 2020 term. Retrieved from <https://onlinelearningconsortium.org>
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients’ reactions to organizational change a 60-year review of quantitative studies, *The Journal of Applied Behavioral Science*, 47(4), 461-524. doi:10.1177/0021886310396550
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Pinchot, G. (1985). *Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur*. New York, NY: Harper Collins.
- Pittaway, L., & J. Cope. (2007). Simulating entrepreneurial learning: Integrating experiential and collaborative approaches to learning. *Management Learning*, 38(2),211–33.
doi:10.1177/1350507607075776
- Poulin, R., & Straut, T. (2016). *WCET Distance Education Enrollment Report 2016*. Retrieved

from: <http://wcet.wiche.edu>

- Pournaras, E., & Lazakidou, A. (2008). Trust and innovativeness in virtual organisations. *International Journal of Business Innovation and Research*, 2(3), 262.
doi:10.1504/ijbir.2008.017521
- Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science*, 29(3), 363–377. doi:10.1287/mnsc.29.3.363
- Radhakrishnan, V. (2018). A role analysis exercise to minimize role ambiguity and promote role clarity in instructional design teams. (Doctoral dissertation). Retrieved from <https://jscholarship.library.jhu.edu/handle/1774.2/60116>
- Rao, J., & Weintraub, J. (2013). How innovative is your company's culture? *MIT Sloan Management Review*, 54(3), 29–37. Retrieved from <https://sloanreview.mit.edu/>
- Reyna, J. (2016). Bringing knowledge to life: Implementing e-learning across the School of Education. *International Journal on E-Learning*, 15(1), 101-120. Retrieved from <https://www.learntechlib.org>
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.
- Rossi, P. H., Lipsey, M. W. & Henry, G.T. (2019). *Evaluation: A systematic approach*. Thousand Oaks, CA: Sage Publications, Inc.
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Samaranayake, S. U., & Takemura, T. (2017). Employee readiness for organizational change: A case study in an export oriented manufacturing firm in Sri Lanka. *Eurasian Journal of Business and Economics*, 10(20), 1-16. doi:10.17015/ejbe.2017.020.01

- Schein, E. H. (2010). *Organizational culture and leadership* (4th ed.). San Francisco, CA: Jossey-Bass.
- Schön, D. A. (1971). *Beyond the stable state*. New York, NY: Random House.
- Seaman, J., Allen, I. E., & Seaman, J. (2018). Grade increase: Tracking distance education in the United States. In *Babson Survey Research Group*. Retrieved from <https://files.eric.ed.gov/fulltext/ED580852.pdf>
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York, NY: Doubleday Publishing Group, Inc.
- Seo, M.-G., & Hill, N. S. (2005). Understanding the human side of merger and acquisition. *The Journal of Applied Behavioral Science*, 41(4), 422–443. doi:10.1177/0021886305281902
- Shadish, W., Cook, T., & Campbell, D. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *The Academy of Management Review*, 25(1), 217–226. doi:10.1007/3-540-48543-0_8
- Shepherd, D. A., Patzelt, H., & Haynie, J. M. (2010). Entrepreneurial spirals: Deviation-amplifying loops of an entrepreneurial mindset and organizational culture. *Entrepreneurship: Theory and Practice*, 34(1), 59–82. doi:10.1111/j.1540-6520.2009.00313.x
- Skodvin, O. (1999). Mergers in higher education -- Success or failure? *Tertiary Education and Management*, 5, 65-80. doi:10.1007/978-3-319-21918-9
- Snyder, N. T., & Duarte, D. L. (2008). *Unleashing innovation: How Whirlpool transformed an industry*. San Francisco, CA: Jossey-Bass.
- Stensaker, B., Persson, M., & Pinheiro, R. (2016). When mergers fail: a case study on the critical

- role of external stakeholders in merger initiatives. *European Journal of Higher Education*, 6(1), 56-70, doi:10.1080/21568235.2015.1099456
- Teddle, C., & Tashakkori, A. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 3-50). Thousand Oaks, CA: Sage Publications, Inc.
- Thurab-Nkhosi, D. (2018). Implementing a blended/online learning policy on a face-to-face campus: Perspectives of administrators and implications for change. *Journal of Learning for Development*, 5(2), 133–147. Retrieved from <http://jl4d.org>
- Tönurist, P., Kattel, R., & Lember, V. (2017). Innovation labs in the public sector: What they are and what they do? *Public Management Review*, 19(10), 1455–1479.
doi:1080/14719037.2017.1287939
- United States Department of Labor. (n.d.). *Fact sheet #17G: Salary basis requirement and the part 541 exemptions under the Fair Labor Standards Act (FLSA)*. Retrieved from https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/fs17g_salary.pdf
- U.S. News & World Report. (n.d.). *National Liberal Arts Colleges*. Retrieved from <https://www.usnews.com/best-colleges/rankings/national-liberal-arts-colleges>
- Verhulst, E., & Boks, C. (2014). Employee empowerment for sustainable design. *Journal of Corporate Citizenship*, (55), 73–101. doi:10.9774/gleaf.4700.2014.se.00008
- Vosse, B. J. F., & Aliyu, O. A. (2018). Determinants of employee trust during organisational change in higher institutions. *Journal of Organizational Change Management*, 31(5), 1105-1118. doi: 10.1108/JOCM-05-2017-0203

- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wall Street Journal. (2020, May 26). Should we forgive all federal student-loan debt? *Wall Street Journal*. Retrieved from <http://www.wsj.com>
- Weber, P. S., & Weber, J. E. (2001). Changes in employee perceptions during organizational change. *Leadership and Organization Development Journal*, 22(6), 291-300.
doi:10.1108/01437730110403222
- Xu, T. (2020, July 4). Side project programs can have major benefits for employers. *Built In*. Retrieved from <https://builtin.com>
- Yeo, M., Bennett, D., McNichol, J. S., & Merkley, C. (2015). New faculty experience in times of institutional change. *Canadian Journal of Higher Education*, 45(4), 283-297. Retrieved from <http://journals.sfu.ca/cjhe>
- Zhang, Q., Larkin, C., & Lucey, B. M. (2017). An empirical study of the innovative culture in Ireland's higher education institutions. *Higher Education Policy*, 30, 533–554.
doi:10.1057/s41307-017-0039-7

Appendix A: List of Interview Participants

Participant number	Campus location	Gender	Current or former employee	Arrived before or after the merger
1	East Coast	Female	Current	After
2	Both campuses	Female	Current	Before
3	East Coast	Male	Current	After
4	East Coast	Female	Current	After
5	East Coast	Female	Current	Before
6	East Coast	Male	Former	After
7	East Coast	Male	Current	Before
8	East Coast	Female	Current	After
9	West Coast	Male	Current	After
10	East Coast	Male	Former	Before

Appendix B: Departments Included in the Survey

“Anchor” functions with staff on both campuses

Alumni Relations
Business Office
Communications and Marketing
Human Resources
Information Technology Services
International Student and Scholar Services
Library
Office of Advancement
Office of Digital Learning and Inquiry
Registrar's Office
Student Financial Services

