

Theses and Dissertations

2023

Leadership strategies for building high-performing faculty teams in technology-focused higher education departments

Liz Hollerman
lhollerman@gmail.com

Follow this and additional works at: <https://digitalcommons.pepperdine.edu/etd>



Part of the [Educational Leadership Commons](#), and the [Higher Education Commons](#)

Recommended Citation

Hollerman, Liz, "Leadership strategies for building high-performing faculty teams in technology-focused higher education departments" (2023). *Theses and Dissertations*. 1313.
<https://digitalcommons.pepperdine.edu/etd/1313>

This Dissertation is brought to you for free and open access by Pepperdine Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Pepperdine Digital Commons. For more information, please contact bailey.berry@pepperdine.edu.

Pepperdine University
Graduate School of Education and Psychology

LEADERSHIP STRATEGIES FOR BUILDING HIGH-PERFORMING FACULTY TEAMS IN
TECHNOLOGY-FOCUSED HIGHER EDUCATION DEPARTMENTS

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Organizational Leadership

by

Liz Hollerman

April, 2023

Laura Hyatt, Ed. D. - Dissertation Chairperson

This dissertation, written by

Liz Hollerman

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

Doctoral Committee:

Laura Hyatt, Ed.D., Chairperson

Paul Sparks, Ph.D.

Latrissa Neiworth, Ed.D.

© Copyright by Liz Hollerman (2023)

All Rights Reserved

TABLE OF CONTENTS

	Page
LIST OF TABLES	vii
LIST OF FIGURES	viii
DEDICATION	ix
ACKNOWLEDGEMENT	x
VITA	xi
ABSTRACT	xiii
Chapter 1: Building High-Performing Faculty Teams for a Technology-focused Department	1
Background	2
Statement of the Problem	4
Purpose of the Study	5
Research Questions	5
Methodological Approach	7
Limitations	8
Theoretical Framework	8
Significance of the Study	9
Key Definitions	10
Summary	13
Organization of the Study	14
Chapter 2: Review of the Literature	15
Chapter Overview	15
Structures of Higher Education	15
High-Performing Teams	18
Theoretical Framework: Kouzes and Posner’s Leadership Model	35
Connections Between Leadership and High-Performing Academic Leaders	45
Summary	54
Chapter 3: Methods	56
Chapter Structure	56

Purpose and Research Questions	57
Research Design	58
Data Gathering Procedures	63
Credibility and Dependability of the Instrument	64
Human Subject Considerations.....	67
Data Analysis Processes	69
Assessing the Intercoder Agreement	71
Reflexivity	72
Limitations.....	73
Summary.....	73
Chapter 4: Data Analysis and Results.....	75
Chapter Structure	76
Participant Recruitment	77
Overview of Participants	77
Data Collection	78
Data Analysis Process.....	79
Instruments for Data Analysis	84
Instrument Credibility and Dependability	85
Results.....	89
Summary.....	105
Chapter 5: Findings and Conclusions	107
Chapter Structure	107
Review of Purpose and Research Questions.....	108
Review of Theoretical Framework	109
Review of the Methods	109
Review of Human Subject Protections	109
Review of the Participants	110
Review of Data Collection and Analysis.....	110
Key Findings.....	111
Conclusions.....	112
Results Overview	122
Implications	124
Limitations of the Study	125
Recommendations for Future Research.....	125
Summary.....	126

REFERENCES	128
APPENDIX A: Research Training Certificate	147
APPENDIX B: IRB Approval Letter.....	148
APPENDIX C: Participant Recruitment Email	149
APPENDIX D: Informed Consent Form for Research Participants.....	150

LIST OF TABLES

	Page
Table 1: Theoretical Framework for Kouzes and Posner’s Leadership Model	44
Table 2: High-Performing Team Factors and Intersections with Kouzes and Posner’s Leadership Model	53
Table 3: Total Years of Academic Leadership Experience for Participants.....	78
Table 4: Coding Themes Connected to Research Questions	80
Table 5: Sample of the Codebook.....	83
Table 6: Coding Themes Connected to Research Questions	83
Table 7: Secondary Reviewer Reliability	89
Table 8: Leadership Strategies Connections to Theoretical Framework	122

LIST OF FIGURES

	Page
Figure 1: Code Diagram.....	81
Figure 2: Sample from Secondary Reviewer Comparison Sheet.....	88
Figure 3: Number of Codes for Each Research Question.....	90
Figure 4: Research Subquestion 1 and Associated Codes	91
Figure 5: Research Subquestion 2 and Associated Codes	94
Figure 6: Research Subquestion 3 and Associated Codes	97
Figure 7: Research Subquestion 4 and Associated Codes	100
Figure 8: Research Subquestion 5 and Associated Codes	103

DEDICATION

I want to dedicate my dissertation to my wife, Kira, and all of my friends and family that have supported me through this process. To my wife Kira, thank you for being so patient and supportive of my work. I honestly could not have done this without you. You are my rock and my best friend. I love you. Thank you. To my family, thank you for encouraging me to do this! I never thought I would do get a doctoral degree, and I am so thankful to have had your support. To my new cohort friends, I am so thankful to have met you. This is an incredibly supportive group of folks and I know we'll be forever friends after this. This is just the beginning of our careers as researchers! I look forward to discovering more things with all of you!

ACKNOWLEDGEMENT

I want to thank my dissertation chair, Dr. Laura Hyatt. Your constant encouragement and support has meant so much to me and I know I'd have been lost without your support and guidance. I've learned so much from you and I hope we can continue to work together on future projects so I can continue to learn more! You pushed me to be a better writer and pushed me to keep digging for more. I'll forever be grateful for your mentorship. To my incredible committee members, Dr. Paul Sparks and Dr. Latrissa Neiworth: THANK YOU! I greatly have appreciated your support on my committee and for challenging me in different ways. I am so incredibly grateful for all the work you have done to get me to this point.

VITA

Liz Hollerman**EDUCATION**

Doctor of Education, Organizational Leadership, Pepperdine University, Malibu, CA

Expected 2023

*Masters of Science, Animation, DePaul University, Chicago, IL**Bachelor of Fine Arts, Animation, University of Louisiana at Lafayette, Lafayette, LA***PROFESSIONAL EXPERIENCE**

Bellevue College**Sept 2015 – Present**

Dean – Institute for Business & Information Technology

January 2021 - Present

Program Chair/Associate Professor – Digital Media Arts

June 2018 – January 2021

Assistant Professor – Digital Media Arts

Sept 2015 – June 2018

Peripheral Creations, LLC**October 2015 – November 2019**

Principal Consultant

Microsoft – Turn 10 Studios**October 2012 – Sept 2017**

Senior Cinematics Artist

February 2017 – Sept 2017

Technical Animator

December 2014 – March 2016

Character/Animation Lead

October 2012 – October 2013

Art Institute of Seattle**October 2013 – Sept 2015**

Adjunct Professor

Amazon**June 2014 – December 2014**

3D Motion Designer

Sanford Brown College**July 2012 – June 2014**

Adjunct Professor

Crankshaft Games

2009 – September 2012

Art Director

Boston University Center for Digital Imaging Arts

2008 – July 2012

Director of 3D Animation and Game Art

January 2011 – July 2012

Instructor

2008 – January 2011

ABSTRACT

This study explored the leadership strategies academic leaders of technology departments in higher education may use to build high-performing faculty teams. The objective of the study was to discover the most effective ways for fostering faculty ingenuity in curriculum reform for a technology-focused program. In addition, the literature review presents *The Five Practices of Exemplary Leadership* by Kouzes and Posner (2019) as the theoretical basis for this study. Literature uncovered thirteen effective leadership elements for building high-performing teams (Friedman, 2021; Katzenbach & Smith, 2005). The research subquestions for this qualitative study were organized around Kouzes and Posner's model of leadership. The selection of participants follows a purposeful sampling (Creswell & Poth, 2017), with the objective of obtaining input from academic leaders with experience leading technology-focused university departments. Seven academic leaders were interviewed using Zoom as part of this study. The findings of this research indicate that academic leaders of technology-focused departments use leadership strategies that align with the key factors and approaches of building a high-performing team. Twenty-one strategies were identified that integrate and overlap with the major ideas of Kouzes and Posner's *Five Practices of Exemplary Leadership* (2019). Future research considerations could investigate how support staff can improve faculty teamwork and outcomes. This study draws on previous research on high-performing teams and contributes to the increasing body of literature by examining how faculty within technology-focused departments of higher education might become a high-performing team.

Chapter 1: Building High-Performing Faculty Teams for a Technology-focused Department

A high-performing team comprises goal-oriented individuals with complementary skills who collaborate, innovate, and consistently produce superior results (Katzenbach & Smith, 2005). Creating a high-performing faculty team in higher education requires academic leaders who are accessible, informed, motivational, and forward-thinking (Kouzes and Posner, 2019). Additionally, leadership is often shared among academic leaders and the faculty of high-performing teams (Katzenbach & Smith, 2005). The academic leaders and faculty of these high-performing teams often adopt a constructivist approach of leadership and learning, allowing team members to build meanings that lead to a common purpose (Lambert et al., 2002). Fukuyama (1995) indicates that trust is one of the key aspects of promoting collaboration amongst social groups, whereas Katzenbach and Smith (2005) suggest that collaboration is key for leaders to develop their teams into high-performing teams. Additionally, successful collaboration and the high performance of teams require leaders to model the culture they expect from their teams (Rego et al., 2013). Furthermore, leaders have the ability to shape the culture of their teams through examples of their behavior (Whitehurst, 2017). These behaviors are reflected in the leadership strategies these leaders bring to their teams. Higher education technology leaders often use unique leadership methods to deal with the issues they confront as technology continues to expand and evolve (Al-Husseini et al., 2019; Drew, 2010). This study seeks to discover if leaders that model the culture and promote collaboration are also applicable for academic leaders to encourage high-performing faculty teams in technology-focused departments.

Higher education institutions face growing challenges in adapting to rapidly changing

technology (Wildavsky et al., 2011). Faculty of technology-focused academic programs are responsible for learning and implementing curriculum adjustments to stay up-to-date with the changing times (Gibbons, 2016). This obligation placed on faculty members is especially difficult to fulfill if their academic leaders do not provide support or opportunities for professional development in order for them to engage in this effort (Sutton & DeSantis, 2017). Because of the rapid pace of technological development, academic programs will be unable to provide students with the up-to-date knowledge necessary to find work in the technology industry unless they adapt (Wildavsky et al., 2011). The lack of currency in curricula leads to a greater challenge for academic leaders where the public may view higher education institutions as not being a place of innovation (Noone, 2000). Therefore, this research aims to identify leadership strategies to build high-performing technology faculty teams in higher education that can adapt quickly to changes in the technology industry.

Background

High-performing teams are an evolution of traditional teams, characterized by a deeper sense of commitment to a group's goals or common purpose (Katzenbach & Smith, 2005). Additionally, high-performing teams thrive when there are opportunities for authentic relationships to develop (Friedman, 2021). Authentic relationships and a commitment to group goals enhance collaboration among the members of the team (Grossman, 1997). Collaboration is considered to be the key to success for learning (López-Arceiz et al., 2017) and resolving various problems among team members (Stanovich, 1996; Tillman-Scott et al., 1994). If there is no collaboration between team members, then goals are unlikely to be achieved (Assbeihat, 2016). The members of a high-performing team are devoted to each other's development and success, and they are eager to collaborate with the other members of the group (Katzenbach & Smith,

2005).

Several studies on high-performing teams have focused on a variety of topics, including the frequency with which team members communicate (Friedman, 2021), methods to be more strategic in meetings (Katzenbach & Smith, 2005), being authentic with team members (Friedman, 2021), setting clear rules and behaviors (Katzenbach & Smith, 2005), social cohesion (Schiefer & van der Noll, 2017), commitment (Pearce & Conger, 2002), and overall group effectiveness (Pearce & Sims, 2000). These topics broadly cover successful strategies that academic leaders can use to build high-performing teams. Technology-focused academic departments face challenges that could be mitigated by these strategies.

Technology has been changing rapidly, and academic programs in technology-focused higher-education departments need to continuously update their curricula to stay current with the changing times (Ra et al., 2019; Valverde, 2016). Academic programs are always under pressure to guarantee that their curricula keeps pace with the fast changes in technological progress and innovation (Gibbons, 2016). For academic programs in higher education, staying abreast of these changes in technology can prove challenging. Computer science, software engineering, and cybersecurity are just some of the technology-related fields in which academic programs may have difficulty adapting their curricula to keep up with the rapid pace of technological advancement. Technology-focused academic programs are often required to update their curricula when newer technologies become available. Academia is known to move at a slower pace than industry, so staying agile and keeping programs current can be a struggle for technology-focused departments (Wildavsky et al., 2011). As technology changes, it can quickly outpace the abilities of academic institutions to integrate the modern technologies into their curricula (Sutton & DeSantis, 2017). However, it is possible that curricula change could be used

as a positive agent for encouraging academic programs to change processes and to keep courses current with changing technologies (Ball & Cohen, 1996). Academic leaders in these technology-focused academic departments are responsible for implementing and promoting these changes in their academic programs in order to keep up with the rapidly changing times (Owusu-Agyeman, 2019).

Academic technology leaders who provide forward-thinking leadership can give academic programs the resources necessary to enact change for their technology-focused departments. Moreover, academic leaders who develop their departments into high-performing faculty teams would be more effective in creating the necessary ongoing changes to keep their departments current with modern technology (Hutt & Speh, 2007). Despite the challenges of keeping program curricula current in many higher education institutions (Getz et al., 1997; Wildavsky et al., 2011), there have been few studies addressing how academic leaders may lead programs to keep up with technological advances in higher education (Edwards, 2022). This research study seeks to address these challenges by providing academic leaders with strategies that they can use to build high-performing faculty teams that can take on these challenges within their technology-focused departments.

Statement of the Problem

Higher education institutions have been found to take nearly three times as long to adapt to changes and innovations in technology (Getz et al., 1997). This delay in innovation causes technology-focused programs to be behind the times as technological innovation is constantly changing (Valverde, 2016). Much of the literature on changing curricula focuses on how professional development is used as a primary means for academic programs to maintain currency (Alexander, 2003; Arzi & White, 2008; Sutton & DeSantis, 2017). Additionally, the

literature examines how higher-education institutions need to change their strategies for innovation because of how slowly they adapt to change (Getz et al., 1997; Wildavsky et al., 2011).

Burns (1978) defined leadership as a process in which “leaders and followers help each other advance to a higher level of morale and motivation” (p. 425). An academic leader of a high-performing team in education who uses effective leadership strategies to bring about innovation similarly advances their followers toward change. Researchers have suggested that additional studies could be conducted that investigate strategies that support academic program and faculty innovation in the areas of technology so leaders can have deeper insights and solutions for encouraging change within their departments (Al-Husseini et al., 2019; Drew, 2010; Edwards, 2022; Owusu-Agyeman, 2019).

Purpose of the Study

This study explored strategies that higher-education leaders can utilize to build high-performing teams for technology-focused departments. This is an area of research that has far-reaching implications that improves the effectiveness of higher education institutions and their connections to industry (Getz et al., 1997; Wildavsky et al., 2011). This research contributed to the literature on high-performing teams and leadership in academic technology-focused higher-education departments. A narrative approach was employed to explore the leadership strategies that higher education academic leaders use that are effective for developing high-performing technology-focused faculty teams. The results of this study could be beneficial to academic leaders who manage technology-focused departments at a higher education institution.

Research Questions

The main objective of this study was to ascertain leadership strategies that build high-

performing faculty teams in higher-education technology departments. The research questions were derived from the Five Practices of Exemplary Leadership by Kouzes and Posner (2019), the theoretical framework of this study. The five practices serve as the foundation upon which the subquestions were built. Model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart are the foundation of Kouzes and Posner's leadership model. This study investigated this objective by using the following research questions:

The central guiding research question for this study was:

- What are the leadership strategies that build high-performing faculty teams in higher-education technology departments?

Subquestions that assist in informing this study are:

- Research Subquestion 1: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that model the way?
- Research Subquestion 2: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that inspire a shared vision?
- Research Subquestion 3: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that challenge the process?
- Research Subquestion 4: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that enable others to act?
- Research Subquestion 5: What are the leadership strategies that build high-

performing faculty teams in higher-education technology departments that encourage the heart?