Departments on the East Coast campus with institution-wide responsibilities

Assistant Treasurer's Office
Budget Office
Controller's Office
Office of Chief Risk Officer
Office of Finance & Administration
Office of the General Counsel
Office of the Provost
Planning and Assessment
President's Office
Printing and Mailing Services

East Coast departments that have counterparts doing similar work at the other campus

Center for Careers and Internships
Center for Creativity, Innovation, and Social Entrepreneurship
Grants and Sponsored Programs
International Programs and Off-Campus Study
Language Schools Administration
Student Creativity, Engagement, and Careers

West Coast departments that have counterparts doing similar work at the other campus

Admissions
Center for Advising and Career Services
Campus Services
Graduate Schools Administration
Language and Professional Programs
Recruiting
Office of the Vice President for Academic Affairs

Appendix C: Interview Schedule

Go over consent form and ask participant if they have questions about the form or participation in the study. Get signed consent form. Ask for permission to audio record the interview. Begin audio recording. The iPhone voice memo application will be used to audio record each interview.

Introduction:

The purpose of this interview is to explore the merger that took place between [East Coast Institution] and what was then known as the [West Coast Institution]. Your responses to this interview will be de-identified and any comments you make will not be attributed to you personally. The interview should take about 30 minutes.

I ask that you answer the questions to the best of your knowledge and recollection. If you joined the organization after the merger, you should answer the questions based on your perceived understanding of the reasons for and impact of the merger. If you are uncertain of an answer, it is fine to ask for clarification or state that you are not sure how to answer the question. The goal is to hear from senior leadership about their perceptions of why the merger took place and what the outcomes of the merger have been for the institution.

Do you have any questions before we begin?

Interviewee background info:

1. Please tell me a little bit about yourself: your role in the organization and how long you have been working here.

Pre-merger stage:

2. In your view, what were the original reasons or objectives for the merger between [East Coast Institution] and the [West Coast Institution]?

3. In your opinion, how was this transition implemented and managed?

Initial planning and formal combination stage (for those who were with the organization prior to or during the merger):

4. How was the merger communicated internally and externally? How were alumni notified?

5. When the merger was announced, how did you react to the news?

6. What was the general reaction of faculty, students, staff, alumni, and the public at large?

7. What areas of the institution had the most resistance? Least resistance?

8. How did the institution respond to or overcome this resistance?

Operational combination stage:

9. What major changes were made during and after the merger? How do you feel about those changes?

10. What was the administrative structure like before the merger? How did it change after the merger?

11. How did the merger influence day-to-day operations at the institution?

12. How has the mission and vision changed for the merged institution?

13. How has the culture and identity changed for the merged institution?

Stabilization stage:

14. Overall, do you believe the merger was a success?

15. What do you consider to be the most successful and least successful outcome(s) as a result of the merger?

16. How has the merger affected your view of the institution?

17. What was the most difficult aspect of the merger? What was the least difficult?

18. What are some of the lessons that you took away from this experience?

Concluding remarks:

Thank you for your time and input. As a reminder, your responses will be de-identified and any comments you make will not be attributed to you personally. If you later decide you would like to withdraw your participation from this study, please notify [the researcher].

Interview questions adapted from Leslie, H., Abu-Rahma, A., & Jaleel, B. (2018). In retrospect: A case of merger in higher education. *International Journal of Educational Management*, 32(3), 382–395. doi:10.1108/IJEM-03-2017-0077

Appendix D: Adapted Organizational Culture Assessment Instrument

Q1 The purpose of this survey is to assess the organizational culture profile of the [institution]. Your responses will be used to build a profile of our organizational culture. Your responses will not be personally identifiable and will only be reported at a departmental, campus, or institutional level. This survey should take no more than 15 minutes to complete.

By completing this survey, you are consenting to be in this research study. Your participation is voluntary, and you can stop at any time. If you later decide you would like to withdraw your participation from this study, please notify [the researcher].

Thank you for your time and input.

Q2 Part One: [The Institution] at Present

There are three parts to this survey. For Part One, answer the items in terms of how you see the organization at the PRESENT time. For each item, "the institution" refers to the [institution] as a whole, including the central administration and [individual units of the institution].

Part One consists of six items, each with four statements. Divide 100 points among these four statements, depending on the extent to which each statement is similar to the [institution]. Give a higher number of points to the statement that is most similar to [institution]. For example, on the first item, if you think the first statement is very similar to [institution], the second and third statements are somewhat similar, and the fourth statement hardly similar at all, you might give 55 points to the first statement, 20 points each to the second and third statement, and 5 points to the fourth statement. Just be sure that your total across the four statements equals 100 points.

Q3 Institutional Characteristics: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The institution is a very personal place. It is like an extended family. People seem to share a lot of themselves.
- B. The institution is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.
- C. The institution is very production oriented. A major concern is with getting the job done. People aren't very personally involved.
- D. The institution is a very formalized and structured place. Bureaucratic procedures generally govern what people do.

Q4 Institutional Leadership: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The leadership in the institution is generally considered to exemplify mentoring, facilitating, or nurturing.
- B. The leadership in the institution is generally considered to exemplify entrepreneurship, innovation, or risk taking.
- C. The leadership in the institution is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.
- D. The leadership in the institution is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.

Q5 Management of Employees: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The management style in the institution is characterized by teamwork, consensus, and participation.
- B. The management style in the institution is characterized by individual risk taking, innovation, freedom, and uniqueness.
- C. The management style in the institution is characterized by hard-driving competitiveness, high demands, and achievement.
- D. The management style in the institution is characterized by security of employment, conformity, predictability, and stability in relationships.

Q6 Institutional Glue: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The glue that holds the institution together is loyalty and mutual trust. Commitment to this school runs high.
- B. The glue that holds the institution together is commitment to innovation and development. There is an emphasis on being first.
- C. The glue that holds the institution together is emphasis on achievement and goal accomplishment. A production orientation is commonly shared.
- D. The glue that holds the institution together is formal rules and policies. Maintaining a smooth-running organization is important here.

Q7 Institutional Emphases: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The institution emphasizes human development. High trust, openness, and participation persist.
- B. The institution emphasizes growth and acquiring new resources. Readiness to meet new challenges is important.
- C. The institution emphasizes competitive actions and achievement. Measurable goals are important.

- D. The institution emphasizes permanence and stability. Efficiency, control, and smooth operations are important.

Q8 Criteria of Success: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The institution defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.
- B. The institution defines success on the basis of having the most unique or newest programs. It is a leader and innovator in higher education.
- C. The institution defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.
- D. The institution defines success on the basis of efficiency. Dependable delivery, smooth operations, and expense management are critical.

Q9 Part Two: [The Institution] in the Future

For Part Two, answer the items in terms of how you wish to see the organization five years in the FUTURE. For each item, "the institution" refers to the [institution] as a whole, including the central administration and [individual units of the institution]. Respond to these items based on how you think [institution] should be in five years in order to be spectacularly successful, achieve its highest aspirations, become an outstanding example of high performance, outstrip the currently stated goals, or become the benchmark for higher education institutions.

Part Two consists of six items, each with four statements. Divide 100 points among these four statements, depending on the extent to which each statement is similar to the [institution]. Give a higher number of points to the statement that is most similar to [institution]. For example, on the first item, if you think the first statement is very similar to [institution], the second and third statements are somewhat similar, and the fourth statement hardly similar at all, you might give 55 points to the first statement, 20 points each to the second and third statement, and 5 points to the fourth statement. Just be sure that your total across the four statements equals 100 points.

Q10 Institutional Characteristics: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The institution is a very personal place. It is like an extended family. People seem to share a lot of themselves.
- B. The institution is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.
- C. The institution is very production oriented. A major concern is with getting the job done. People aren't very personally involved.

- D. The institution is a very formalized and structured place. Bureaucratic procedures generally govern what people do.

Q11 Institutional Leadership: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The leadership in the institution is generally considered to exemplify mentoring, facilitating, or nurturing.
- B. The leadership in the institution is generally considered to exemplify entrepreneurship, innovation, or risk taking.
- C. The leadership in the institution is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.
- D. The leadership in the institution is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.

Q12 Management of Employees: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The management style in the institution is characterized by teamwork, consensus, and participation.
- B. The management style in the institution is characterized by individual risk taking, innovation, freedom, and uniqueness.
- C. The management style in the institution is characterized by hard-driving competitiveness, high demands, and achievement.
- D. The management style in the institution is characterized by security of employment, conformity, predictability, and stability in relationships.

Q13 Institutional Glue: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The glue that holds the institution together is loyalty and mutual trust. Commitment to this school runs high.
- B. The glue that holds the institution together is commitment to innovation and development. There is an emphasis on being first.
- C. The glue that holds the institution together is emphasis on achievement and goal accomplishment. A production orientation is commonly shared.
- D. The glue that holds the institution together is formal rules and policies. Maintaining a smooth-running organization is important here.

Q14 Institutional Emphases: Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The institution emphasizes human development. High trust, openness, and participation persist.

- B. The institution emphasizes growth and acquiring new resources. Readiness to meet new challenges is important.
- C. The institution emphasizes competitive actions and achievement. Measurable goals are important.
- D. The institution emphasizes permanence and stability. Efficiency, control, and smooth operations are important.

Q15 **Criteria of Success:** Please distribute 100 points across the four statements. Your total across the four statements should equal 100.

- A. The institution defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.
- B. The institution defines success on the basis of having the most unique or newest programs. It is a leader and innovator in higher education.
- C. The institution defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.
- D. The institution defines success on the basis of efficiency. Dependable delivery, smooth operations, and expense management are critical.

Q33 **Part Three: Demographic Information**

Q28 Which location do you primarily work from?

- East Coast campus
- West coast campus
- Other

Display This Question:

If Which location do you primarily work from? = Other

Q34 Please enter the location that you primarily work from:

Display This Question:

If Which location do you primarily work from? = West Coast campus

Q16 What department do you primarily work for?

▼ Admissions (1) ... Other (24)

Display This Question:

If Which location do you primarily work from? = East Coast campus

Q29 What department do you primarily work for?

▼ Assistant Treasurer's Office (3) ... Other (29)

Display This Question:

If What department do you primarily work for? = Other

Or What department do you primarily work for? = Other

Or What department do you primarily work for? = Other

Or Please enter the location that you primarily work from: Text Response Is Displayed

Q31 Please enter the name of the department you primarily work for:

Q17 What career band does your current job description fall into?

- Administrator
- Management
- Operations
- Specialist
- Not sure

Q18 What year did you start working for the [institution], including at [East Coast campus] or the [West Coast campus] prior to the merger? Please answer in four-digit year format, e.g. 2010.

Q19 What is your gender?

- Male
- Female
- Non binary
- Decline to state

Q20 What is your age?

- 18-24 years old
- 25-39 years old
- 40-55 years old
- Older than 55 years old
- Decline to state

Q27 If you would like to receive a summary report of the results of this survey, please include your email address here. You do not have to include your email address to participate in this survey, and your responses will remain confidential and unidentified.

Appendix E: Themes and Codes
Qualitative Analysis of Needs Assessment Data

Theme	Color	Codes
Goals of the merger	Green	Financial Academic/program offerings Economies of scale/efficiency
Organizational culture	Orange	Stability and control Flexibility and discretion Internal focus External focus Identity Conflict*
Leadership	Purple	Style Communication Management Vision
Distance collaboration	Blue	Matrix management Virtual teams
Change	Red	Readiness for change Resistance to change

*Emergent code

Appendix F: Data Report for Organizational Culture Assessment Instrument

PRESENT: Institutional Characteristics							
#	Field	Min	Max	M	SD	Variance	N
1	The institution is a very personal place. It is like an extended family. People seem to share a lot of themselves.	0	84	31.13	18.82	354.32	145
2	The institution is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.	0	60	19.37	14.11	198.98	145
3	The institution is very production oriented. A major concern is with getting the job done. People aren't very personally involved.	0	65	21.58	16.09	258.80	145
4	The institution is a very formalized and structured place. Bureaucratic procedures generally govern what people do.	0	90	27.92	19.97	398.74	145
PRESENT: Institutional Leadership							
#	Field	Min	Max	M	SD	Variance	N
1	The leadership in the institution is generally considered to exemplify mentoring, facilitating, or nurturing.	0	100	24.30	18.54	343.60	142
2	The leadership in the institution is generally considered to exemplify entrepreneurship, innovation, or risk taking.	0	50	20.63	13.62	185.61	142
3	The leadership in the institution is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.	0	100	32.34	26.48	701.45	142
4	The leadership in the institution is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.	0	100	22.73	17.19	295.39	142
PRESENT: Management of Employees							
#	Field	Min	Max	M	SD	Variance	N
1	The management style in the institution is characterized by teamwork, consensus, and participation.	0	100	28.64	20.28	411.24	135
2	The management style in the institution is characterized by individual risk taking, innovation, freedom, and uniqueness.	0	53	13.17	12.09	146.16	135
3	The management style in the institution is characterized by hard-driving competitiveness, high demands, and achievement.	0	100	22.33	24.57	603.47	135
4	The management style in the institution is characterized by security of employment, conformity, predictability, and stability in relationships.	0	100	35.86	24.2	585.6	135