Methodological Approach

The purpose of this qualitative study was to examine the strategies through which leaders in higher education may build high-performing teams for technology-focused departments.

Qualitative research is concerned with defining in depth the intricate aspects that comprise social phenomena and how these qualities connect to one another and have significance within a wider, more holistic cultural framework (Pajo, 2017). This study used Kouzes and Posner's (1987) Five Practices of Exemplary Leadership model as the theoretical framework in examining the research questions that explore how academic leaders can use these five practices to build high-performing faculty teams.

Qualitative research using the narrative approach was used for this study. A narrative approach of qualitative research uses "stories from individuals (and documents, and group conversations) about individuals' lived and told experiences" (Creswell & Poth, 2017, p. 68).

Additionally, the researcher's goal when using a narrative approach was to interpret the participants' statements rather than to seek only facts (McQueen & Zimmerman, 2006).

Purposeful sampling included the following criteria: (a) academic leaders who manage programs that are technology focused, (b) academic leaders who have been leading and managing their departments for 3 years or more, and (c) academic leaders who work in higher education institutions.

The collection of data through interviews included semi-structured interviews with academic leaders who oversee technology-focused higher-education departments. The sample of participants included seven academic leaders who have experience leading a technology-focused

academic department. Initially, codes for data analysis will be generated manually. In addition, computer programs were used to further gain insight into the data and assist in the identification of key themes. The theoretical framework provided the structure for themes generated through the use of coding. The processing of data used techniques such as interview transcripts, notes, and other artifacts, before being coded.

Limitations

Limitations are characteristics of a study that may have an effect on the results or the capacity to generalize the findings (Roberts & Hyatt, 2019). These limitations are also areas that can highlight potential weakness within a research study that is outside of the researcher's control (Simon & Goes, 2010). For this study, the primary data were collected through interviews. This is a qualitative study applying narratives, and, therefore, requires participants to be actively engaged and willing to share their stories and experiences (Creswell & Poth, 2017).

Theoretical Framework

This study used Kouzes and Posner's (1987) Five Practices of Exemplary Leadership model as the foundation for the theoretical framework. Kouzes and Posner interviewed hundreds of people throughout the 1980s to distill their responses down into the five practices that leaders use to become better leaders. Their book, *The Leadership Challenge: How to Get Extraordinary Things Done in Organizations*, described the five practices as "model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart" (Kouzes & Posner, 2019, p. 3).

Kouzes and Posner (2019) defined leaders who model the way as needing to be clear about their principles and values and to be the example to which their followers look. Leaders can inspire a shared vision by getting their followers on board with their goals and imagining a

future in which they would want to be engaged (Kouzes & Posner, 2019). The third practice from Kouzes and Posner (2019) has leaders challenge the process by taking risks and being willing to listen and learn from their experiences. These leaders can also enable others to act by building trust with their followers and facilitating relationship building and cohesiveness on their teams (Kouzes & Posner, 2019). Finally, Kouzes and Posner (2019) suggested that leaders encourage the heart by showing appreciation for their followers and building community among them.

The literature was reviewed by investigating major themes related to high-performing teams, leadership theories, and how the two intersect. A qualitative narrative study approach will be used to study the best leadership practices in building high-performance teams for technology-focused academic departments. The research sought to provide pathways for academic leaders to take in building high-performance teams for their technology-focused departments. Furthermore, the literature revealed several intersections between leadership and high-performing teams in higher education that will be explored as part of this research. Further connections with the five exemplary leadership principles have also been established (Friedman, 2021; Katzenbach & Smith, 2005). The research sought to discover what leadership strategies academic leaders of a higher education technology department may employ to establish high-performing faculty teams.

Significance of the Study

While there is considerable literature related to high-performing teams and how to build and maintain them (Abbott & Bush, 2013; Bush & Glover, 2012; Goodall, 2013), there is a gap between high-performing teams and higher education technology departments. The study aimed to provide greater insight into how academic leaders of higher education technology departments

can employ various leadership strategies to build programs and curricula to stay abreast with changing technology. The findings of this research would benefit academic leaders of higher-education institutions that have a focus on technology.

Academic technology leaders who provide support and motivation to their academic programs to innovate play a significant role in the growth and advancement of their academic programs (Wildavsky et al., 2011). Thus, academic technology leaders may apply successful leadership tactics to construct high-performing faculty teams in their technology-focused departments by studying and developing this area further. This study aimed to compile insights on crucial elements from academic leaders who have been responsible for these technologically oriented departments.

Key Definitions

The following definitions are used in this study:

- *Academic Leader*: An educational leader who has the power to influence the culture of their organization (Civera et al., 2020). For this study, the position could commonly be a dean, director, or vice president of a technology department at the institution.
- *The Five Practices of Exemplary Leadership*: In 2019, Kouzes and Posner developed a follow-up book titled, *Leadership in Higher Education*, which uses the same five leadership practices for exemplary leadership, but it instead focuses on the area of higher education. The five best practices they define are: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. These practices are also the theoretical framework for this study. The definitions of the five practices are:

- *Model the Way*: Leaders model the way when they are clear about their principles and set an example that they want their followers to follow. Leaders “know if they want to gain commitment and achieve the highest standards, they must be models of the behaviors they expect of others” (Kouzes & Posner, 2019, p. 5).
- *Inspire a Shared Vision*: Leaders ought to know and understand themselves and their goals before they can share them with others. Once a vision has been formulated in a leader’s mind, they must learn to speak the language of their followers in order to share it with others. These leaders create passion and excitement in others about their vision for their followers to create enthusiasm for the path laid before them (Kouzes & Posner, 2019).
- *Challenge the Process*: It can be a shared process that comes when followers question a leader’s idea. Leaders should listen to their followers and recognize the ideas of others (Kouzes & Posner, 2019).
- *Enable Others to Act*: Leaders must foster collaboration among their followers. The development of relationships and building trust are important for a successful team. A good leader will create an atmosphere where it is possible for stakeholders to accomplish their goals (Kouzes & Posner, 2019).
- *Encourage the Heart*: Caring and genuine gestures that show appreciation for followers are important for a leader to do. Leaders who encourage the heart are providing encouragement to their followers when they might want to give up (Kouzes & Posner, 2019).
- *High-Performing Teams*: A high-performing team “has members who are deeply

- committed to one another's personal growth and success" (Katzenbach & Smith, 2005, p. 92). These teams generally outperform other similarly organized teams and surpass the expectations that are given to the team.
- *Higher Education*: Generally, refers to education beyond high school or Grade 12, e.g., university, in the United States (Gumport, 2007).
 - *Industry*: A separate collection of productive or profitable businesses. An industry is a collection of companies whose major business activities are similar (Nightingale, 1978).
 - *Leadership*: The process of exerting influence on the activities of a formalized group in its attempts to accomplish its stated objectives (Stogdill, 1950). Furthermore, according to Stogdill (1950), in order for leadership to exist, there must be two or more individuals, a purpose toward which the group is directed, and members of the group must have duties that vary from one another. Leadership also can be considered as an individual that influences a group of individuals to achieve a common goal (Northouse, 2015).
 - *Mature Industry*: A mature industry is one that has less freedom and voice in organizational change, and when change does happen, it is generally slow. There is less room for innovation and modifications (Manning, 2017).
 - *Narrative Research*: Narrative research has individuals share stories about their lives (Creswell & Creswell, 2018). These stories can be retold by the researcher as narratives.
 - *Social Cohesion*: Social condition characterized by a collection of social norms and attitudes, which include trust, sense of belonging, a desire to contribute, and to be

supported; this condition includes the behavioral manifestations of these attitudes and standards (Chan et al., 2006).

- *Social Relations*: People, organizations, groups, and territorial entities all have social connections (Noll, 2000).
- *Trust*: The foundation of relationships and the cornerstone of building a team. Trust also refers to the confidence that team members have in one another to complete tasks (Fukuyama, 1995).

Summary

This research study examined the leadership strategies that academic leaders of higher-education technology departments could utilize to build high-performing faculty teams. The research specifically sought to examine what strategies were most effective at building faculty innovation in curricula change for a technology-focused program. Additionally, the literature review offers Kouzes and Posner's (2019) leadership theory model, *The Five Practices of Exemplary Leadership*, as the theoretical framework for this research. Finally, the literature review links the findings to the study's theoretical framework to examine academic leaders in higher-education technology departments.

This research project aspired to add to the research for high-performing teams and extend it further to be inclusive of higher-education technology departments. It could provide administrators and other researchers with a guide for effective strategies to build continuous improvement and innovation of curricula in an academic department. The results of this study may help academic leaders improve their technology departments and strengthen faculty cohesion.

Organization of the Study

This paper is made up of five chapters. The first chapter provides an introduction to the study. The topics cover the explanation of the leadership strategies that are effective in developing high-performing teams for technology-focused higher education departments. Chapter 2 provides a review of pertinent literature, including higher education background, theory, and further discussions on high-performing teams and the leadership literature relevant to the research topic. Chapter 3 gives a description of the research methods that were used in this study as well as an explanation of the design and the research methods used. Chapter 4 reports the research findings and an analysis that answers the research questions. Chapter 5 summarizes the findings and provides further insights and future research recommendations related to this study.

Chapter 2: Review of the Literature

This research study focused on exploring specific leadership strategies that build high-performing faculty teams for a technology-focused higher-education department. The review of the literature investigated peer-reviewed articles located within university libraries, scholarly journals, and related texts on leadership and high-performing teams. Topics searched included high-performance teams, narrative research, effective leaders, positive leaders, shared governance leadership, technology, innovation, and higher education leadership. The literature review covers three core themes: higher education and technology changes, cohesiveness of teams, and key factors for building high-performing teams. Analysis and examination of this subject matter are aided by the extensive theoretical literature on the subject.

Chapter Overview

The review of the literature is divided into several parts. The first section examines the structures of higher education while also exploring technology-focused academic departments and how the changes in technology directly affect academia. The second section provides the background and definition of high-performing teams and investigates the needs of these teams. This section also provides literature on the key factors that can be used to build high-performing teams. The third section describes the Kouzes and Posner (1987) Five Practices of Exemplary Leadership model as the theoretical framework used for this research study. The concluding section of this literature review summarizes how the theoretical framework intersects with high-performing teams in higher-education technology-focused departments.

Structures of Higher Education

Higher education consists of colleges and universities that are considered one of the most important systems of society for distributing the process of knowledge creation to the masses

(Altbach, 1991). The system of higher education is a very mature industry, having existed in some form since the medieval period (Altbach, 1991; Levine, 1997; Manning, 2017). Mature industries can be considered as organizations that have undergone institutionalization or are less innovative (Manning, 2017). Additionally, mature industries historically have been thought to be slow to change (Bills, 2016; Levine, 1997). However, higher education has adapted to the changing times since the 13th century (Altbach, 1991). Their expansive existence has resulted in universities and colleges taking on many of the traits of a mature industry. Universities have become institutions that often have a strong focus on research, while colleges typically have a strong connection to the local community and prepare students for the workforce (Altbach, 1991; Orr, 2001). Universities typically separate various subject matter areas into specializations that relate to one another (Altbach, 1991). This separation by specialization limits the ability of faculty within these programs to adapt to change that is driven by market demands (Manning, 2017). Specializations often create silos among academic departments and hamper the ability of these programs to collaborate and grow. The following section describes technology-focused academic departments and the challenges they face.

Technology-Focused Departments

Universities across the United States offer a wide variety of educational areas of study. Technology-focused areas in an academic setting generally refer to programs in computer science, software development and engineering, information technology, cyber security, data science and analytics, digital design, and more. It is critical for faculty within these types of technology-focused programs to retain strong relationships to the technology-focused industry they represent in order to tailor their services strategically to the industry's demands (Orr, 2001). The U.S. Bureau of Labor Statistics (2021) has classified many of these fields as being high in-

demand jobs and it forecasts this sector will have a 13% increase by 2030. In order to meet this demand and prepare adequately students for jobs in this sector, universities can begin by developing connections to industry.

Industry Partnerships. Universities have long-held connections to their community, governments, and other schools on the development of curricula (Kisker & Carducci, 2003). Connections with industry have a long and complex history for higher education (Prigge, 2005). Businesses have been partnering with universities for hundreds of years to provide people with the necessary skills and training to be successful in the workforce (Manning, 2015; Prigge, 2005; Rybnicek & Königsgruber, 2019). However, it is challenging for programs to maintain these partnerships for a variety of reasons. Prigge (2005) described that these partnerships can break down if there is suppression of information from industry partners and if faculty members begin to believe that their academic standards are being compromised because of the influence of industry partners. Successful collaboration is reached when there is a balance between industry and higher education institutions and there is effective communication (Orr, 2001). Rapid changes in technology have also made it increasingly difficult for faculty to maintain currency within the technology industry (Wildavsky et al., 2011).

Rapid Changes in Technology. The rate of technological advancement has increased, necessitating faculty in academic technology-focused programs to update their curricula in order to keep pace with the changing times (Getz et al., 1997; Valverde, 2016; Wildavsky et al., 2011). Historically, higher-education institutions have fallen behind the technology industry by at least 3 years when it comes to staying up to date with current technologies (Wildavsky et al., 2011). Students who wish to work in the technology industry after graduation may find themselves in a difficult situation as a result of this time gap. Furthermore, these students will not have current

information and may not be sufficiently prepared for the workplace. Additionally, as a result of newer technological advancements, academic leaders have acknowledged that change is necessary in order for universities to grow in these changing times (Eckel et al., 2015).

Consequently, if the knowledge gap between higher education and the technology sector is not addressed, it weakens the growth of this industry and impacts student success (Wildavsky et al., 2011). Academic leaders may take steps to meet the problems posed by the current era of rapid change. Steps toward solving these challenges are described in the next section.

High-Performing Teams

Background of High-Performing Teams

Typically, teams are more capable than individuals (Katzenbach & Smith, 2005). They are made up of a collection of people who are interdependent, have common goals, and work cooperatively to achieve those goals (Northouse, 2015). Teams are more productive when they have clear goals and objectives (Katzenbach & Smith, 2005). Boynton and Fischer (2015) defined the differences between a traditional team and a high-performing team. Boynton and Fischer defined a traditional team as having members who are chosen for their availability, they emphasize more on the collective group, they are task-focused, they will work individually, and they will focus on the average customer. In contrast, a high-performing team consistently outperforms traditional teams (Katzenbach & Smith, 2005). They more often will choose team members for their skills, emphasize the individual, focus on particular ideas, work collaboratively together, and they will address a more sophisticated customer base (Boynton & Fischer, 2015). These traits of high-performing teams illustrate many of the factors that academic leaders use to shift their faculty to become high performing. However, there are a few additional psychological needs that academic leaders consider when developing high-performing faculty

teams.

In particular, there are three components that high-performing teams need in order for employees to be satisfied with their jobs: autonomy, competence, and relatedness (Friedman, 2021; Martela et al., 2018). Autonomy entails an internal agreement to one's behavior, as opposed to feeling constrained or pushed; competence is experiencing a sense of efficiency, effectiveness, and even mastery in one's behavior, as opposed to incompetence and ineffectiveness; relatedness comprises a sense of real connection to people, as opposed to detachment or marginalization (Sheldon & Filak, 2008). Relatedness has been shown to be complex for managers of high-performing teams to establish because it requires trust building and a sense of belonging among team members (Friedman, 2021; Schiefer & van der Noll, 2017). For a team to become a high-performing team, leaders should consider the needs of the teams and focus on developing relatedness, or social cohesion, among the team members.

Social Cohesion of High-Performing Teams. Social cohesion is a condition in which society's vertical and lateral relationships are defined by a set of norms and attitudes that include trust, a feeling of belonging, and a desire to contribute and support, including its behavioral expressions (Chan et al., 2006). Schiefer and van der Noll (2017) defined three core dimensions of social cohesion that managers of teams can look to in building relatedness. Those three dimensions are social relations, attachment/belonging, and orientation toward the common good.

Social Relations. Social relations is defined as a social feature concerned with the links and relationships between societal units such as people, organizations, associations, and territorial entities (Noll, 2000). Social networks and social capital are considered to be core components of social cohesion (Schiefer & van der Noll, 2017). A person's social network is the frequency with which they engage in social contact with family members, friends, acquaintances,

or colleagues (Villarreal & Silva, 2006). Schafft and Brown (2003) defined social capital as the people and organizations that work together to achieve mutually beneficial outcomes by adhering to social standards and creating networks of support. Similarly, Putnam et al. (1994) described social capital as the elements of social life, networks, norms, and trust that allow individuals to work together more successfully to accomplish common goals, though, having social capital and a social network does not immediately qualify a group as having cohesion.

Trust is another factor that Schiefer and van der Noll (2017) determined is a core component of social cohesion. Similarly, Putnam et al. (1994) noted that trust is a key component of social capital. A person's actions are influenced by their assessment of the likelihood that another person or group would carry out an action, according to Gambetta's (2000) definition of trust. Trust can also be described as the expectation that develops within a society when members act predictably, honestly, and cooperatively (Fukuyama, 1995). Group or shared norms were also described by Fukuyama (2000) in relation to trust and social capital as being the key to promoting cooperation. These norms result in collective collaboration and are, therefore, associated with conventional characteristics such as honesty, fidelity to commitments, trustworthy execution of tasks, and reciprocity (Fukuyama, 2000). People's commitment to a shared set of norms is often the source of the expectation and a key factor in maintaining trust.

The final component of social relations is participation, which is defined as social interactions or social ties within society (Schiefer & van der Noll, 2017). Participation in public life demonstrates a feeling of belonging, camaraderie, and a willingness to cooperate in pursuit of shared objectives (Berger-Schmitt, 2000). This component is also the one component of social relations that is easily observed (Schiefer & van der Noll, 2017). Observations are conducted through various memberships in organizations, engaging in governance, or other shared working

opportunities.

Attachment/Belonging. When it comes to participation in the social relations component of social cohesiveness, it is critical for individuals to feel connected to or identify with a social entity (Schiefer & van der Noll, 2017). Attachment is a collection of social processes that help instill in individuals a sense of belonging to a common community and of being recognized as members of that society (Jenson, 2010). Chan et al. (2006) included a feeling of belonging with social connections, trust, and a desire to engage and assist in their list of defining attachment. In the absence of the element of identification with the physical location in which social interactions occur, the other components might as well represent people's general altruism (Schiefer & van der Noll, 2017). The identification feature is what distinguishes these ideas as representations of social cohesion. Schiefer and van der Noll (2017) described the attachment/belonging component to overlap with social relations, though they consider this dimension to be more abstract and psychological than social relations. They do relate directly to one another, as all the components do; however, there is a stronger connection between social relations and attachment/belonging.

Orientation Toward the Common Good. The final area comprises a sense of obligation to the common good and adherence to societal laws and regulations (Schiefer & van der Noll, 2017). Additionally, this area refers to a condition of things in which a group of individuals exhibits a capacity for cooperation, resulting in an atmosphere conducive to change that benefits everyone in the long term (Easterly et al., 2006). When orienting toward the common good, there is acceptance of the social structure and adherence to social rules and standards (Schiefer & van der Noll, 2017). Institutions responsible for regulating and maintaining the social order have a great deal of public confidence in order to function effectively (Kearns & Forrest, 2000). A

social order provides the framework for people and groups to work together to accomplish shared objectives (Wrong, 1994). In a diverse society, social order is not necessarily always 100% achievable, and compliance with social order is carefully monitored by academic leaders (Beauvais & Jenson, 2002).

The three components of social relationships provide dimensions to consider in breaking down social cohesion into aspects that can be related to high-performing teams. The next section discusses the various leadership theories that have been identified that relate to high-performing teams and how they intersect.

Leadership Theories Related to High-Performing Teams

A review of the literature of high-performing teams has identified various leadership theories that align with the core components that make up these teams. Two of these theories, authentic leadership and transformational leadership, have been found to connect directly to the contexts of this research study.

Authentic Leadership. Before being defined as a theory, authenticity in leadership was seen as social condition where there was not any detectable difference between a person's actions and their underlying beliefs (Etzioni, 1968). Furthermore, to be authentic means accepting personal growth and decision-making constraints, owning one's flaws and failures, as well as using organizational creativity to develop policy (Rome & Rome, 1967). Additionally, authentic leaders actively engage in the broader community. George (2004) later defined authentic leadership as a moral and ethical purpose that drives true leaders, and they never lose sight of their fundamental ideals and convictions. Leaders who have these qualities are those who have the ability to lead from their hearts, build lasting connections, and set high standards for themselves and others around them (George, 2004). These leaders are able to drive

relatedness between their followers and drive a sense of purpose and deep caring about their work. High-performing teams share many of the attributes of an authentic leader. Social relatedness and cohesion among followers are two such attributes of authentic leadership that relate directly to high-performing teams. The next section discusses the characteristics of transformational leaders and how they also apply to high-performing teams.

Transformational Leadership. Initially developed by Burns (1978), transformational leadership is the ability of the leader to inspire followers to go above and beyond their own expectations. Similarly, Bass (1985) later defined a transformational leader as someone who broadens and transforms the interests of their followers and generates an understanding and acceptance of the group's objectives and mission. They inspire their followers to put the group's well-being ahead of their own personal interests (Krishnan, 2002). The original four factors that Bass (1985) described for a transformational leader are positive influencer, motivational, intellectually stimulating, and individualized support. Transformational leaders are seen as role models who are respected and admired. They are able to motivate and challenge their followers while actively soliciting innovative ideas and processes for doing things. They will also pay close attention to their followers, and they will be supportive of them (Stewart, 2006). Dirks and Ferrin (2002) identified certain characteristics of transformational leadership as having a strong correlation with building trust among followers. Building trust is specifically related to being a positive influencer, offering individual support, and encouraging acceptance of collective objectives (Podsakoff et al., 1990). Not only is trust an important aspect of being a transformational leader, but it is also a key component of building social cohesion for high-performing teams. Furthermore, encouraging followers toward a common goal or vision shared by leaders is another component of high-performing teams that is closely related to

transformational leadership (Bass, 1985; Schiefer & van der Noll, 2017). Additionally, Kouzes and Posner's (1987) Five Practices of Exemplary Leadership model also closely follows transformational leadership's tenets. They expanded upon Bass's (1985) four factors to create more emphasis on encouraging the heart of followers. New attributes related to transformational leadership continue to be defined in order to provide leaders with more tools to support their followers. However, Burns' (1978) fundamental concepts of transformational leadership continue to serve as the unifying theme around which all theorists build their knowledge of this style of leadership.

Transformational leadership has connections with the core components of high-performing teams. These relationships help further define the attributes that academic leaders can use to build high-performing faculty teams in a technology-focused department. The next section identifies key factors that define high-performing teams and how these factors align with social cohesion and leadership.

Key Factors of High-Performing Teams

Strong leadership and management have been directly correlated with the development of high-performing teams (Hutt & Speh, 2007). While there are a significant number of researchers who have conducted studies into strategies to build teams that are considered high-performing (Boynton & Fischer, 2015; Friedman, 2021; Gratton & Erickson, 2021; Katzenbach & Smith, 2005; Pentland, 2015), Friedman, Katzenbach and Smith outlined key factors that can successfully build high-performing teams. Katzenbach and Smith (2005) presented how a team leader's role includes setting clear objectives, encouraging team members to take ownership of those goals, increasing the group's collective competence and attitude, and removing externally imposed barriers so that everyone in the team has an equal opportunity to succeed. Similarly,

Friedman's (2021) key factors focused on team connectedness or social cohesion and determined how high-performing teams are different, while Katzenbach and Smith (2005) specifically examined how to build a high-performing team. The following sections expand on social cohesion and how to build high-performing teams.

Social Cohesion of High-Performing Teams

Friedman (2021) found that there are five key factors that contribute to connections between colleagues and can improve team performance. Those five key high-performing team factors are:

- Frequent communication among team members;
- meetings are very strategic;
- a greater time bonding between team members on nonwork topics;
- appreciation of team members is more freely given and received by all members of the team; and
- team members are more authentic at work.

Frequent Communication Among Team Members. Using the phone more often or having a consistent means of communication with team members strengthens relationships and resolves any miscommunication among team members (Friedman, 2021). Pentland (2015) described three aspects of communication that can be used as measures of team performance: energy, engagement, and exploration. Energy is identified by the number of exchanges that team members have at a given time; engagement is defined as how energy is distributed among team members; and finally, exploration is specific to the communication that team members have outside their team (Pentland, 2015). These three factors can be used to measure communication among team members and provide insights to leaders on overall communication patterns to

ensure collaboration is happening on the team. Kraut et al. (2012) also asserted that people on teams are more likely to communicate and contribute if they think their contributions to team meetings and goals are effective overall. These contributions that are visible to the overall goals allow for further attachment and better social relations among faculty team members (Chan et al., 2006).

Constructivism also speaks to the importance of communication through conversations where each person understands the purpose since the relationship is built on reciprocity (Lambert et al., 2002). These conversations are a means to find the truth and search for meaning by making sense of what is being talked about together. Similarly, Senge (2006) describes the differences between discussion and dialogue. When people have discussions, there is not meaning being shared. People are generally bouncing ideas off of one another without trying to derive a shared idea. For communication to be effective, people must move towards a dialogue where “individuals gain insights that could not be achieved individually” (Senge, 2006, p. 224). Dialogues allow for people to begin to develop a common meaning, which can be achieved through consistent communication.

All Meetings Are Very Strategic. A strategy is defined as a plan to adapt communications to fit the demands of both group members and the group's context in order to accomplish both individual and group goals (Beck & Keyton, 2009). Teams that require prework, have an agenda, and start by checking in with meeting participants are far more likely to create positive interactions and better relationships between team members (Friedman, 2021). The objective of the meeting should be made very apparent in both the invitation and the meeting's agenda, and it should guide the meeting's overall structure (LeBlanc & Nosik, 2019). Strategic meetings also allow further orientation toward team goals and enhance social relations

among team members (Schiefer & van der Noll, 2017).

A Greater Time Bonding Between Team Members on Nonwork Topics. Investing in friendships between team members shows that there are major advantages for workers discussing nonwork topics (Friedman, 2021). When leaders provide opportunities for team members to have personal interactions, they strengthen their bonds (Kraut et al., 2012). Gratton and Erickson (2021) emphasized that a strong sense of community is important, as people will feel more comfortable reaching out and sharing knowledge with others. This community building can be inside or outside of work to engage the development of teams (Gratton & Erickson, 2021). Similarly, Pentland (2015) noted that successful teams connect directly with one another and do not rely on the team leader for communication. This important aspect of bonding for high-performing teams can bring about trust, which has been identified as a vital component in building social cohesion (Schiefer & van der Noll, 2017).

Appreciation of Team Members Is More Freely Given and Received by All Members of the Team. When people feel valued and appreciated, they will respond by performing at a higher level. This appreciation should not only flow from the leader down to followers, but also be spread between colleagues (Friedman, 2021). Kraut et al. (2012) described how giving praise to group members can generally increase motivation to complete tasks or goals. The praise is more likely to be effective if it is reflected among all team members. Appreciation given freely creates a more positive work culture and fosters an overall sense of wellbeing among team members (Seppälä & Cameron, 2015). Seppälä and Cameron identified characteristics that are essential for a positive work environment. These characteristics include caring for and being interested in colleagues and friends, providing support for one another, avoiding blame and forgiving mistakes, inspiring one another at work, emphasizing the

meaningfulness of work, and treating one another with respect, gratitude, trust, and integrity (Seppälä & Cameron, 2015). Leaders may help to create a healthy culture by creating social relationships among team members (Schiefer & van der Noll, 2017) and building trust (Fukuyama, 1995) with them by encouraging team members to communicate with them about their concerns and by going out of their way to assist them (Seppälä & Cameron, 2015).

Team Members Are More Authentic at Work. Teams that are high performing are more often found to be positive and express that positivity outwardly (Friedman, 2021). Authenticity at work has often been linked with authentic leadership characteristics (George, 2004; Günter et al., 2017; Lyubovnikova et al., 2017; Rego et al., 2013). Leaders who practice authentic leadership rely on and encourage good psychological capabilities as well as an ethical environment in order to help their followers acquire increased self-awareness, an internalized moral viewpoint, balanced information processing, and relational transparency (Walumbwa et al., 2008). It is also true that leaders who are authentic in their leadership with their followers are more likely to have their followers reflect it (Rego et al., 2013). By practicing positive authenticity, leaders can find that there are increased levels of organizational effectiveness that are established when positive reinforcement outweighs negative reinforcement in the workplace (Cameron et al., 2011).

These factors provide perspicuity into some methods that can be employed by leaders in higher education to improve connections with teams in their departments. Katzenbach and Smith (2005) further provides strategies to build further high-performing teams and define the best approaches for how organizations can build them.

Building High-Performing Teams

Katzenbach and Smith (2005) defined various approaches to building a high-performing

team. They specifically outlined methods that leaders can use to improve overall team performance and push teams to shift into high-performing teams. The following are the approaches noted by Katzenbach and Smith (2005):

- Establish urgency and direction;
- Select team members based on their skill, not personalities;
- Pay attention to first meetings and actions;
- Set clear rules and behaviors;
- Set and move forward on performance-based goals;
- Challenge the team with new facts and information;
- Spend time together; and
- Use positive feedback, recognition, and reward.

Establish Urgency and Direction. In establishing urgency and direction, high-performing leaders are ensuring that the team believes they have an urgent and worthwhile purpose (Katzenbach & Smith, 2005). Kotter (2012) noted that establishing a sense of urgency is the first step in driving change in an organization. It is important that all team members feel a similar sense of urgency, otherwise complacency sets in and momentum toward the organizational goals slows (Kotter, 2012). To overcome this, Kotter (2012) suggested that leaders increase the urgency by utilizing data as a means to illustrate the needs of the organization or by creating a crisis to encourage team members to act. Similarly, Lewin (1947) sought to build urgency by stirring up the emotions of team members to break through the complacency that might exist in the organization. This stirring up would engage team members and bring them in alignment to act on the goals and objectives of the organization (Fredberg & Pregmark, 2022). Brockner and Higgins (2001) indicated that leaders can influence the behaviors

and emotions of team members through various cues to shift them in a direction that aligns with the goals of the organization. Leaders who present a meaningful rationale for urgency will likely find a “real team” emerging (Katzenbach & Smith, 2005, p. 119).

Select Team Members Based on Skill. Katzenbach and Smith (2005) defined three categories of skills that are necessary for selecting team members. Those skills are technical and functional, problem-solving, and interpersonal (Katzenbach & Smith, 2005). Generally speaking, a technical and functional team member is defined as someone who has a technical understanding of tools and equipment as well as overall expertise with regard to being able to operate them. A problem-solving team member often has the capacity not only to identify problems, but also to work through them and support the team in doing so. The interpersonal team member focuses on the relatedness or social cohesion of the team. They seek to build trust and camaraderie among team members. Gratton and Erickson (2021) similarly defined specific skills that members of a high-performing team should be collaborative and cooperative with one another and how they express a willingness for relatedness among team members. Boynton and Fischer (2015) provided another definition to high-performing teams by referring to them as virtuoso teams. These virtuoso teams have individuals who are hired specifically for their skills (Boynton & Fischer, 2015). These skills reflect closely to Katzenbach and Smith’s (2005) categorization of a skilled team member with the addition of team members being more willing to push each other toward the team objective (Boynton & Fischer, 2015).

Pay Attention to First Meetings and Actions. How team leaders act during initial meetings with the team is a determining factor in early team performance (Katzenbach & Smith, 2005). When leaders first establish meetings for a new team, it is important to clarify the outcomes and expectations for the early meetings (LeBlanc & Nosik, 2019). Initial meetings can

be revealing about how team members feel or comprehend a team's goals or objectives. How team members perceive or understand messages delivered in meetings influences the success of early team goals (Beck & Keyton, 2009). To ensure that messages in these early meetings are being delivered effectively, Beck and Keyton (2009) advised that an analysis of meeting interactions should be conducted on three levels. These three levels look at the function of the message and what it is supposed to accomplish, what the intent of the message is coming from the person delivering it, and finally, how the receiver of the message understood the sender's intent (Beck & Keyton, 2009).