PRESENT: Institutional Glue							
#	Field	Min	Max	M	SD	Variance	N
1	The glue that holds the institution together is loyalty and mutual trust. Commitment to this school runs high.	0	100	32.48	23.28	541.81	132
2	The glue that holds the institution together is commitment to innovation and development. There is an emphasis on being first.	0	60	17.39	15.02	225.63	132
3	The glue that holds the institution together is emphasis on achievement and goal accomplishment. A production orientation is commonly shared.	0	100	22.61	18.40	338.39	132
4	The glue that holds the institution together is formal rules and policies. Maintaining a smooth-running organization is important here.	0	100	27.53	24.83	616.36	132
PRESENT: Institutional Emphases							
#	Field	Min	Max	M	SD	Variance	N
1	The institution emphasizes human development. High trust, openness, and participation persist.	0	73	18.24	15.41	237.48	128
2	The institution emphasizes growth and acquiring new resources. Readiness to meet new challenges is important.	0	70	21.51	15.63	244.33	128
3	The institution emphasizes competitive actions and achievement. Measurable goals are important	0	100	25.92	21.79	475.01	128
4	The institution emphasizes permanence and stability. Efficiency, control, and smooth operations are important.	0	100	34.33	24.87	618.69	128
PRESENT: Criteria of Success							
#	Field	Min	Max	M	SD	Variance	N
1	The institution defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.	0	100	17.25	18.55	344.26	126
2	The institution defines success on the basis of having the most unique or newest programs. It is a leader and innovator in higher education.	0	100	28.50	19.36	374.98	126
3	The institution defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.	0	100	26.81	21.79	474.92	126
4	The institution defines success on the basis of efficiency. Dependable delivery, smooth operations, and expense management are critical.	0	100	27.44	25.25	637.45	126

ASPIRATIONAL: Institutional Characteristics							
#	Field	Min	Max	M	SD	Variance	N
1	The institution is a very personal place. It is like an extended family. People seem to share a lot of themselves.	0	82	35.44	17.02	289.63	120
2	The institution is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.	0	83	35.35	16.29	265.29	120
3	The institution is very production oriented. A major concern is with getting the job done. People aren't very personally involved.	0	51	15.15	14.03	196.93	120
4	The institution is a very formalized and structured place. Bureaucratic procedures generally govern what people do.	0	100	14.06	15.61	243.75	120
ASPIRATIONAL: Institutional Leadership							
#	Field	Min	Max	M	SD	Variance	N
1	The leadership in the institution is generally considered to exemplify mentoring, facilitating, or nurturing.	0	93	33.70	16.19	262.19	120
2	The leadership in the institution is generally considered to exemplify entrepreneurship, innovation, or risk taking.	0	55	26.63	12.94	167.37	120
3	The leadership in the institution is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.	0	100	15.63	18.61	346.15	120
4	The leadership in the institution is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.	0	80	24.04	15.45	238.69	120
ASPIRATIONAL: Management of Employees							
#	Field	Min	Max	M	SD	Variance	N
1	The management style in the institution is characterized by teamwork, consensus, and participation.	0	93	39.33	17.59	309.31	119
2	The management style in the institution is characterized by individual risk taking, innovation, freedom, and uniqueness.	0	70	26.52	13.24	175.43	119
3	The management style in the institution is characterized by hard-driving competitiveness, high demands, and achievement.	0	100	16.36	16.45	270.63	119
4	The management style in the institution is characterized by security of employment, conformity, predictability, and stability in relationships.	0	80	17.79	13.85	191.95	119

ASPIRATIONAL: Institutional Glue							
#	Field	Min	Max	M	SD	Variance	N
1	The glue that holds the institution together is loyalty and mutual trust. Commitment to this school runs high.	0	90	37.66	18.38	337.94	119
2	The glue that holds the institution together is commitment to innovation and development. There is an emphasis on being first.	0	100	24.32	13.68	187.02	119
3	The glue that holds the institution together is emphasis on achievement and goal accomplishment. A production orientation is commonly shared.	0	70	19.96	13.63	185.69	119
4	The glue that holds the institution together is formal rules and policies. Maintaining a smooth-running organization is important here.	0	100	18.06	15.16	229.92	119
ASPIRATIONAL: Institutional Emphases							
#	Field	Min	Max	M	SD	Variance	N
1	The institution emphasizes human development. High trust, openness, and participation persist.	0	79	33.71	16.43	269.87	119
2	The institution emphasizes growth and acquiring new resources. Readiness to meet new challenges is important.	0	100	27.36	13.40	179.61	119
3	The institution emphasizes competitive actions and achievement. Measurable goals are important	0	85	19.12	13.67	186.76	119
4	The institution emphasizes permanence and stability. Efficiency, control, and smooth operations are important.	0	80	19.81	13.90	193.33	119
ASPIRATIONAL: Criteria of Success							
#	Field	Min	Max	M	SD	Variance	N
1	The institution defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.	0	80	31.61	16.57	274.66	119
2	The institution defines success on the basis of having the most unique or newest programs. It is a leader and innovator in higher education.	0	67	28.74	13.12	172.07	119
3	The institution defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.	0	80	17.99	15.29	233.91	119
4	The institution defines success on the basis of efficiency. Dependable delivery, smooth operations, and expense management are critical.	0	75	21.66	13.96	194.93	119

Appendix G: Categorization of Departments

Operations Departments ($n = 43$)

Admissions
Assistant Treasurer's Office
Budget Office
Business Office
Campus Services
Communications and Marketing
Controller's Office
Events & Media Services
Human Resources
Information Technology Services
Institutional Planning and Diversity
International Student and Scholar Services
Office of Chief Risk Officer
Office of Finance & Administration
Office of the General Counsel
Planning and Assessment
Printing and Mailing Services
Registrar's Office
Student Financial Services

Academic Departments ($n = 28$)

Center for Creativity, Innovation, and Social Entrepreneurship
Graduate Schools Administration
Grants and Sponsored Programs
International Programs and Off-Campus Study
Language and Professional Programs
Language Schools Administration
Office of Digital Learning and Inquiry
Office of the Provost
Office of the Vice President for Academic Affairs
President's Office

Student Services Departments ($n = 41$)

Alumni Relations
Center for Advising and Career Services
Center for Careers and Internships
Library
Office of Advancement
Recruiting
Student Creativity, Engagement, and Careers
Student Services

Appendix H: Proposed Program Outline and Timeline

Phase/Session	Topic	Date	Duration
Phase I	Initial workshops	September 2020	2 weeks
Session 1	Program orientation and community building Introduction to innovation principles	September 14	3 hours
Session 2	How to link innovation to institutional processes How to incorporate the voice of the user for process innovation	September 16	3 hours
Session 3	How to incorporate the voice of the student for program innovation How to ideate and brainstorm	September 18	3 hours
Session 4	How to create a migration path to the dream state	September 21	3 hours
Session 5	How to develop a business model	September 23	3 hours
Session 6	Project team formation Workshop reflection and wrap up Planning for Phase II	September 25	3 hours
Phase II	Project team work	September 28 – December 11	10 weeks
Phase III	Final team presentations	December 11	2 hours

Note: There is a break the week of November 23 for the Thanksgiving holiday.