Set Clear Rules and Behaviors. Setting rules early in team development assists in achieving team goals and improving team performance (Katzenbach & Smith, 2005). Several early rules to set, as determined by Katzenbach and Smith (2005) are attendance, discussion, confidentiality, taking an analytical approach to facts, end-product orientation, constructive confrontation, and contributions to teamwork. These rules help set norms for the team and build trust. Fukuyama (2000) noted that cooperation between two or more individuals is developed through informal norms. By setting these norms for a group, social cohesion among team members is possible (Schiefer & van der Noll, 2017). Grossman (1997) further asserted that teams should develop a set of operating norms so that each team member may perform at their highest level. Furthermore, he emphasized that a focus on the individual over the group can change the behaviors on teams, as they will look at individual contributions more meaningfully and will see them as indispensable to the team's success (Grossman, 1997). When teams have set norms and recognize individual contributions, they are more likely to collaborate and be more successful at achieving their goals.

Constructivist principles also state that setting standards that assist in determining what

good performance is important if leaders are going to ask more from followers (Lambert et al., 2002). Additionally, Lambert et al. (2002) states that “standards are useful when they provide guidance about commonly agreed upon goals” (p. 6.). Leaders who strive to set standards or rules for their faculty teams can find that trust might be easier to establish (Chan et al., 2006) and goals and objectives easier to achieve.

Move Forward on Performance-Based Goals. Setting small achievable goals for teams can be helpful in overall team success (Katzenbach & Smith, 2005). Amabile and Kramer (2011) described that small wins can be a way to keep teams consistently moving toward a larger objective without slowing them down. Breaking down a large goal into smaller achievable chunks is motivating for team members to see that progress is being made. It is important that these milestones are meaningful to the overall goals so team members can see that the work they are doing is contributing in a small way to the objectives of the team (Amabile & Kramer, 2011). Kotter (2012) also described how small wins are effective in promoting teams to continue to deliver results. He also recommended several key factors that are important for leaders to keep in mind when developing small goals for their faculty teams. He indicated that the following are areas leaders should be aware of when driving small wins for their teams: provide evidence that the work is worth it, reward team members for their hard work, adjust team deliverables and strategies as new data emerges, be able to combat team members who are resistant to the changes, keep all upper-level administrators and stakeholders involved with changes and show how it is moving toward the end goal, and finally, show how these small wins can build momentum for the overall goals of the teams (Kotter, 2012).

Challenge Team With New Information. New knowledge allows a prospective team to redefine and enhance its understanding of a performance problem, so leaders can work toward

developing a shared purpose, setting more specific objectives, and improving on its shared approach (Katzenbach & Smith, 2005). The new knowledge provides challenges for the team, as it can present them with outside information that forces them to reconsider their processes. Grossman (1997) proposed having “internal consultants” (p. 11) within an organization who are insulated from the internal team and can provide subject-matter expertise on project goals and provide insights that the internal team might be lacking. Boynton and Fischer’s (2015) virtuoso teams also consistently look to challenge not only the team but the customer. They are looking to deliver solutions that surpass the expectations of their customers (Boynton & Fischer, 2015). They are asking team members to challenge the initial expectations and go beyond what their customers might want.

Spend Time Together. It is highly recommended that new teams spend time together at the beginning of team development in both scheduled and unscheduled times (Katzenbach & Smith, 2005). This approach is similar to Friedman’s (2021) key factor of bonding with team members during non-work times. However, this particular approach not only asks to spend time with team members outside of work, but also to schedule time during work. It is also important for team members to bond while working to build more trust among each other (Katzenbach & Smith, 2005). Grossman (1997) also described how the more time people spend together, the more productive they are when working in a group setting.

Use Positive Feedback, Recognition, and Reward. Positive feedback works well in shaping team behaviors and developing increases in team performance (Katzenbach & Smith, 2005). Similarly, Friedman (2021) defined appreciating team members more openly as being a core factor in developing high-performing teams. Appreciation is one level of feedback that leaders can give to followers. Recognition and reward for their contributions are equally

important to appreciating the work that they do. Bradler et al. (2016) found a positive correlation between positive recognition and performance output for workers. Specifically, they found that recognition and reward are considered most effective when the same type of recognition is given (Bradler et al., 2016).

Each of these key factors that define high-performing teams could be used as a strategy by academic leaders of technology-focused higher-education departments to measure the effectiveness of their teams and improve overall performance. The following section outlines the challenges that can be present when developing a high-performing team.

Challenges of Developing High-Performing Teams

Various studies have noted that challenges can arise when developing high-performing teams. One such difficulty, as Boynton and Fischer (2015) wrote, is maintaining team cohesion. It can be difficult to keep high-performing teams together once they reach their goals. New challenges often lure high-performing team members away. Leaders might want to examine measures to keep their team members motivated in order to avoid being enticed away.

Additionally, it is challenging to have experts collaborate when everyone believes they are correct (Boynton & Fischer, 2015). Faculty are considered subject-matter experts in their field of study, and it might be difficult for them to agree on a single solution to a problem. Power dynamics between faculty of different ranks, gender, or race can also contribute to challenges in collaboration and the development of high-performing faculty teams (Cowin et al., 2012). The diverse population of a faculty team can also lead to faculty being less likely to share knowledge (Gratton & Erickson, 2021).

A final challenge describes how there can be difficulties that arise when a new team member joins a preexisting team (Kraut et al., 2012). New team members can change the group

dynamics and potentially shift the culture of a team (Cowin et al., 2012). For new team members to successfully follow their lead, leaders commit to modeling the behaviors of the culture they wish for their teams to follow (Whitehurst, 2017). Leaders who work toward alleviating these challenges could be successful in maintaining high-performing faculty teams within their departments.

Theoretical Framework: Kouzes and Posner's Leadership Model

Kouzes and Posner's (1987) Five Practices of Exemplary Leadership were used as the foundational theoretical framework for this study. Developed in the 1980s, Kouzes and Posner developed these practices to identify the behaviors that make an exemplary leader. They interviewed hundreds of people throughout the 1980s to distill their responses down into the five practices that leaders use to become better leaders. Their book, *The Leadership Challenge*, described the five practices as model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. These five practices are defined in this section and are used to relate directly to the key factors of high-performing teams.

Model the Way

Kouzes and Posner (2019) stated that to model the way, leaders should have a good sense of who they are before they can lead others. When leaders have an understanding of their own identity, they will be much more successful in leading others. They are authentic and fully understand themselves and what they care about. Once they have a grasp of who they are, leaders state their personal values and are clear about what their guiding principles are. A leader who communicates their values is far more likely to find success building trust on their teams (Kotter, 2012). They should also work to build shared values with their followers and renew them periodically through focus groups, town hall meetings, or other means of learning from members

of the organization. Leaders also set an example for their followers. Whitehurst (2017) described how a leader's behavior can impact the culture of an organization because culture is a learned behavior. The culture is set by the actions of the leader. The example that they set becomes important for creating the culture of the organization.

Lead by Example. Leaders who lead by example are more likely to get followers to contribute and follow their example (Kouzes & Posner, 2019). Additionally, Potters et al. (2007) found that this reciprocity happens when followers can directly observe the actions of their leader. Followers will directly model the behavior of their leaders when they observe their leader's choices and actions (Potters et al., 2007). Leaders who arrive early or stay late and display care for followers, set examples for followers for how they should behave within the workplace (Kouzes & Posner, 2019). Research by Drouvelis and Nosenzo (2013) indicated that leading by example is effective in fostering collaboration when leaders and followers have a shared or cohesive group identity. This social cohesion of the group is important for long-term success in having followers continue to model the example of the leader. Furthermore, Kouzes and Posner (2019) posited that leaders continuously assess their own abilities and develop new ones for followers to emulate; otherwise, cohesiveness could deteriorate over time. A leader does not lead by words alone. A leader's actions have been found to encourage follower contributions at a higher level than words (Dannenbergh, 2015). Leaders ought to exemplify the behaviors they want their followers to have in order to encourage commitment to the group and to receive a higher level of contributions.

Inspire a Shared Vision

To be successful, leaders ought to be capable of seeing the future of their organization. The vision should be clear, and the leader has first to believe the vision before they bring the

plan to their followers (Kouzes & Posner, 2019). Kotter (2012) described an effective vision as having six characteristics. First, the vision describes an event that will happen in the future. It will articulate the best interests of the stakeholders involved, and the vision is also realistic for the organization to undertake. Furthermore, the vision is clear to promote action from followers but still flexible for followers to take initiative. Finally, the vision is very easy to communicate to followers. Once the leader has an effective vision for the organization, they share the vision with their followers. A shared vision helps uplift followers and their aspirations toward the future (Senge, 2006). It is important for leaders to listen deeply to their followers to assist in collectively forming the shared vision (Kouzes & Posner, 2019). A shared vision directly connects to developing a common purpose. Higher education institutions have an advantage over other organizations, as the stakeholders already have a shared common purpose in learning and professional development (Kouzes & Posner, 2019). It is essential for leaders to take on a positive approach and display enthusiasm for the shared vision. Positive psychology has been found to be compelling in institutional effectiveness and growth for higher-education institutions (Williams et al., 2018). Setting a positive vision can assist in getting followers on board and aid in bringing about change for an organization.

Get Others on Board. Leaders cannot just have a vision for the future; they share and communicate that vision with their followers and get them on board (Kouzes & Posner, 2019). When leaders convey the reasons why followers should support a cause, they also consider how that cause will serve their best interests. Garvin and Roberto (2005) outlined steps that leaders can take to get followers on board with their vision. Those steps include setting the stage for acceptance, framing a turnaround plan, managing the mood, and preventing backsliding. When setting the stage, leaders may craft a compelling message that will push followers to act or

change their behavior. Cassell (2021) found that communicating a vision that is not cognitively demanding and evokes emotions among followers has a high likelihood of engagement for followers. Turnaround plans allow followers to understand the vision in the way that the leader intends (Garvin & Roberto, 2005). Leaders who listen deeply are more likely to sense that followers are understanding their vision and can give voice to any concerns they may have (Kouzes & Posner, 2019). Listening deeply will also allow leaders to manage the mood, present optimism for the vision, and allow followers to become more cohesive to a common purpose (Garvin & Roberto, 2005; Kouzes & Posner, 2019). Unaligned followers may be disruptive to the process, and action by leaders might be warranted to address follower concerns and get them on board with the future goal.

Challenge the Process

Growth can only occur if leaders inspire their followers to think beyond their limitations in order to take chances and produce innovative ideas (Kouzes & Posner, 2019). This practice loosely aligns with the concepts of transformational leadership as described by Burns (1978). The initial concept of transformational leadership is simply a way for leaders and followers to help one another advance to the next level or goal (Burns, 1978). Risk-taking is part of advancing goals, and leaders who take on these transformational leadership concepts would encourage followers to try new things to grow (Kouzes & Posner, 2019). Leaders encourage initiative in followers to take on new challenges and make them meaningful. Work that is meaningful could be described as work that is worthwhile, conducive to a person's growth, and emphasizes autonomy (Ciulla, 2015; Yeoman, 2013). Large challenges are often difficult for followers to overcome, and small wins are a great way to keep progress moving forward (Amabile & Kramer, 2011; Kouzes & Posner, 2019). Additionally, Kouzes and Posner describe

resilience as a trait that leaders can promote in their followers when challenging them to grow. Resilience has many definitions from the literature, though Connor (1993) described that resilience is made up of seven dimensions. Those dimensions reflect the ability to recover, bounce back, cope and adapt, implement change, overcome adversity, withstand hardship, and confront. It is important for leaders to build resilience with their followers because people will not stay with an organization long if an action by leaders or an incident within the organization causes them distress (Kouzes & Posner, 2019). When leaders build resilience among their followers, they are more likely going to be able to maintain a cohesive team.

Experiment and Take Risks. Risk-taking can be considered to be a key foundation to leadership. Leaders who are willing to take risks may fail, but they will have the opportunity to learn from those mistakes to improve their organization (Kouzes & Posner, 2019). Additionally, Horton-Deutsch et al. (2014) found that many leaders believe that risk-taking often allows them to assume responsibility and also maintain their vision and values. While not all choices are popular, it is critical for leaders to take chances and make tough decisions without hesitation, otherwise their leadership would become ineffective (Horton-Deutsch et al., 2014). Mistakes can often lead to fortuitous results for an organization, and when this happens, organizations should capitalize on them (Hunter et al., 2011). In other words, organizations should focus on taking calculated risks so there could be a higher likelihood of fortuitous results. Van Dyck et al. (2005) also recommends an error management plan that includes communicating the errors, sharing knowledge about the errors, assisting in error situations, error recovery, and coordinated efforts to manage the errors as steps leaders can take to avoid negative consequences of risks.

Enable Others to Act

Kouzes and Posner (2019) described leaders who enable others to act as the most

effective leaders in higher education. In order for leaders to enable others to act, it is important that trust is first established. The loss of trust can be costly for an organization, and it is difficult to engage followers if there is no trust (Kouzes & Posner, 2019). Bryer (2020) described developing a sense of belonging can bring about trust in an organization. “People tend to articulate wider aspirations, experience more energy and enthusiasm, and are more likely to band together and share resources with others through their belonging” (Bryer, 2020, p. 642). Belonging also helps leaders develop positive relationships and cooperation within their organization. It will allow followers to feel part of the change and allow them to feel free to act. Face-to-face interactions have also been found to be successful in encouraging followers to act and have also been shown to be more effective (Kouzes & Posner, 2019; O’Neill et al., 2015). There is a value in leaders having a large social network so they can be a global connector and connect their followers with people, ideas, and resources that can assist them in taking action (Kouzes & Posner, 2019; Ibarra & Hansen, 2015). Empowerment is also necessary to engage action among followers, as it has been found to influence both intrinsic motivation and engagement in tasks (Zhang & Bartol, 2010). Leaders can allow followers to feel free to make their own choices and take ownership of various tasks if leaders are empowering them to do so (Kouzes & Posner, 2019). Empowering followers to make their own decisions only works well if leaders guide them in tasks that they need to do. When there are new tasks and responsibilities, these responsibilities could have a measure of accountability over them for there to be a successful outcome (Kouzes & Posner, 2019). Accountability can be measured through peer reviews among followers, which can further enhance their empowerment and engagement within the organization (Marx & Squintani, 2009). Developing a measure of accountability also increases trust among leaders and followers, which can lead to the growth of high-performing

teams.

Create a Climate of Trust. As previously mentioned, leaders who do not have the trust of their followers cannot lead (Kouzes & Posner, 2019). Conversely, if leaders are unable to trust their followers, then they cannot be leaders because they could not stand to be dependent on them for work tasks. Ellonen et al. (2008) described two types of trust: interpersonal and organizational. Interpersonal trust refers to trust between employees and the trust between employees and their leaders, while organizational trust focuses on the expectations that people have about the “competence, reliability, and benevolence of organizational members, as well as the institutional trust within the organization” (Ellonen et al., 2008, p. 162). Nienaber et al. (2015) also stated that trust between a leader and a follower within an organization ensures that there is increased performance for the followers and the followers are more likely to communicate vital information with their leaders. Furthermore, Neves and Caetano (2006) reinforced this sentiment by finding followers who trust their leader will further gain organizational trust and commitment when followers have a perceived low level of control over change within the organization.

Setting norms for reciprocity is also considered a key factor in trust and cooperation for followers in an organization (Kouzes & Posner, 2019). Fukuyama (2000) also described as a consequence, norms are linked to traditional traits such as honesty, faithfulness to commitments, trustworthy performance of tasks, and reciprocity. Moreover, these norms lead to collective cooperation among leaders and followers. These norms build trust and social capital for the followers of the organization. When there are strong connections between people, there is generally “more trust, reciprocity, information flow, collective action, and even happiness” (Kouzes & Posner, 2019, p. 101). This creates greater social cohesion among teams and can lead

to beneficial outcomes for the organization (Schafft & Brown, 2003).

Encourage the Heart

When leaders encourage the heart, they are grounded in recognizing and celebrating the contributions of their followers (Kouzes & Posner, 2019). Clear standards and goals should be established so they can be recognized and celebrated by team members. Without these goals, followers may feel unmotivated, as they would be unsure if what they are doing is important. Leaders encourage the heart by setting high standards and goals for followers and themselves to improve followers' self-confidence and self-worth (Kouzes & Posner, 2019). Paying attention to the progress of followers is incredibly important for leaders. Leaders learn what their followers are doing and also work toward developing friendships to foster a community (Kouzes & Posner, 2019). Personal involvement and support from leaders are essential to fostering a strong relationship with their followers and increasing productivity (Kouzes & Posner, 2019).

Focus on Clear Standards. It is important for followers to have standards and goals that they believe in so they can work together on something that is worth accomplishing (Kouzes & Posner, 2019). Goal setting can affect not only a person's performance but also their overall wellbeing (Karakowsky & Mann, 2008). It can increase self-confidence (Hollenbeck & Brief, 1987), motivation (Locke, 1968), commitment to the organization, and their performance (Chang & Lorenzi, 1983; Kouzes & Posner, 2019). Goals and standards increase a person's focus and lead to persistence on attaining goals (Latham et al., 2008). Leaders should have high expectations of their followers and expect them to achieve more (Kouzes & Posner, 2019). Clear goals and standards allow followers with high ability to achieve more (Latham et al., 2008). Not only should leaders focus on setting clear goals and standards, but they should also focus on developing friendships and recognizing and rewarding contributions of followers (Kouzes &

Posner, 2019).

Developing friendships that are dedicated toward a group's goals can increase productivity and commitment toward a team's goals. People are more likely to follow someone they trust, and greater social cohesion can occur (Kouzes & Posner, 2019; Schiefer & van der Noll, 2017). When leaders become friends with their followers, it creates a working environment that encourages followers to contribute to the goals of the organization. Moreover, Campbell et al. (2013) posed that recognizing the achievements of followers enhances overall team performance and creates a positive work culture. Hence, leaders recognize achievements deepen ties to the organization. Not only is recognizing achievements important for leaders to do but having mutual respect among leaders and followers is also equally important for the wellbeing of followers (Clarke & Mahadi, 2017). Likewise, Seppälä and Cameron (2015) stated that positive work cultures are more productive and one way to build that culture is to foster social connections between followers. As a result, leaders focus their efforts on fostering a feeling of belonging among their followers in order to strengthen the relationship between them (Bryer, 2020).

Foster Community. By building a community, leaders are strengthening the resolve of followers to achieve their goals (Kouzes & Posner, 2019). Gratton and Erickson (2021) described how building a sense of community within an organization allows followers to feel that they can share knowledge with greater frequency. Leaders who foster a feeling of belonging in their followers are more likely to inspire them to collaborate freely with one another. A strong feeling of community and loyalty to the organization can only be achieved if leaders are also socially supportive of their followers (Kouzes & Posner, 2019). Social supports have positive effects on a working environment and provide followers with much needed protections from life

stress (Shirey, 2004). Leaders can act as one element of a social support when trying to build community and also encourage other followers to act as supports so the community can thrive. In order to create a positive work environment, leaders value and engage their employees on a personal level in order to foster an environment of mutual respect and cooperation (Kouzes & Posner, 2019). Leaders who are personally involved with their followers will find success in building community within their organizations. When a community thrives, leaders and organizations can accomplish their objectives.

An abundance of literature supports the theoretical framework to connect leadership strategies that build high-performing faculty teams for a technology-focused department with Kouzes and Posner's leadership model. Table 1 summarizes the supporting material used in this research for each of the Five Practices of Exemplary Leadership.

Table 1

Theoretical Framework for Kouzes and Posner's Leadership Model

Leadership Practices	Authors
Model the way	Dannenbergh, 2015; Drouvelis & Nosenzo, 2013; Gratton & Erickson, 2021; Katzenbach & Smith, 2005; Kotter, 2012; Nolan & Doyle, 2007; Potters et al., 2007; Whitehurst, 2017
Inspire a shared vision	Bolman & Deal, 2017; Cassell, 2021; Garvin & Roberto, 2005; Kotter, 2012; Senge, 2006; Williams et al., 2018
Challenge the process	Amabile & Kramer, 2011; Boynton & Fischer, 2015; Burns, 1978; Ciulla, 2015; Connor, 1993; Grossman, 1997; Horton-Deutsch et al., 2014; Hunter et al., 2011; van Dyck et al., 2005; Yeoman, 2013
Enable others to act	Bryer, 2020; Eales-White, 2012; Ellonen et al., 2008; Fukuyama, 2000; Ibarra & Hansen, 2015; Neves & Caetano, 2006; Nienaber et al., 2015; O'Neill et al., 2015; Schafft & Brown, 2003; Schiefer & van der Noll, 2017; Zhang & Bartol, 2010
Encourage the heart	Bryer, 2020; Campbell et al., 2013; Chang & Lorenzi, 1983;

Leadership Practices	Authors
	Clarke & Mahadi, 2017; Gratton & Erickson, 2021; Grossman, 1997; Hollenbeck & Brief, 1987; Locke, 1968; Schiefer & van der Noll, 2017; Seppälä & Cameron, 2015; Shirey, 2004

Connections Between Leadership and High-Performing Academic Leaders

A correlation between Friedman's (2021) and Katzenbach and Smith's (2005) key factors on high-performing teams can be found with Kouzes and Posner's (1987) leadership principles. The following sections supply an understanding of how these key factors support the five exemplary leadership principles and how these principles apply to the leadership of high-performing academic leaders in higher education.

High-Performing Academic Leaders who Model the Way

A high-performing team that models the way has drive and focus on the goals of the organization (Katzenbach & Smith, 2005). There are several elements that are necessary for a strong leader in higher education to model the way effectively. A high-performing leader clarifies their values and knows what they are. Additionally, they know themselves before they can share their values with others, and they listen and learn from others and work toward building a consensus. A high-performing leader modeling the way can be seen in how they develop the culture of their department. Kouzes and Posner (2019) stated, "Leaders enact the meaning of the organization in every decision they make and in every step they take toward the future they envision" (p. 33). High-performing leaders strive to model these behaviors so the faculty of their departments will fully conceive this future. These leaders also allow open and frank conversations that can promote growth and innovation (Whitehurst, 2017). Frank conversations can also enable trust to grow and allow team members to collaborate effectively.

A critical element that high-performing leaders employ to encourage collaboration and

innovation (Nolan & Doyle, 2007) are consistent team meetings that are also strategic (Friedman, 2021). A high-performing leader would develop a frequent communication plan and hold strategic meetings that focus on listening to team members and consensus building (Kotter, 2012). Similarly, Kouzes and Posner (2019) describe how academic leaders can model the way by spending time with their faculty and paying attention to their priorities. Strategic meetings allow for teams to stay on task and provide consistent direction for faculty to follow. Gratton and Erickson (2021) noted in their research that high-performing leaders also model collaborative behavior for teams to emulate collaboration. Leaders can take action on tasks and collaborate with other academic leaders, staff, and faculty for their faculty teams to mirror the behavior. Katzenbach and Smith (2005) defined a high-performing leader as having constant focus on where their department is headed, “and an unrelenting dedication to the communication, involvement, measurement, and experimentation to get there” (p. 252). This study will examine whether high-performing academic leaders who strive to communicate frequently and openly, while also being open to trying new things to solve problems are applicable to academic technology leaders. Furthermore, academic leaders who follow the process of modeling the behaviors they want to see from their faculty members could be one step closer to building a high-performing faculty team.

High-Performing Academic Leaders who Inspire a Shared Vision

A shared vision binds people together with a common aspiration (Senge, 2006). Exemplary academic leaders are generally able to create a vision of a positive future and can communicate that vision with their followers (Kouzes & Posner, 2019). Similarly, a high-performing leader has frequent communication with the team (Friedman, 2021) to build energy among team members and enable them to realize the shared vision of the leader (Pentland,

2015). Setting operational standards for objectives may help leaders communicate the vision to their team more effectively (Grossman, 1997). All stakeholders are committed to this vision of the future, and it should reflect their own personal vision (Senge, 2006). Kouzes and Posner (2019) asks academic leaders to likewise consider a common purpose for a department so they have values and interests that all faculty and staff can get behind. High-performing leaders are able to communicate their vision to their team so that it becomes their own, because doing so may lead to their objectives being met. Kotter (2012) described several steps that leaders could take to effectively communicate the vision to their department. Those steps are as follows:

- Simplicity;
- Metaphor, analogy, and example;
- Using multiple forums;
- Repetition;
- Leadership by example;
- Explanation of seeming inconsistencies; and
- Give-and-take.

Simplicity. The vision is simple for the team to absorb and understand (Kotter, 2012).

When the vision is straightforward, team members will have an easier time processing it, and leaders will have a smoother time convincing faculty to support their goals. A complicated vision with several components may jeopardize its chances of success. Additionally, the vision should be expressly communicated by academic leaders so that the pathway forward can be clear for faculty (Kouzes & Posner, 2019).

Metaphor, Analogy, and Example. Leaders provide data and examples of the direction (Kotter, 2012). Team members benefit from visual representations that analogize the leader's

vision because they can better comprehend the direction the leader intends to take them. Kouzes and Posner (2019) recommended that exemplary leaders “use symbolic language” (p. 130) that specifically evokes feelings of positivity and community. Symbolic language can be as simple as an image that is representative of the future. Similarly, Bolman and Deal (2017) described that a vision needs to instill a pervasive and hopeful image of what the leader is seeking to achieve. The hopeful image can be told through stories or examples that can explain to the team the vision of the future. Furthermore, the image can be representative of a theme that the academic leader describes to the faculty of their department to illustrate a vision that is bigger than them (Kouzes & Posner, 2019).

Multiple Forums. There are a multitude of ways that the vision is communicated among team members (Kotter, 2012). Email, chat, text, phone, and other avenues of communicating the vision with faculty could be applicable to academic leaders as part of this study. Team members are given the opportunity to comment on the vision and express questions in meetings or town hall discussions organized by leaders (Garvin & Roberto, 2005). It is important that these various forms of communication occur for leaders to be able to ensure that their vision is communicated effectively and broadly across their department (Kotter, 2012). Similarly, Kouzes and Posner (2019) recognized that in order for academic leaders to get faculty and staff on board with their vision, they would need to listen deeply by using multiple forums to communicate with them.

Repetition. For the vision to be fully implemented and understood by all staff in the department, it is repeated so the message can sink in (Kotter, 2012). By using multiple forums, the vision should be repeated at each forum but in different ways and using different metaphors or symbols to ensure maximum coverage of the message to team members in the department. Repetition and variety are key to helping the team members internalize the vision and make it a

part of their own personal vision going forward (Zhan et al., 2018). Additionally, Kouzes and Posner (2019) found that academic leaders that frequently describe a compelling image of the future, the better the faculty and staff of their departments are able to understand the vision and expectations of their job.

Leadership by Example. A leader's behavior is consistent with the vision they are communicating to stakeholders. If an academic leader has a vision that is aspiring for large goals for their department, but their behavior on regularly achieving goals is not consistent, then it is unlikely that team members would be on board with the vision (Kouzes & Posner, 2019). Leaders who embody the vision they are portraying will have a greater likelihood of inspiring a shared vision among their faculty (Kotter, 2012).

Explanation of Seeming Inconsistencies. Leaders address any misunderstandings and mixed signals that their followers bring to the table (Kotter, 2012). Garvin and Roberto (2005) described a turnaround plan that a leader can use to illustrate a frame for the team to follow if there are any misunderstandings. The turnaround plan would ensure that any complexities that there might be in the vision could be worked out and simplified for team members who may not understand the direction the leader is wanting to take the department. Additionally, Kouzes and Posner (2019) describe how academic leaders that practice positive communication can renew faith and confidence in the faculty of their departments. The enthusiasm can create hope for the future and keep the faculty encouraged on the vision ahead.

Give-and-Take. Leaders create a mechanism for team members to submit feedback, and they demonstrate that they are paying attention to that input (Kotter, 2012). Additionally, it is essential for leaders to be willing to adjust their vision after hearing feedback from the team members in their departments. It is crucial for academic leaders to listen to the department

faculty in order to fully determine whether or not their vision is clear and understood (Kouzes & Posner, 2019).

This study will examine if using Kotter's (2012) steps for communicating and inspiring a shared vision for the department can provide direction for academic leaders to effectively share their vision and enact the necessary change for growth. Academic leaders may also advance their faculty toward their goals by successfully inspiring a shared vision (Kouzes & Posner, 2019). Furthermore, executing a shared vision for the faculty in their academic department will allow leaders to build commitment toward the team.

High-Performing Academic Leaders who Challenge the Process

Challenging the process asks academic leaders to encourage faculty members in their departments to take risks and move beyond their limitations (Kouzes & Posner, 2019). A high-performing leader challenges the process by challenging their team with new information, establishing a sense of urgency and direction for their team, setting clear rules and behaviors, and encouraging authenticity (Friedman, 2021; Katzenbach & Smith, 2005). Risk-taking can be difficult for team members because of the unknowns and the risk of failure. A high-performing leader sets clear rules and behaviors for their teams so their faculty can fully comprehend the risks involved (Katzenbach & Smith, 2005). The rules and behaviors also have a direction that leaders share with the employees that outlines their goals (Katzenbach & Smith, 2005).

Academic leaders who promote resilience among their team will be able to experiment and work on new opportunities for their departments (Kouzes & Posner, 2019). The new opportunities could allow high-performing leaders to challenge their team with new information to enrich and invigorate the team (Katzenbach & Smith, 2005). Large opportunities should be broken down into small parts to avoid overwhelming the team and allow its members to feel that they are still

moving toward their goal (Amabile & Kramer, 2011). Additionally, team members who are given highly challenging goals are more likely to contribute more to the team (Kraut et al., 2012). Similarly, Kouzes and Posner (2019) describe how academic leaders can encourage initiative amongst faculty by providing opportunities for new challenges. Academic leaders provide opportunity for faculty members to perform above and beyond what is expected. This study will examine if academic leaders who challenge their faculty to develop deeper relationships with technology-sector leaders are applicable to academic technology leaders.

High-Performing Academic Leaders who Enable Others to Act

Academic leaders enable others to act by building trust with faculty members (Kouzes & Posner, 2019). High-performing leaders enable others to act by setting clear rules and behaviors; paying attention to meetings and actions; selecting team members based on skill (Katzenbach & Smith, 2005), and enabling team members to be their authentic selves (Friedman, 2021). When leaders create clear rules and behaviors, they allow people in their departments to understand the boundaries of the team. Setting and respecting boundaries is a foundation of building trust (Schiefer & van der Noll, 2017). When high-performing leaders enable team members to act, they first build trust among them. Otherwise, the employees are unlikely to collaborate (Schiefer & van der Noll, 2017). It is important to pay attention to early meetings and the actions of team members within the department (Katzenbach & Smith, 2005). The actions or behaviors of the employees in these meetings provide much-needed insights for a leader on the cohesiveness of their team. These early meetings also show the authenticity of the team members and how they interact with one another (Friedman, 2021). Leaders model the authentic behavior to encourage it among their employees (Rego et al., 2013). Team members who can be their authentic selves bring skills that help serve a high-performing team (Friedman, 2021). It is up to the high-

performing leader to select and manage the various skills that team members bring and enable them to act and cooperate effectively together (Gratton & Erickson, 2021; Katzenbach & Smith, 2005). Kouzes and Posner (2019) also state that academic leaders put trust building as a central part of their goals. Stability and predictability may be achieved in the department by establishing standards based on reciprocity. In addition, face-to-face interactions may contribute to the development of social capital, which in turn strengthens faculty relationships and trust. Academic leaders who promote these elements are likely to increase departmental trust.

High-Performing Academic Leaders who Encourage the Heart

Recognizing individual contributions and celebrating achievements together are a couple of ways that academic leaders encourage the heart (Kouzes & Posner, 2019). People spending time together, providing positive feedback (Katzenbach & Smith, 2005), and giving recognition and rewards are vital for leaders to emphasize (Friedman, 2021). When team members bond on nonwork topics (Friedman, 2021), they are more likely to form friendships and strength bonds (Kraut et al., 2012) and trust between them (Schiefer & van der Noll, 2017). Similarly, friendships amongst academic leaders and their faculty teams can allow the faculty to trust the leader more (Kouzes & Posner, 2019). Leaders encourage building these bonds as well as encourage greater appreciation and praise for tasks that team members have completed (Seppälä & Cameron, 2015). Kouzes and Posner (2019) recommend that academic leaders should use a mix of recognition and rewards to show their appreciation of faculty. Team members who praise each other are more likely to have their motivation toward tasks be increased (Kraut et al., 2012). Increased motivation can also lead to team members behaving more authentically and they can express greater outward positivity (Friedman, 2021). Leaders encourage this authenticity and provide avenues for team members to spend more time together to enable greater bonding (Kraut

et al., 2012) and greater productivity (Grossman, 1997). With higher productivity, it is important for leaders to provide positive reinforcement and recognize the achievements of the team members in their departments (Friedman, 2021). The recognition cannot be consistently the same or else it will not be as meaningful to the employees (Bradler et al., 2016). Clear rules and standards for team members to follow allows an increase in self-confidence (Chang & Lorenzi, 1983) and commitment to the department (Kouzes & Posner, 2019). Furthermore, leaders focus on building community among their teams to deepen collaboration efforts (Gratton & Erickson, 2021) and develop a sense of belonging for team members in the department (Bryer, 2020). A high-performing academic leader will find that through building community, giving praise and appreciation for their faculty, and providing recognition for faculty accomplishments that they will accomplish their goals (Kouzes & Posner, 2019).