Appendix I: Project Evaluation Rubric

Element	1	2	3	n/a
Mission aligned: Aligns with the Institute’s mission*	Not aligned with mission	Partially aligned with mission	Strongly aligned with mission	
Forward driving: Moves the institution toward its vision**	Moves institution substantially away from its vision	Maintains the status quo within the institution	Drives institution forward in achieving its vision	
Solution oriented: Solves a problem identified by users, students, or employers	No evidence that proposal will solve an existing problem	Some evidence that proposal will solve an existing problem	Strong evidence that proposal will solve an existing problem	
Feasible: Can be achieved with current or easily acquired resources	Requires substantial resources to implement	Requires some additional resources to implement	Leverages existing structures and resources to implement	
Scalable: For <i>process</i> innovation, can be implemented across the whole institution For <i>program</i> innovation, has potential to expand global reach of the institution	Cannot be scaled across the institution Does not expand existing audiences or reach new audiences	Has potential for scaling across the institution May expand existing audiences or reach new audiences	Can have wide-scale impact across the institution Strong potential to reach new audiences around the globe	
Sustainable: Includes plan for long-term viability of the innovation	No plan in place to sustain the innovation	Rough plan in place to sustain the innovation	Viable and detailed plan in place to sustain the innovation	
Cost saving (for <i>process</i> innovation)	Institution stands to lose money by implementing	Institution may see some cost savings from innovation	Institution could see substantial costs savings from innovation	

Revenue generating (for <i>program</i> innovation)	Institution stands to lose money by implementing	Institution may see some revenue generation from innovation	Institution could see substantial revenue generation from innovation	
-----------------------------------------------------------	--------------------------------------------------	-------------------------------------------------------------	----------------------------------------------------------------------	--

*Mission Statement: The [West Coast campus] educates professionals to advance understanding, promote peace, and drive change in pursuit of a more just world.

**Vision Statement: A world with a robust and inclusive public sphere where ethical citizens work across intellectual, geographical, and cultural borders.

Comments from panelist:

Appendix J: Summary Matrix

Research Question	Construct	Data Source(s)	Measure	Frequency	Data Analysis
RQ1: To what extent did the intervention reach its intended audience?	Program reach: Extent to which the program was received by the targeted group (Baranowski & Stables, 2000)	Researcher	Pre-Program Survey	Once at beginning of program	Descriptive statistics
		Researcher Program coaches	Attendance logs	Weekly throughout program	Document analysis
				At beginning of each session	Document analysis
RQ2: What factors did participants identify as motivating them to finish the program or inhibiting them from completing the program?	Reasons for finishing the program	Program participants	Post-Program Survey	Upon completion of program	Emergent coding and thematic analysis
	Participant maintenance: differences among staff member population, recruited sample, and maintained sample (Baranowski & Stables, 2000)	Researcher	Pre-Program Survey	Once at beginning of program	Descriptive statistics

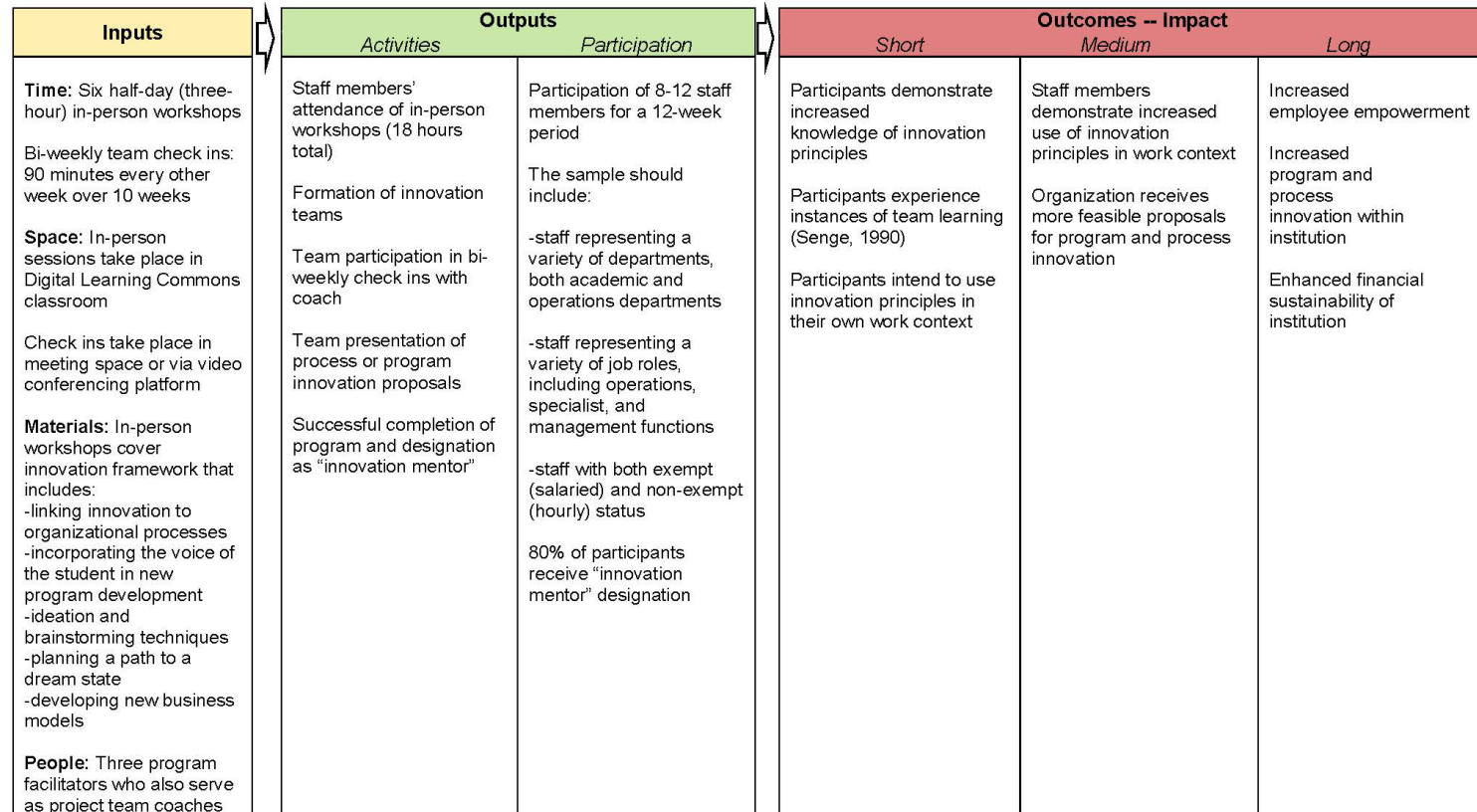
	Reasons for not finishing the program	Program participants	Program cessation survey	Stage at which participant ceased participating	Emergent coding and thematic analysis
RQ3: To what extent do participants demonstrate increased knowledge of innovation principles?	Knowledge of innovation principles	Participants	Pre- and post-program surveys	At the beginning and end of the program	Wilcoxon rank sum test
		Project evaluators	Rubric for project evaluation	At the end of the program	Document analysis
RQ4: How do participants describe their experiences of working and learning with their project teams?	Team learning (Senge, 1990): “when the intelligence of the team exceeds the intelligence of the individuals in the team” (p. 12) Entrepreneurial learning (Bagheri & Pihie, 2011): hands-on experience, social interaction, observation, and reflection	Participants	Participant reflection logs	Weekly throughout program	A priori coding and thematic analysis
			Post-program survey	At the end of the program	
			Focus groups	At the end of the program	

RQ5: In what ways do participants intend to use innovation principles in the future?	Intention to use innovation principles in future	Participants	Post-program survey	At the end of the program	Descriptive statistics for QUAN item and a priori coding and thematic analysis for QUAL item
			Focus groups	At the end of the program	A priori coding and thematic analysis
			Follow up survey	Two months after program completion	Correlation with post-program survey

Appendix K: Logic Model

Program: Logic Model for Innovation Mentor Program

Situation: Results of a needs assessment indicate staff members across the organization would like to have more flexibility and discretion in their work, while senior leadership would like to see enhanced financial sustainability. Staff members desire an organizational culture that values greater employee development, support, creativity, and innovation. Creation of an innovation mentor program could facilitate a move toward greater empowerment, creativity, and innovation for staff members and long-term financial success due to increased process and program innovation throughout the organization.