Through this literature review, multiple intersections between high-performing teams and Kouzes and Posner's leadership model were found. Table 2 summarizes the high-performing team factors used in this research and illustrates how they intersect with the Five Practices of Exemplary Leadership.

Table 2

High-Performing Team Factors and Intersections with Kouzes and Posner's Leadership

Model

Leadership Practices	High-Performing Team Factors
Model the Way	All meetings are very strategic; Establish urgency and direction; Select team members based on skill; Set clear rules and behaviors; Pay attention to first meetings and actions; Team members are more authentic at work.

Leadership Practices	High-Performing Team Factors
Inspire a Shared Vision	Move forward on performance-based goals; Frequent communication among team members; Set clear rules and behaviors
Challenge the Process	Challenge team with new information; Establish urgency and direction; Team members are more authentic at work; Set clear rules and behaviors.
Enable Others to Act	Set clear rules and behaviors; Pay attention to first meetings and actions; Team members are more authentic at work.
Encourage the Heart	Bonding between team members on nonwork topics; Set clear rules and behaviors; Appreciation of team members is more freely given; Spend time together; Use positive feedback, recognition, and reward; Team members are more authentic at work.

Summary

The purpose of this study is to determine specific leadership strategies that can inform building high-performing faculty teams for a technology-focused department within higher education. The literature review discovered structures that have hampered higher education in maintaining currency with the technology sector (Bills, 2016; Kimberly, 1979; Levine, 1997). Furthermore, the literature revealed thirteen key leadership factors that are effective in creating high-performing teams (Friedman, 2021; Katzenbach & Smith, 2005). Although there are many studies that describe key factors for building high-performing teams, Friedman (2021) and Katzenbach and Smith (1995) had the most encompassing key factors that were well represented in other studies. These studies also only focused on these key factors of building high-performing teams, but they disregarded relating these factors to specific industries such as higher education and technology. This literature examines this connection and outlines how these key

leadership factors can be applied.

The studied literature on high-performing faculty teams has neglected to show the specific leadership traits that academic leaders should possess to lead faculty teams.

Nevertheless, the literature revealed building connections between colleagues and a focus on improving overall team performance as key themes for development of high-performing teams (Friedman, 2021; Katzenbach & Smith, 2005). Furthermore, these themes directly integrate with the theoretical framework used for this research: Kouzes and Posner's (1987) Five Practices of Exemplary Leadership. Therefore, the key factors of these themes will be utilized as part of the theoretical framework for this study.

Chapter 3: Methods

The purpose of this qualitative narrative research study was to explore strategies that higher-education leaders could utilize to build high-performing teams for technology-focused departments. An exploratory study aimed at examining a new study area, a fresh thread of previously documented relationships, an innovative technique, a unique data collecting instrument, or to obtain a better knowledge of a particular population (Pajo, 2017). High-performing faculty teams in technology-focused higher-education departments are not a widely researched topic; therefore, this study seeks to explore this area of study using a narrative qualitative method. Narrative research is considered a retrospective of an event. That research examines the past and requires researchers to organize characters, conversations, and topics into a cohesive plot (Boje, 2008). By utilizing this research method, the researcher sought to determine the leadership strategies of academic leaders who have successfully built high-performing faculty teams within a technology-oriented department.

The main research question that was investigated asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments? Kouzes and Posner's (2019) theoretical framework serves to inform the study. This chapter details the methods for conducting this exploratory qualitative narrative approach, the theoretical framework, the research design, quality, and human subjects are also addressed.

Chapter Structure

Chapter 3 discusses the qualitative research technique and study design. The chapter starts with an overview of the study's context, followed by a statement of the goal and research questions. A review of the research design, including the justification for using qualitative methods, procedures, and instrumentation, is discussed. This chapter contains an overview of the

steps taken to protect human subjects. Additionally, credibility and reliability are examined. Finally, the limits of the investigation are presented.

Purpose and Research Questions

The purpose of this research was to determine strategies that higher education academic leaders might employ to build high-performing faculty teams for technology-focused departments. The study of high-performing teams in higher education can be considered an area of research that has not received much attention. Using a narrative qualitative approach, the research sought to uncover the leadership strategies used by other academic leaders at higher-education institutions that have been shown to be successful for creating transformative change. The purpose of the research was to shed light on how academic leaders of higher education technology departments could apply a variety of leadership strategies to build high-performing faculty teams that keep pace with technological advances. The findings of this study would benefit academic leaders of technology-focused higher education institutions.

Research Questions

The purpose of this study investigated strategies that leaders in higher education could employ to build high-performing faculty teams for technology-focused departments. The following research questions were used to inform the purpose.

The central guiding research question for this study is:

- What are the leadership strategies that build high-performing faculty teams in higher-education technology departments?

Subquestions that support this study are:

- Research Subquestion 1: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that model the

- way?
- Research Subquestion 2: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that inspire a shared vision?
 - Research Subquestion 3: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that challenge the process?
 - Research Subquestion 4: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that enable others to act?
 - Research Subquestion 5: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that encourage the heart?

Research Design

Research about high-performing teams often focuses on the characteristics or strategies that leaders employ to motivate their teams (Friedman, 2021; Katzenbach & Smith, 2005). Much of this research has a focus on the corporate, for-profit sector, and how leaders can shape their teams (Boynton & Fischer, 2015; Friedman, 2021; Gratton & Erickson 2021; Katzenbach & Smith, 2005; Pentland, 2015). There is scant research specific to how academic technology department leaders can build high-performing faculty teams. This study sought to add to the body of research in this area. Stories of leaders who develop high-performing teams and the strategies these leaders employed to find success are commonly used in the literature of high-performing teams (Boynton & Fischer, 2015; Katzenbach & Smith, 2005). This research study

utilized qualitative narrative methods to discover how academic leaders who have built high-performing faculty teams within their technology-focused departments. This approach to qualitative research utilizes narratives of study participants as the main source of data (Butina, 2015). Data collection for qualitative methods is conducted through participant interviews. The data are coded and categorized to form themes that address the main research question (Creswell & Creswell, 2018). This research study used interviews as the primary method of gathering data.

The researcher used Kouzes and Posner's (2019) leadership model as the theoretical framework for this study. As outlined in Chapter 2, model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart are the five primary components of this theoretical framework (Kouzes & Posner, 2019). Research questions were formulated following an in-depth review of the literature.

Narrative as a Qualitative Method

The narrative method used for this qualitative study explored the experiences of people. Qualitative research, as described by Denzin and Lincoln (2005), is the examination and collection of empirical materials e.g.: case studies, personal experiences, reflection, life stories, interviews, artifacts, and cultural texts and productions—that reflect the circumstances in people's lives. Additionally, qualitative research can be seen as having a “set of interpretive, material practices that make the work visible” (Denzin & Lincoln, 2005, p. 4).

In qualitative research, the researcher typically begins by getting detailed information from their research participants and separating the data into categories (Creswell & Creswell, 2018). Additionally, these categories are then developed into patterns and themes that can be compared to the literature (Creswell & Creswell, 2018). There are numerous means of conducting qualitative research that a researcher can undertake to find the answers to their

research questions. Patton (2001) recommended that in order to choose a qualitative method, researchers should consider the purpose of their inquiry and the answers they want to identify. Using the narrative method of qualitative research, the purpose of this study was to investigate the strategies that academic leaders in higher education could employ to build high-performing faculty teams for technology-focused departments.

According to Lambert et al. (2002), narrative and dialogue are effective tools for the construction of meaning. The construction of meaning directly relates to constructivism, which asks leaders to derive meaning from their work (Wisniewski, 2003). This study utilized this concept to draw meaning from the narratives that the interview participants share.

Often, researchers gain an understanding of a phenomena by using a narrative approach. Using a narrative approach benefits researchers for a number of reasons. First and foremost, Chesla (1995) offered that narratives give insights into the specific stories of participants. Second, narratives can give readers a glimpse into the progression of an experience. Third, narratives promote the use of everyday language and all of its nuances. Finally, narratives allow reactions to the actions and relationships described to reveal aspects of their own individual dynamics (Chesla, 1995). Qualitative research is, in general, subject to the researcher's interpretation. Therefore, the researcher chose to incorporate the interpretive paradigm into the narrative approach of qualitative research to answer the research questions. The interpretive paradigm attempts to get into the minds of the subjects being researched in order to comprehend and interpret what the subjects are thinking (Kivunja & Kuyini, 2017). This paradigm commonly views reality as socially constructed, which is why it is sometimes related to constructivism (Bogdan & Biklen, 1998). Furthermore, this paradigm asks researchers to focus not on a single reality, but to look at all realities or perspectives (Creswell & Poth, 2017).

In general, the narrative method uses five components for conducting the research, which are “identifying the research issue, selecting participants, conducting the interview, analyzing the narrative, and reporting findings” (McQueen & Zimmerman, 2006, p. 476). Additionally, McQueen and Zimmerman (2006) described the narrative method as requiring researchers to direct their study more intentionally, and narratives are constructed using a preplanned sequence of questions about a certain subject. For this study, the researcher used an interpretive and constructivist lens to report on the findings and share the participant’s account of their lived experiences.

Sampling Method and Population

Purposive sampling was the study’s primary sampling method, and one of the key components of using this method of sampling is to have as much variation in perspectives of the participants as possible (Creswell & Poth, 2017; Koerber & McMichael, 2008). Qualitative research techniques often employ a lower sample size than quantitative approaches. Qualitative research methods are concerned with gaining an in-depth understanding of a phenomenon (Dworkin, 2012). Subjects were sent an email asking for their participation in this research study. Research by Dworkin (2012) found that five to 50 research participants are considered an adequate sample size for qualitative research. Therefore, the researcher’s goal was to have at least seven participants to be solicited as part of this study. In addition, expert sampling was used as part of the purposeful sampling process. In expert sampling, experts in a given area are chosen to be the subjects (Etikan et al., 2016). The objective of expert sampling is to provide a more effective approach to generating the perspectives of those who are experts in a certain field (Etikan & Bala, 2017). For this study, the researcher identified academic leaders by using the following criteria:

- Academic leaders who manage programs that are technology-focused;
- Academic leaders who have been leading and managing their departments for 3 years or more; and
- Academic leaders who are from universities.

It was determined to use these criteria in an attempt to discover academic leaders who had experience in academic leadership and who have implemented successful high-performing faculty teams within their technology-focused departments. These criteria were initially determined to assist the researcher in narrowing down the list of academic leaders to interview. After receiving Institutional Review Board (IRB) approval, the researcher contacted study subjects via email before following up and setting up times for interviews.

Instrumentation

In qualitative studies, researchers are considered an instrument of the study (Hammersley & Atkinson, 1995). Researchers use all of their senses to study and interpret their research subjects (Turato, 2005). An interview instrument employing semi-structured questions was used to gather information. The academic leaders who met the study's established criteria and agreed to be interviewed were invited to participate.

Participants who are interviewed in a more private atmosphere may be more willing to open up and share their thoughts and experiences about the subject matter (Owens, 2006). Therefore, the researcher provided a private Zoom session for the interviews so that the participants can openly share their thoughts and experiences. If additional information was required for this study, the researcher asked the participant to expand on a response following a question. The questions that will be asked of each participant are:

1. Give an example of how you've served as a role model or established standards for

- your department's faculty.
2. When it comes to making changes in your division, how can you inspire your faculty to take action?
 3. How do you foster an environment where faculty feel safe enough to try new things?
 4. Specifically, how have you gone about gaining the trust of your faculty?
 5. How have you fostered a sense of camaraderie among your faculty members to foster a productive working environment in your department?
 6. Do you have anything further to say?

Data Gathering Procedures

Methods of data collecting are significant because they impact how the information is utilized and what explanations it might provide (Paradis et al., 2016). As part of this research study, participants provided consent to participate in the study prior to any interviews. When academic leaders agree to participate in this study, they were scheduled for 30-to-60-minute semi-structured interviews to get a better understanding of the academic leadership strategies they employed to build high-performing faculty teams. Once individuals gave consent to participate, interviews were scheduled and conducted virtually using Zoom. The text of the interviews was recorded using Zoom Cloud Recording with the participants' consent for automatic transcription. During the interview process, the researcher took field notes to supplement the recorded interviews. Field notes enable the researcher to keep track of and note perceptions, contextual circumstances, actions, and nonverbal clues that may not be fully documented during the recording process (Sutton & Austin, 2015). Interview transcripts were saved on an encrypted hard drive for examination, are only accessible to the researcher, and will be stored for 3 years following the requirements of the University IRB.

It is important to collaborate with participants throughout the research process (Creswell & Creswell, 2018). Therefore, participants had the opportunity to ask questions and make comments throughout the process of the interview. Confirmation of the recorded transcript was conducted via email with each participant to confirm the accuracy of the data.

Credibility and Dependability of the Instrument

Credibility

Roberts and Hyatt (2019) noted that qualitative researchers generally use the term credibility to address the validity of a study. To be considered credible, the researcher's claims must be corroborated by the data collected from participants (Sinkovics et al., 2008). Liao and Hitchcock (2018) defined additional credibility techniques as techniques that can include member checks, triangulation, and having prolonged engagement with the research subjects. Member checking outlines how sharing written reports with participants enables them to rectify inconsistencies in the researcher's report and to prevent any misperceptions caused by the researcher's assumptions and/or interpretations (Guba & Lincoln, 1985). Following each virtual interview, the transcript was sent to each participant for review. Participants could provide feedback and ideas that could be incorporated into the final transcript. This member check was done to ensure the accuracy of the narrative (Creswell & Creswell, 2018).

Triangulation is another credibility check that can be used to add rigor, breadth, and depth to an inquiry (Guba & Lincoln, 1985). It is a method that conducts three measures to determine validity (Meijer et al., 2002). Guba and Lincoln (1985) argued that a study may be triangulated to increase credibility. This research study focused on interviews with participants who meet the criteria of the study as the main means of data collection, though the participant search of academic leaders resulted in participants who work at various higher-education

institutions. This diversity of institutions, both large and small universities, meet Guba and Lincoln's (1985) criteria for triangulation.

The last area of credibility outlines having prolonged engagement with the participants, according to Liao and Hitchcock (2018). It is critical for narrative research to have a strong relationship with the participants so that the researcher can effectively develop a narrative that highlights the cocreation of the work (Guba & Lincoln, 1985). During the transcription process, the researcher reached out to the participants if there were questions regarding the information that has been captured. The additional time spent with the participants increases the credibility of the study (Liao & Hitchcock, 2018).

Dependability

Qualitative researchers use the term dependability to refer to a previously used term of reliability of findings (Roberts & Hyatt, 2019). These terms can be used interchangeably. Creswell and Creswell (2018) defined dependability as "the consistency or repeatability of an instrument" (p. 154). If the same findings are obtained regardless of whether different participants were used, the instrument is considered reliable (Creswell & Poth, 2017). To ensure dependability, the researcher solicited a secondary reviewer to examine the process and to assess the accuracy (Creswell & Poth, 2017; Guba & Lincoln, 1985). The secondary reviewer had no connection to the study and examined if the findings and conclusions were supported by the data (Creswell & Poth, 2017). The secondary reviewer had doctoral level education in qualitative methods in order to provide the necessary support and understanding of the coding process. In addition, Hyatt's (2013) 10-step process was used to build secondary reviewer or interreviewer dependability and bolster the credibility of this work. The following are the stages involved in this process:

1. The primary researcher analyzes the data and then meets with the second reviewer to review the coding process for identifying themes.
2. The primary researcher selects a transcript to familiarize the reviewer with the coding process.
3. The researcher maintains the highlighted, analyzed version of the transcript.
4. The reviewer is provided with a clean copy of the selected transcript.
5. Prior to analysis, the researcher and reviewer will read the transcript to familiarize the reviewer with the data from the transcripts and answer any questions about the transcript.
6. The researcher assists the reviewer in completing the analysis of one selected transcript by bracketing for reduction, horizontalization, and synthesis of the text for structural descriptions and conclusions.
7. Meaning units are entered in the left margin. Structural descriptions and conclusions are entered into the right margin. This completes the analysis of the transcript.
8. The additional reviewer applies the same process to the remaining transcripts independent of the primary researcher.
9. After completing all transcripts, the primary researcher and reviewer reconvene. The primary researcher and the reviewer review their identified findings, discuss differences, and agree on the conclusions. An analysis categorizing form may be created to identify the agreed-upon themes.
10. Generally, criteria for significant themes are met when most participants provide supportive data for the themes.