Assumptions

Staff member interest in program content and outcomes
 Manager support for staff member participation
 Availability and interest of colleagues to serve as coaches
 Recognition by leadership of innovation mentor designation

External Factors

Potential loss of manager support for employee participation
 Participation not possible due to focus on COVID-19 response
 Participants change positions or leave organization

Appendix L: List of Intervention Study Participants

Participant Number	Department	Gender	Year Employed	Payroll Status	Focus Group	Program Cessation Date
1	Graduate school administration	Female	2001	Exempt	A	
2	Provost's office	Female	2013	Exempt	A	
3	Recruiting	Female	2020	Exempt	B	
4	Library	Female	2019	Non-Exempt	B	
5	Research center	Male	2018	Non-Exempt	B	
6	Academic and career advising	Male	2015	Exempt	C	
7	Academic and career advising	Female	2018	Exempt	C	
8	Digital learning	Female	2019	Exempt	C	
9	Institutional advancement	Female	2001	Non-Exempt	D	
10	Recruiting	Female	2000	Exempt	n/a	10/7/2020
11	Graduate school administration	Female	2002	Non-Exempt	n/a	10/13/2020

Innovation Mentor Pre-Program Survey

The purpose of this survey is to gather information about you and your knowledge of innovation principles before we begin the Innovation Mentor program. There are no "correct" answers to this survey. We are interested in learning more about your current familiarity with the program content and your personal goals for the program.

The survey should take no more than 15 minutes to complete. Your responses are confidential and will not be attributed to you personally.

By completing this survey, you are consenting to be in this research study. Your participation is voluntary, and you can stop at any time. If you later decide you would like to withdraw your participation from this study, please notify [the researcher].

Thank you so much for your time.

Part One: Knowledge and Use of Innovation Principles

Rate each statement based on how well you feel that you know the concept or skill. Responses range from 1 (strongly disagree) to 4 (strongly agree).

I know how to...

	Strongly Disagree	Disagree	Agree	Strongly Agree	Unsure
Link innovation to Institute processes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incorporate the voice of the student in new program development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incorporate the voice of the user in new process development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideate and brainstorm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plan a path to the Institute's "dream state"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop new business models	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Generally speaking, how often do you practice innovation at work?

- Never
- Sometimes
- About half the time
- Most of the time
- Always

Feel free to share some examples of how you practice innovation at work.

Part Two: Goals for the Program

Please tell us what your goals and concerns are about joining the Innovation Mentor program.

Why did you decide to join the Innovation Mentor program?

What do you hope to learn in the program?

What concerns do you have about the program?

Is there anything else you would like us to know?

Part Three: Demographic Information

What is your primary role at the [institution]?

Staff

Faculty

Student

Other _____

What department do you primarily work for?

▼ Admissions ... Other

What is your current job title?

Are you a non-exempt (hourly) or exempt (salaried) employee?

- Non-Exempt/Hourly
- Exempt/Salaried
- Not sure
- Decline to state

What year did you start working for the [institution], including at [East Coast campus] or the [West Coast campus] prior to the merger? Please answer in four-digit year format, e.g. 2010.

What is your gender?

- Male
- Female
- Non binary
- Decline to state

Thank you for completing this survey. Once again, if at any time you wish to withdraw your participation from this study, please contact [the researcher].

Innovation Mentor Post-Program Survey

The purpose of this survey is to gather information about you and your knowledge of innovation principles after completing the Innovation Mentor program. There are no "correct" answers to this survey. We are interested in learning about your current familiarity with the program content, your intention to use this content in the future, and your experience of the program.

The survey should take no more than 15 minutes to complete. Your responses are confidential and will not be attributed to you personally.

By completing this survey, you are consenting to be in this research study. Your participation is voluntary, and you can stop at any time. If you later decide you would like to withdraw your participation from this study, please notify [the researcher].

Thank you so much for your time.

Part One: Familiarity with Innovation Principles

Rate each statement based on how well you feel that you know the concept or skill. Responses range from 1 (strongly disagree) to 4 (strongly agree).

I know how to...

	Strongly Disagree	Disagree	Agree	Strongly Agree	Unsure
Link innovation to Institute processes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incorporate the voice of the user for process innovation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incorporate the voice of the student for program innovation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideate and brainstorm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plan a path to the Institute's "dream state"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop new business models	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part Two: Use of Innovation Principles

Rate each statement based on your intention to apply the concept or skill in your future work. Responses range from 1 (strongly disagree) to 4 (strongly agree).

I intend to apply this skill in my future work.

	Strongly Disagree	Disagree	Agree	Strongly Agree
Link innovation to Institute processes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incorporate the voice of the user for process innovation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incorporate the voice of the student for program innovation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideate and brainstorm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plan a path to the Institute's "dream state"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop new business models	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part Three: Experience in the Program

What motivated you to complete the program?

- Wanted to receive Innovation Mentor designation
- Interest in program content
- Enjoyed working in my team
- Manager support
- Project team support
- Project coach support
- Other _____

What challenges did you face in completing the program?

- Time constraints
- Lost interest in program content
- Challenges working in my team
- Pressure from my manager
- Other _____
- None

Did you achieve the goals you set for the program?

- Yes
- Partially
- No

What goals did you achieve? What helped you achieve these goals?

Is there anything else you would like us to know?

Part Three: Demographic Information

What is your primary role at the [institution]?

- Staff
- Faculty
- Student
- Other _____

What department do you primarily work for?

▼ Admissions ... Other

What is your current job title?

Are you a non-exempt (hourly) or exempt (salaried) employee?

- Non-Exempt/Hourly
- Exempt/Salaried
- Not sure
- Decline to state

What year did you start working for the [institution], including at [East Coast campus] or the [West Coast campus] prior to the merger? Please answer in four-digit year format, e.g. 2010.

What is your gender?

- Male
- Female
- Non binary
- Decline to state

Thank you for completing this survey. Once again, if at any time you wish to withdraw your participation from this study, please contact [the researcher].

Innovation Mentor Follow Up Survey

The purpose of this survey is to check in with Innovation Mentor program participants two months after the completion of the program. We are interested in learning if you have been able to apply the concepts and skills you learned in the program in your job role and work context.