Intercoder consistency is when researchers employ peer review to determine the

reliability of data analyses as findings develop (Creswell & Poth, 2017). Intercoder agreement refers to the practice of comparing data codes utilizing two or more researchers. Intercoder agreement happens when two or more data analyzers agree on the codes used to identical portions of text. Creswell and Poth (2017) recommend an intercoder agreement to increase the dependability of a qualitative study. The threshold for determining the level of quality dependability varies depending on the context; however, the majority of researchers adhere to guidelines that suggest an intercoder reliability of 0.41 to 0.6 is considered to be moderate, 0.61 to 0.80 is considered to be significant, and 0.81 to 1 is considered to be excellent (Malviya et al., 2021). Because this research study will consist of two reviewers, McHugh (2012) suggests the use of percent agreement as the method to measure intercoder consistency. When calculating the percentage of agreement, a matrix will be generated in which each reviewer will be represented by a column and the variables for the data will be represented by rows. Each column in the matrix will contain either a zero or a one to indicate whether or not there is a difference between the two reviewers. The difference will be portrayed as a third column to indicate the disparity between the ratings of the two reviewers. To assess the level of agreement, the number of zeros were added together and then divided by the total number of variables. A percent agreement score of 80% or higher will be determined as a dependable score.

Human Subject Considerations

It is mandated by the U.S. Code of Federal Regulations (Department of Health and Human Services, 2021) to guarantee that researchers and review boards implement proper safeguards to preserve the privacy and confidentiality of participants in studies. To guarantee that research involving human beings is conducted in accordance with federally mandated ethical norms, IRBs are required to review proposed methods (White, 2020). The researcher adhered

strictly to the rules and regulations of the IRB and completed the required human subjects training as required by Pepperdine (see Appendix A). The University IRB reviewed the study methods before any data was collected by the researcher. The IRB submission contained information on the study's goal, procedures, data collecting, analysis, interpretation, as well as a strategy for respecting participants' privacy and ethical standards. The researcher launched recruitment efforts after receiving IRB approval (see Appendix B). As a prerequisite to participating in research, study participants must be informed of all relevant features of the project, including any possible risks to them, and must be given the opportunity to withdraw their permission at any time (Newman et al., 2021). Prior to recruiting any participants, the researcher informed them of the researcher's goal and data gathering method, as well as obtaining signed permission. Participation in the research was completely optional, and participants had the opportunity to withdraw at any time. Participants were made aware that the information they provide will be kept strictly anonymous at all times. Data cleaning occurred to address confidentiality of all participants by removing any unique identifiers in transcripts and field notes (Kaiser, 2009). Each participant was given a pseudonym to increase the confidentiality of the research. The pseudonyms were not related to the participants in any way and were chosen at random. There was no disclosure of the subjects' university affiliation.

The researcher sought to understand academic leaders and their leadership strategies to build high-performing faculty teams. Neither the participants nor the organizer received compensation for their time. There was minimal risk associated with participating in this research as it qualifies for exempt review (Walch-Patterson, 2020). The interviews should last about 30 to 60 minutes per participant. Zoom was used for the interviews and transcripts. A unique Zoom account, a secure password, and a private laptop was used to protect the data. The

researcher's own hard disk was password-protected and used to store all of the electronic data that was gathered throughout the process. In accordance with University IRB regulations, the data will be kept for a minimum of three years before being destroyed.

Data Analysis Processes

In qualitative narrative research, the most important aspect of data analysis is authenticity towards the participants. This research study conducted all interviews remotely through Zoom. The interviews were also transcribed using the Zoom platform. For the accuracy of the transcriptions, all of the recordings of the transcriptions were further examined and manually revised. After the interview, each research participant received a transcript of their interview, which was used to validate the accuracy of the information gathered.

The interview data underwent a coding process. During the coding process, textual material is interpreted and examined (Sinkovics et al., 2008). The data analysis process involved several steps in coding qualitative data. The researcher focused on using Creswell's (2004) five-step approach for assessing qualitative text as data:

1. First, review data in the text files.
2. The text should be separated into smaller sections of information.
3. Use a code to identify each section of information.
4. Identify the amount of code duplication.
5. Compress codes so that they may be categorized according to a subject.

Deductive and inductive methods of data analysis was used to answer the study's research questions (Creswell & Creswell, 2018). The deductive technique was used in conjunction with the study's theoretical framework, which consisted of Kouzes and Posner's (2019) five leadership principles, to begin the coding process. The data that was gathered from

interviews will be addressing the research study's subquestions: (a) What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that model the way?; (b) What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that inspire a shared vision?; (c) What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that challenge the process?; (d) What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that enable others to act?; and (e) What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that encourage the heart?

As part of an inductive method, the data was coded using open coding, axial coding, and selective coding using interview transcripts (Creswell & Poth, 2017). Open coding was used to arrange keywords and concepts into categories. Categories were then divided into themes and essential ideas using axial coding. The core theme was then determined via the use of selective coding. Selective coding is concerned with the formation of theories about the nature of primary themes and ideas that emerge from the data that have been gathered (Holton, 2007).

Processes Identifying Codes

Taguette (Rampin & Rampin, 2021), a free and open-source qualitative coding application, was utilized for the coding procedure. The tool provides a range of features for organizing and analyzing textual data in a more efficient and user-friendly way. One of the primary features of Taguette is its ability to import a variety of file formats, enabling researchers to upload their textual data into the system. Researchers can then highlight words, sentences, or paragraphs and tag them with the codes they create. This allows for greater flexibility in working with data from different sources and simplifies the process of organizing and analyzing the

information.

Another significant advantage of Taguette is its collaborative functionality. Researchers can work together on a project, sharing documents, highlights, and codes. This feature makes it much simpler to collaborate with secondary reviewers or other researchers on complex qualitative analysis projects.

One of the unique aspects of Taguette is that all user data stays private and secure. Researchers can export their entire project, including documents, highlights, and codes, ensuring that their data remains their own. Additionally, Taguette is being recommended for use by major universities throughout the country because of its low barrier to entry. Harvard University and New York University are two such universities that are recommending the tool for their researchers to use for their qualitative research.

Taguette is useful because it simplifies the process of organizing and analyzing textual data, allowing researchers to identify patterns and trends in large datasets. The ability to tag and code data provides a flexible approach to data analysis, allowing researchers to adapt their methods as their research progresses. Taguette also enables researchers to collaborate with other researchers or secondary reviewers, share insights and ideas, and provides a secure environment for data storage. Overall, Taguette is a versatile tool that worked well for this project because of the robust and effective way it manages qualitative data.

Assessing the Intercoder Agreement

The researcher followed Creswell and Poth's (2017) recommended procedures for researchers to use when assessing intercoder agreement. They recommend the following:

1. Initiate the process of developing a preliminary list of codes on a shared platform.
2. Create an initial codebook and distribute it to the reviewer.

3. Utilize the codebook for additional transcripts and compare the coding that different researchers have produced.
4. Assess and report on the level of agreement amongst researchers.
5. Finalize and revise the codebook to serve as a guide for future coding efforts.

Reviewers analyzed the data and compared their results. Creswell and Poth (2018, as cited in Silverman, 2013) indicate that additional computer programs can assist with developing the major themes of codes. Following Creswell and Poth's (2017) procedures for assessing an intercoder agreement, the secondary reviewer and researcher will determine if an additional computer program is necessary for developing the major themes into codes. The theoretical framework was connected to the themes after they had been identified in order to fully understand and organize the emerging themes.

Once the codebook was initially established, it was shared with the secondary reviewer to begin to develop, as Creswell and Poth (2017) suggest, "a shared understanding of codes to create a codebook that is stable and represents the coding analysis" (p. 265). The data was sorted and coded by the researcher and a second reviewer to establish intercoder reliability. For the purpose of establishing intercoder reliability, the research reliability was set at 80% or above (McHugh, 2012). A narrative analysis was written after the data were coded to present the participants' narratives by identifying recurring themes in each of the research questions that were investigated.

Reflexivity

Creswell and Poth (2017) described that researchers need to engage themselves in self-understanding their biases, values, and experiences they bring to their qualitative study. Cunliffe (2009), similarly, drew on three philosophies that encourage researchers to analyze their actions

in the world, as well as their life experiences, and to investigate potential concerns and behave responsibly and ethically. Additionally, any qualitative investigation should include reflection on the research process and an examination of the ways in which one's own values and viewpoints may impact the results (Jootun et al., 2009). This study's researcher is an academic leader at a higher-education institution that manages a technology-focused department. To minimize the bias that the researcher had regarding holding a similar position to those of her interview subjects, she used field notes and wrote down observations, as well as the process of bracketing events in a notebook. By capturing her thoughts during interviews, the researcher was able to exercise reflexivity routinely and responsibly. Notes that were taken throughout the study procedure provided for the capture or checking of researcher bias.

Limitations

Limitations are elements of a research study that might show possible weaknesses that are beyond the researcher's control and be acknowledged (Simon & Goes, 2010). Individual interviews serve as the major method of gathering data for this research. As this is narrative research, the participants participate in order to share their narratives and experiences (Creswell & Poth, 2017). The researcher's depiction of the narratives can have an overall impact on the interpretation of the study.

Summary

Qualitative research, primarily narrative research, was presented in Chapter 3 as the means of examining the study context and design. There was a discussion of the chosen approach and why it was appropriate for this qualitative research project. The protection of human subjects was included in the discussion of sampling and participant selection procedures. There was a discussion of narrative interviewing strategies and data gathering processes. Furthermore, the

types of data sources were also included in this section. Additionally, the chapter detailed the study credibility, and dependability. The last section of Chapter 3 addressed the methods to examine data linked to leadership strategies that contribute to high-performing technology faculty teams. The next chapter presents the findings of this research study.

Chapter 4: Data Analysis and Results

The primary goal of this research is to discover effective leadership strategies for building high-performing faculty teams in academic technology-focused departments. The participants in this study are academic leaders of universities within the United States. These participants are defined as educational leaders who have the power to influence the culture of their organizations (Civera et al., 2020). In the context of this study, the academic leader role may be fulfilled by a dean, director, or vice president of the technology department of an academic institution. The central research question of this study was: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments? To investigate this, a thorough review of the literature revealed the Five Practices of Exemplary Leadership (Kouzes & Posner, 2019) as the theoretical framework for this study. The study's subquestions are based on these five practices. The following research questions were developed based on this theoretical framework:

- Research Subquestion 1: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that model the way?
- Research Subquestion 2: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that inspire a shared vision?
- Research Subquestion 3: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that challenge the process?
- Research Subquestion 4: What are the leadership strategies that build high-

performing faculty teams in higher-education technology departments that enable others to act?

- Research Subquestion 5: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that encourage the heart?

To answer these questions, this study used a narrative qualitative methodology, based on semi-structured interviews. The interviews will be guided by six semi-structured interview questions. Every participant in the study was asked and given the opportunity to respond to the same six interview questions. The following six questions were posed to each participant during the study:

1. Give an example of how you've served as a role model or established standards for your department's faculty.
2. When it comes to making changes in your division, how can you inspire your faculty to take action?
3. How do you foster an environment where faculty feel safe enough to try new things?
4. Specifically, how have you gone about gaining the trust of your faculty?
5. How have you fostered a sense of camaraderie among your faculty members to foster a productive working environment in your department?
6. Do you have anything further to say?

Chapter Structure

Data analysis and findings are discussed in depth in Chapter 4. This chapter presents a comprehensive analysis of the context of the research as well as the guiding questions.

Additionally, the methodology that underpinned the data collection was discussed, as well as the

researcher's approach to locating and recruiting participants for the study. Tools and processes for data analysis, as well as approaches for assuring the authenticity and trustworthiness of the data, were discussed in this chapter. After presenting the chapter's conclusions based on the research questions and interview questions, a summary of those findings is provided.

Participant Recruitment

After receiving approval from the IRB at Pepperdine University, participants in this research were recruited via the use of purposive sampling (Creswell & Poth, 2017; Koerber & McMichael, 2008). In particular, this research relied on expert sampling (Etikan et al., 2016) to recruit academic leaders. Therefore, the following broad criteria were used to identify and select participants:

- Academic leaders who manage programs that are technology-focused;
- Academic leaders who have been leading and managing their departments for 3 years or more; and
- Academic leaders who are from universities.

This study discovered a total of 29 eligible volunteers who satisfied the research requirements. A participant recruitment email template was developed and distributed to all potential research participants to seek their involvement in the study (see Appendix C). All seven prospective participants who replied to the recruiting email completed the Informed Consent Form for Research Participants (see Appendix D). There were seven participants who were able to attend and complete the Zoom interview. After member checks were complete, all seven interview transcripts were included in the final data analysis procedure.

Overview of Participants

Interview participants had a range of academic leadership experience that ranged from 4

to 23 years. The study had a total of seven academic leaders, with three Associate Deans and four Deans of technology-focused universities within the United States. All interviewees had a minimum of 4 years of academic leadership experience managing faculty and staff within their institutions. Table 3 contains an overview of the research participants experience.

Table 3

Total Years of Academic Leadership Experience for Participants

Participant Pseudonym	Current Academic Leadership Position	Years of Academic Leadership Experience
Participant A	Associate Dean	4
Participant B	Associate Dean	5
Participant C	Dean	5
Participant D	Dean	5
Participant E	Associate Dean	4
Participant F	Dean	23
Participant G	Dean	7

Data Collection

The Pepperdine University IRB approved the collection of data from academic leaders who matched the sample requirements. The data gathering results were compared to the theoretical framework. All interviews were performed virtually on the internet conference platform Zoom, with each participant determining the day and time. At the beginning of each interview, the interviewer verified each participant's willingness to be recorded and their years of experience in academic leadership. In addition, the researcher clarified the informed consent form that was delivered to every participant. Each participant was then asked the five main

research questions. A last question was given to determine whether or not each participant had anything further to offer regarding their leadership experience. The duration of the interviews varied from 10 to 30 minutes. Each interview's transcript was generated with the assistance of the Zoom auto-transcription tool. The auto transcription resulted in interviews ranging in length from 10 to 23 pages. After review and editing, each transcript was between two and five pages in length.

Data Analysis Process

The procedure of analyzing the data consisted of various parts, one of which was the coding of qualitative data. The researcher's primary emphasis was on using Creswell's (2004) five-step methodology for evaluating qualitative text as data:

1. Review data in the text files.
2. Separate text into smaller sections of information.
3. A code is used to identify each section of information.
4. Code duplication is identified.
5. Compress codes to allow for subject-based categorization.

In order to transcribe the interviews, the first step was to make use of the audio transcription technology offered by Zoom. After getting the unprocessed interview transcripts, the researcher listened to all of the audio files, read the transcripts to become comfortable with the formatting of the text, and then fixed any problems that were discovered.

Following the completion of the editing process, the transcripts were separated into separate files for each interview, after which they were sent to the participants for evaluation. The researcher became quite familiar with the general content of each section of the transcripts by conducting an in-depth analysis of the interview audios and the procedure for cleaning up the

transcripts. Additionally, the researcher became acquainted with the general location of the important information that would be used in the study.

The third stage involved the deductive and inductive techniques of data analysis, which were used in order to answer the research questions that were posed by the study (Creswell & Creswell, 2018). In order to get started with the coding process, the deductive method was used in combination with the theoretical framework of the research, which consisted of Kouzes and Posner's (2019) five leadership principles.

As a first step, the researcher used a preset set of themes that were derived from Kouzes and Posner's (2019) five leadership principles. These principles are as follows: modeling the path, inspiring a common vision, challenging the process, enabling others to act, and encouraging the heart. The first research question was addressed by the theme model the way, which centered on question 1. The second research question was addressed by the theme inspire a shared vision, which centered on question 2. The third research question was addressed by the theme challenge the process, which centered on question 3. The fourth research question was addressed by the theme enable others to act, which centered on question 4. And the fifth research question was addressed by the theme encourage the heart, which centered on question 5. The specifics on the application of these themes to the various study questions are provided in Table 4.