The survey should take no more than 10 minutes to complete. Your responses are confidential and will not be attributed to you personally.

By completing this survey, you are consenting to be in this research study. Your participation is voluntary, and you can stop at any time. If you later decide you would like to withdraw your participation from this study, please notify [the researcher].

Thank you so much for your time.

Use of Innovation Principles Rate each statement and respond based on how well you feel that you have been able to apply the concept or skill. Responses range from 1 (strongly disagree) to 4 (strongly agree).

I am able to...

	Strongly Disagree	Disagree	Agree	Strongly Agree
Link innovation to Institute processes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incorporate the voice of the student in new program development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incorporate the voice of the user in new process development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideate and brainstorm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plan a path to the Institute's "dream state"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop new business models	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Feel free to add any comments about how you have or have not been able to apply the concepts and ideas you learned in the Innovation Mentor program in your job role and work context.

Demographic Information

What is your primary role at the [institution]?

- Staff
- Faculty
- Student
- Other _____

What department do you primarily work for?

▼ Admissions ... Other

What is your current job title?

Are you a non-exempt (hourly) or exempt (salaried) employee?

- Non-Exempt/Hourly
- Exempt/Salaried
- Not sure
- Decline to state

What year did you start working for the [the institution], including at [East Coast campus] or the [West Coast campus] prior to the merger? Please answer in four-digit year format, e.g. 2010.

What is your gender?

- Male
- Female
- Non binary
- Decline to state

Thank you for completing this survey. Once again, if at any time you wish to withdraw your participation from this study, please contact [the researcher].

Innovation Mentor Program Cessation Survey

The purpose of this survey is to learn more about why you have decided to stop participating in the Innovation Mentor program. We are interested in learning your reasons for leaving the program. The survey should take less than 10 minutes to complete. Your responses are completely confidential and will not be attributed to you personally.

If you have any questions or concerns about how the responses to this survey will be used, please contact [the researcher].

Thank you so much for your time.

Why did you decide to stop participating in the Innovation Mentor program? (Select all that apply.)

- Program content uninteresting
- Program content not relevant to my work
- Too busy
- Got bored
- Pressure from my manager to focus on my job duties
- Conflict in my project team
- Didn't like my coach
- Other _____

Feel free to add any comments about why you have decided to quit the Innovation Mentor program.

Demographic Information

What is your primary role at the [institution]?

- Staff
- Faculty
- Student
- Other _____

What department do you primarily work for?

▼ Admissions ... Other

Are you a non-exempt (hourly) or exempt (salaried) employee?

- Non-Exempt/Hourly
- Exempt/Salaried
- Not sure
- Decline to state

What year did you start working for the [institution], including at [East Coast campus] or the [West Coast campus] prior to the merger? Please answer in four-digit year format, e.g. 2010.

What is your gender?

- Male
- Female
- Non binary
- Decline to state

What is your age?

- 18-24 years old
- 25-39 years old
- 40-55 years old
- Older than 55 years old
- Decline to state

Thank you for completing this survey. If you have any questions or concerns about how the responses to this survey will be used, please contact [the researcher].

Appendix Q: Focus Group Protocol

If consent forms have not been previously collected, go over form and ask participants if they have questions about the form or participation in the study. Get signed consent forms. Ask for permission to audio record the focus group. Begin audio recording. The iPhone voice memo application will be used to audio record each focus group.

Introduction:

The purpose of this focus group is to hear about your experiences participating in the innovation mentor program. Your responses will be de-identified and any comments you make will not be attributed to you personally. The session should take about 30 minutes.

I ask that you answer the questions to the best of your knowledge and recollection. If you are uncertain of an answer, it is fine to ask for clarification or state that you are not sure how to answer the question. The goal is to hear from program participants about their experience in the innovation mentor program.

Do you have any questions before we begin?

Participant background info:

Please tell me about your role in the organization and how long you have been working here.

Project team experience and team learning:

What was the experience of working with your team like? What challenges did you face in working with your team?

Were there things that were easier to do with your team than would be on your own? Conversely, were there things that would have been easier to do on your own, rather than in a team?

In learning organizations, Peter Senge (1990) defines team learning as when “when the intelligence of the team exceeds the intelligence of the individuals in the team.” Did you ever experience a feeling that as a team you were able to achieve more than you would be able to achieve on your own? If so, can you describe an example of when that happened?

If not, what do you think inhibited your team from achieving “team learning”?

Intention to use innovation principles in future:

What elements of innovation could you see yourself using in your own work? Have you already applied anything you learned in the program to your work?

Have you shared any ideas with your colleagues? If so, which ideas?

Which ideas from the program would be difficult to apply in your work context? Which ideas from the program do you think would not work at the Institute? Why not?

Concluding Remarks

Thank you for your time and input. As a reminder, your responses will be de-identified and any comments you make will not be attributed to you personally. If you later decide you would like to withdraw your participation from this study, please notify [the researcher].

Appendix R: Final List of Codes and Subcodes
Qualitative Analysis of Intervention Data

Code	Color	Subcodes
Individual	Pink	Employee empowerment Intention to use in future Mindset
Organization	Green	Bottom up diffusion Top down diffusion Entrepreneurial culture Leadership
Teams	Blue	Attitudes Conflict Knowledge or perspective Roles Skills Synergy or collaboration
Entrepreneurial Learning	Yellow	Observation Past experience Reflection Social interaction
Constraints*	Purple	COVID impact Time
Innovation*	Orange	n/a

*Emergent codes

Appendix S: Screenshots of Social Media Platform for Innovation Mentors Program

Search

☆
🔔 Settings

Innovation Mentors Fall 2020

👤 Staff and Faculty · Private group · 11 members

🗨 Discussion
📄 Info
📎 Resources

Innovation Mentors Fall 2020 +

Resources Name ↑

	Being Excellent - Values & Supporting Practices (Edit-able) <small>Collaborative values exercise</small>	✦ ...
	Collection of Readings & Videos <small>Collecting links to articles, videos, podcasts related to creativity and innovation. Have a suggestion? Let us know and we can a</small>	✦ ...
	Innovation Mentors Weekly Reflection Form <small>Here's the link to the Google form where you can submit your weekly reflection.</small>	✦ ...
	Team Sign Up Sheet	✦ ...
	Apel et al 2018 Transforming the Enrollment Experience Using Design Thinking.pdf <small>146.14 KB · Added by Patricia Szasz</small>	✦ ...

Search

🗨 Discussion
📄 Info
📎 Resources

6mths (edited) ...

In the past few sessions we delved a little further into formulating problem statements. In human centered design this phase is designed to help distill stakeholder / user research. Through interviews and observations we can begin to sketch out point of view (POV) based problem statements.

A useful formula for a POV or problem statement that we worked with was "a (STAKEHOLDERS*) *needs a way to* (DO SOMETHING**) *because* (INSIGHT/REASON/RATIONALE)." As we've discussed, it's important at this stage to not get overly fixated on solutions, but rather to craft a statement that is both focu...

Show more...

consglobal-pdf-nature-cards-2020-07-27.pdf

👍 2 people like
💬 3 comments
👁 44 views

👍 Like
💬 Comment

View 1 more comment

6mths
...

It's funny. I was the co-author on a study of the economics of sea otters. They're not only ecosystem engineers. They're economic system engineers. The ideas in these cards tie in with an important idea in economics. that of an externaliv. In other words. these are the consequences of a marke...

Search

Discussion Info Resources



A screenshot from our opening Zoom annotation activity and discussion of creativity and innovation.

Some themes that emerged from this conversation:

Creativity is disciplinary, dispositional, reflective of practices, behaviors, and mindsets that support the generation of knowledge, novelty and perhaps spaces where judgement or analysis is withheld, refined over time. Don't forget creative problem solving and [lateral thinking](#). While artistic output is often associated with creativity, we sh...

Show more...



Appendix T: Revised Project Evaluation Rubric

Innovation Mentors Fall 2020

Project Evaluation Rubric

Feedback for Team Members:

Proposal Focus:

Feedback from: (Panelist Name)

Element	1	2	3	n/a
Mission aligned: Aligns with the Institute's mission*	Not aligned with mission	Partially aligned with mission	Strongly aligned with mission	
Forward driving: Moves the institution toward its vision**	Moves institution substantially away from its vision	Maintains the status quo within the institution	Drives institution forward in achieving its vision	
Solution oriented: Solves a problem identified by users, students, or employers	No evidence that proposal will solve an existing problem	Some evidence that proposal will solve an existing problem	Strong evidence that proposal will solve an existing problem	
Feasible: Can be achieved with current or easily acquired resources	Requires substantial resources to implement	Requires some additional resources to implement	Leverages existing structures and resources to implement	
Scalable: For <i>process</i> innovation, can be implemented across the whole institution For <i>program</i> innovation, has potential to expand global reach of the institution	Cannot be scaled across the institution Does not expand existing audiences or reach new audiences	Has potential for scaling across the institution May expand existing audiences or reach new audiences	Can have wide-scale impact across the institution Strong potential to reach new audiences around the globe	
Equitable: Promotes equal access and opportunity for traditionally marginalized communities and removes barriers toward that access and opportunity.	Does not offer equal access to traditionally marginalized communities.	Offers some access and/or removes some barriers toward equal participation.	Promotes equal access and removes barriers toward full participation.	

Sustainable: Includes plan for long-term viability of the innovation	No plan in place to sustain the innovation	Rough plan in place to sustain the innovation	Viable and detailed plan in place to sustain the innovation	
Cost saving (for <i>process</i> innovation)	Institution stands to lose money by implementing	Institution may see some cost savings from innovation	Institution could see substantial costs savings from innovation	
Revenue generating (for <i>program</i> innovation)	Institution stands to lose money by implementing	Institution may see some revenue generation from innovation	Institution could see substantial revenue generation from innovation	

*Mission Statement: The [West Coast campus] educates professionals to advance understanding, promote peace, and drive change in pursuit of a more just world.

**Vision Statement: A world with a robust and inclusive public sphere where ethical citizens work across intellectual, geographical, and cultural borders.

Comments from panelist:

EDUCATION

The Johns Hopkins University

Ed.D. in Entrepreneurial Leadership in Education

Dissertation Topic: Fostering Innovation Among Staff Members in a Multicampus Higher Education Institution

Baltimore, Maryland, USA

August 2021

Middlebury Institute of International Studies

M.A. in Teaching English to Speakers of Other Languages

Certificate, Language Program Administration

Monterey, California, USA

December 2006

University of Michigan

B.A. in English Language & Literature and Arts Administration

Graduated *magna cum laude*

Ann Arbor, Michigan, USA

May 1992

EDUCATION ADMINISTRATION

Associate Dean for Language & Professional Programs

Provides leadership and growth strategy for institution-wide unit for Language & Professional Programs, in support of the institution's transformational goals to become a center for persuasive and inclusive dialogue, a laboratory for curricular innovation and experiential learning, and a globally-networked changemaker. Sits on executive leadership team.

September 2018 – present

Assistant Dean for Language & Professional Programs

Graduate School of Translation, Interpretation & Language Education

Had primary responsibility for driving efforts to enhance the portfolio of intensive and customized language and professional development programs offered by the Graduate School of Translation, Interpretation, and Language Education.

August 2012 – August 2018

Director, Intensive English Programs

Coordinated, implemented and reviewed all non-degree English as a second language (ESL) and English for specific purposes programs at [REDACTED].

June 2007 – July 2012

English Program Coordinator, WTO China Executive Program

Coordinated a 10-week English program in conjunction with business and policy training for a group of diplomats who would be representing China in the World Trade Organization (WTO).

September 2005 – January 2006

TEACHING & TRAINING

Adjunct Faculty January 2010 – present
Teach graduate-level “Principles & Practices of Language Teaching” and “Introduction to Classroom Observation” courses to students pursuing master’s degrees in Teaching English to Speakers of Other Languages (TESOL) and Teaching a Foreign Language (TFL).

Teacher Trainer Baku, Azerbaijan
June 2011, January 2012
Co-delivered two-week curriculum development workshop for English as a foreign language teachers. Topics included conducting a needs assessment, setting course goals and objectives, creating content-based and project-based syllabi, adapting textbook and authentic materials, and developing classroom-based and alternative assessment instruments. Training conducted at Azerbaijan Diplomatic Academy and Azerbaijan National Aviation Academy.

Via Lingua Rome, Italy
Teacher Trainer September 2003 – July 2004
Observed and evaluated trainee instructors of Teaching English as a Foreign Language (TEFL) certificate program. Coached trainees on pedagogical methods, including how to use the Internet and video in language teaching. Guided trainees through grammar topics in preparation for grammar exam.

PROFESSIONAL ORGANIZATIONS & AFFILIATIONS

Past President and Past Treasurer, EnglishUSA: The American Association of Intensive English Programs
English Language Specialist, U.S. Department of State
Member, TESOL International Association
Member, University Professional and Continuing Education Association
Member, Language Capital of the World Cultural Festival Steering Committee
Member and Former Board Member, California Teachers of English to Speakers of Other Languages
Member, NAFSA Association of International Educators

SPECIALIZED KNOWLEDGE & SKILLS

Excellent knowledge of Italian; working knowledge of French
Graduate coursework in budgeting, grant proposal writing, marketing, teacher education, teacher supervision
Attended Congressional advocacy events for EnglishUSA, the Joint National Committee for Languages, and NAFSA Association of International Educators in Washington, DC
Supervised program accreditation and re-accreditation processes for Intensive English Program via the Commission on English Language Program Accreditation (CEA)
Attended Summer Institute for Intercultural Communication, 2011 and 2012
Completed Foundation Course in Online Teaching through the Online Learning Consortium (formerly known as the Sloan Consortium)
Proficient in Microsoft Office, Banner, Salesforce, Moodle and Canvas course management systems, mobile technologies for language teaching and learning