Table 4

Coding Themes Connected to Research Questions

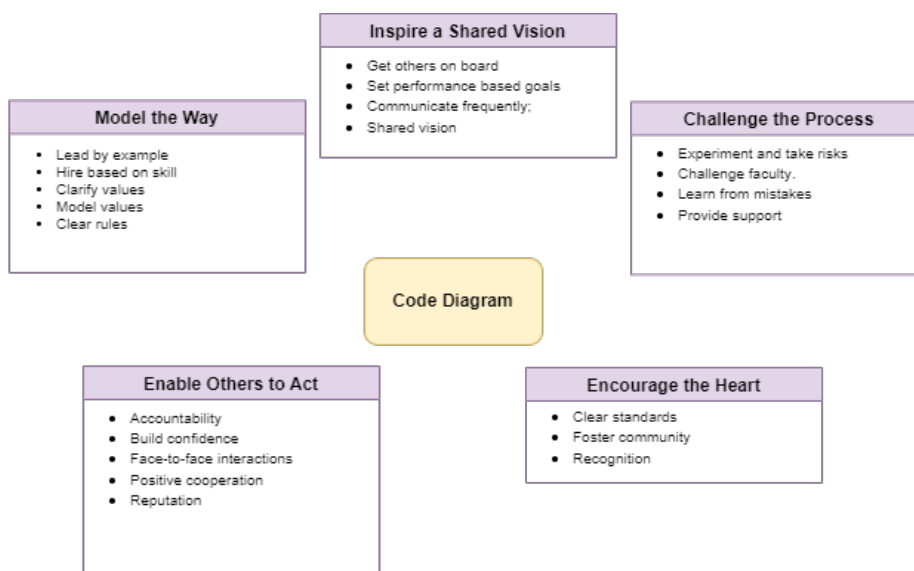
Number	Theme	Research Question
1	Model the way	What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that model the way?

Number	Theme	Research Question
2	Inspire a shared vision	What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that inspire a shared vision?
3	Challenge the process	What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that challenge the process?
4	Enable others to act	What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that enable others to act?
5	Encourage the heart	What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that encourage the heart?

Additionally, a code diagram was created. Under each theme, around three to five first codes were developed based on the theoretical framework of this research, for example, clear standards, foster community, and recognition were codes used for the theme of encourage the heart. (See Figure 1).

Figure 1

Code Diagram



Inductive coding was also employed, as well as open coding, axial coding, and selective coding, all of which were done with the use of the interview transcripts (Creswell & Poth, 2017). The organization of keywords and ideas into categories was accomplished via the usage of open coding. Afterwards, axial coding was used to separate the categories into their respective themes and fundamental concepts. The use of selective coding was then used in order to identify the primary theme. The construction of hypotheses about the nature of major themes and concepts that emerge from the data that has been obtained is the focus of selective coding (Holton, 2007). Theories are derived from the data that has been gathered. A codebook was then developed. A codebook is a document that comprises a listing of the codes that were used in a study along with an explanation of how those codes relate to the responses that were provided by the participants (Pajo, 2017).

In the fourth step of the process, the categories were adjusted, aggregated, and arranged into themes and concepts that were more concise. This was accomplished with the use of axial coding as well as discussion with the secondary reviewer. Afterwards, using selective coding, the major topic of the codes generated by the inductive technique was analyzed and identified. Deductive coding, which was developed based on the theoretical framework of this study, was then used to do an analysis on the gathered data. In addition, the inductive coding approach, which includes open, axial, and selective coding, was able to unearth key themes and codes that contributed to the findings of the research. At this point, the codebook was revised to provide complete descriptions as well as sample excerpts. Table 5 depicts a portion of the codebook. Using the codebook as a point of reference, interview excerpts were highlighted and organized into categories according to the codes and subjects discussed.

Table 5*Sample of the Codebook*

	Name of Code	Definition of Code	Code Example
Inspire a Shared Vision	Communicate Frequently	The academic leader expresses how they need to openly communicate with their faculty to relate information to them.	"...speak articulately and clearly about what is the reason for the change"
Challenge the Process	Challenge Faculty	The academic leader describes how they might challenge their faculty to innovate.	"It's even in that concept of inspiring change and inspiring people to be willing to do things differently..."
Enable Others to Act	Positive Cooperation	The academic leader provides reasons for people working and cooperating together.	"I sit with them and discuss about my experiences with them, and again I encourage them to talk to other folks"

The final codes are presented in a list format inside each of the five topics that were derived from the theoretical framework of the research. These codes and themes address five research topics to investigate academic leadership methods that build high-performing faculty teams in higher education departments that are focused on technology. Table 6 displays the connections between the study topics, the themes, and the codes.

Table 6*Coding Themes Connected to Research Questions*

Number	Theme	Research Question	Codes
1	Model the way	What are the leadership strategies that build high-	Model Values; Lead by Example; Hire Based on Skill; Clear Rules;

Number	Theme	Research Question	Codes
		performing faculty teams in higher-education technology departments that model the way?	Clarify Values
2	Inspire a shared vision	What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that inspire a shared vision?	Shared Vision; Set Performance Goals; Get Others on Board; Communicate Frequently
3	Challenge the process	What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that challenge the process?	Challenge Faculty; Experiment and Take Risks; Learn From Mistakes; Provide Support
4	Enable others to act	What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that enable others to act?	Accountability; Build Confidence; Face-to-Face Interactions; Positive Cooperation; Reputation
5	Encourage the heart	What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that encourage the heart?	Clear Standards; Foster Community; Recognition

Instruments for Data Analysis

The free and open-source qualitative coding tool, Taguette (Rampin & Rampin, 2021), was used for the coding process. The tool was simple to use and allowed the researcher to separate each participant transcript for analysis and highlight identified codes. To begin, the researcher imported relevant textual data sources into Taguette. Taguette's highlighting and tagging features were used to identify key themes, patterns, and trends within the data. By

tagging specific words or phrases, the researcher was able sort and group them together for further analysis.

One of the primary benefits of Taguette is its flexibility. The ability to create custom tags and groupings, allowed the researcher to organize data in a way that made sense for the research questions. This would also allow for greater depth and nuance in the analysis.

Another valuable feature of Taguette was its collaboration capabilities. The secondary reviewer accepted the use of this tool for their own analysis. The secondary reviewer created their own project in Taguette and tagged the same data sources as the main researcher. This would allowed both the main researcher and the secondary reviewer to work separately on the same data sources and compare their findings afterwards. The main researcher and the secondary reviewer could met to discuss their findings by comparing their codes and discussed any discrepancies or differences in their interpretations. In addition, the secondary reviewer used Taguette's export feature to share their project data, codes, and highlights with the main researcher which allowed the data to be analyzed more closely. Finally, the process of data analysis included the use of Google Docs and Google Sheets for activities such as the creation of the codebook, the comparison of the data from secondary reviewers, and the calculation of intercoder reliability.

Instrument Credibility and Dependability

If one is to give credence to the findings of a study then the findings need to be substantiated with participant data (Sinkovics et al., 2008). This study included data triangulation (Guba & Lincoln, 1985) and member checking in order to increase the dependability of the results (Creswell & Creswell, 2018). The inclusion of a secondary reviewer in the coding process was done in order to further strengthen the credibility and dependability of the study that was

conducted (Hyatt, 2013).

Triangulation of the data was used so that the conclusions would have a higher degree of reliability (Guba & Lincoln, 1985). Data triangulation was made possible through the use of several sources of data (Creswell & Poth, 2017). In order to increase the credibility of the study, various methods and data sources were investigated, including publicly accessible artifacts. Through analysis of the data obtained from LinkedIn, university websites, and interview transcripts, it was discovered that the data obtained from artifacts and interviews were consistent with one another.

Initial reviews and corrections to all transcripts were performed via a process of member checking. Afterward, the transcripts were returned to the individuals who had been interviewed. The procedure was implemented to adequately confirm the data obtained (Creswell & Creswell, 2018). The seven people who were first interviewed all passed the member check.

One secondary reviewer was included in the coding process to further ensure the study's reliability and dependability. This coding was performed by a single secondary reviewer with expertise in leadership theories and practices and a current doctorate student. Methods for collaborative data analysis with peers were based on Hyatt's (2013) 10 steps. Hyatt's (2013) 10-step process was applied to establish interreviewer dependability and support the trustworthiness of this study. As listed in Chapter 3, the 10-step process that was followed is:

1. After finishing their data analysis, the primary researcher met with the secondary reviewer to discuss their coding strategy.
2. The secondary reviewer will be introduced to the coding process by reviewing a transcript chosen by the primary researcher.
3. The transcript with the researcher's annotations was kept.

4. A pristine copy of the chosen transcript was sent to the second reviewer.
5. The researcher and reviewer read the transcript together before analyzing it to ensure mutual understanding and to address any issues the reviewer may have.
6. The researcher reviewed the text, interpreted the main concept, evaluated the match with the research question, and identified a relevant and suitable theme in order to help the reviewer finish the study of one chosen transcript.
7. Separately, the researcher and reviewer coded the transcript in order to ensure coding uniformity. In order to facilitate comparisons across secondary reviewers, the researcher used a Google Sheet. Researchers and reviewers also have their own columns in which to insert the codes.
8. Independent of the first researcher, the second reviewer repeated the procedure with the remaining transcripts.
9. Once all transcripts were finished, the main researcher and reviewer met again to go over the results they had found, address any discrepancies, and reach a consensus.
10. Agreement was reached on criteria for major themes once data was offered in support of them.

Figure 2 shows an example of the secondary reviewer collaboration through the coding process.

Figure 2

Sample from Secondary Reviewer Comparison Sheet

Item	Interview Question	Tag	Primary Coder	Secondary Coder	Agreement	Disagreement	Difference
1	1	accomplish common goals	clarify values	clarify values	0	0	0
2	1	build common objectives, and common goals to accomplish what we need to accomplish	clarify values	clarify values	0	0	0
3	2	collaborative structure of faculty and the self-governance nature of the faculty and things are a lot easier to accomplish if it is motivated by faculty	get others on board	get others on board	0	0	0
4	2	aligned to their objectives	shared vision	shared vision	0	0	0
5	2	depending on how we communicate	communicate frequently	communicate frequently	0	0	0
6	2	how faculty interests are aligned with the objective of the change	shared vision	-	0	1	-1
7	2	the more they align, the easier to accomplish the goal	shared vision	-	0	1	-1
8	2	we try to align with the faculty's interest	shared vision	shared vision	0	0	0
9	3	That they are researchers. They are innovators	experiment and take risks	experiment and take risks	0	0	0
10	3	provide whatever resources they need	provide support	provide support	0	0	0
11	3	provide incentives to generate interest	challenge faculty	challenge faculty	0	0	0
12	3	make sure that the faculties are tuned into the outside world in terms of teaching	challenge faculty	challenge faculty	0	0	0
13	3	we have been trying to experiment with different models, different technologies	experiment and take risks	experiment and take risks	0	0	0
14	3	If something fails, then we move on to the next thing.	learn from mistakes	learn from mistakes	0	0	0
15	4	therefore respect is the key	reputation	reputation	0	0	0
16	4	for me, is to respect faculty and to understand, what they need	positive cooperation	positive cooperation	0	0	0
17	4	try to understand where they are coming from	positive cooperation	positive cooperation	0	0	0
18	4	There's to educate faculty, and to make them understand that I'm not in their way to just be a roadblock to what they want	accountability	-	0	1	-1
19	5	to be productive to foster a healthy and positive environment	foster community	foster community	0	0	0

The intercoder reliability (ICR) of the transcripts was also determined in addition to the aforementioned ten processes. Researchers often equate ICR with inter-rater reliability. Intercoder consistency refers to the use of peer review to assess the validity of data analysis as results are compiled (Creswell & Poth, 2017). The term "intercoder agreement" describes when two or more researchers reach a consensus on a set of data codes. When several data analyzers provide consistent results for the same portions of text, this is known as intercoder agreement. One of the simplest approaches and methods for computing ICR is to simply compute the percentage of agreement (McHugh 2012). In a matrix that will be used to determine the percentage of agreement, each reviewer will be represented by a column and the data variables by rows. In order to indicate whether the two reviewers agreed or disagreed, a 0 or 1 was inserted in each column of the matrix. To emphasize the disparity in the reviewers' ratings, a third column

was added to illustrate the difference. The degree of agreement was then determined by dividing the total number of zeros by the total number of variables. The formula was as follows:

$$ICR = \text{Number of Zeros} \div \text{the number of variables}$$

A percent agreement score of 80% or greater will be deemed reliable (McHugh 2012).

The primary coder and the secondary coder each conducted their own analyses of the data, and then compared their results to arrive at the same conclusions on the themes.

Table 7

Secondary Reviewer Reliability

Transcript	ICR
Participant A	.84
Participant B	.94
Participant C	.90
Participant D	.86
Participant E	.93
Participant F	.94
Participant G	.89

With an ICR above 80% for each participant, the coding of the data can be considered reliable.

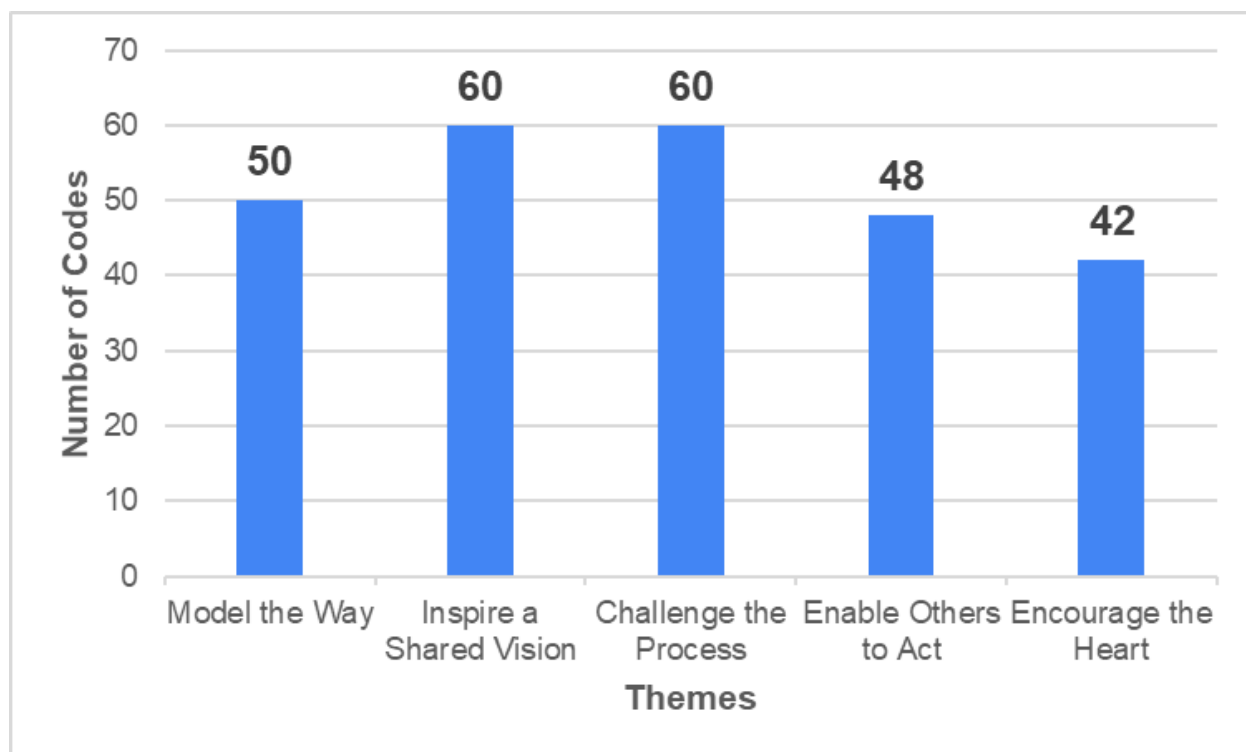
Results

The study's overall research focus was on the leadership strategies of academic leaders that build high-performing teams for technology-focused departments in higher education. The main research question asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments? To respond to this inquiry, five research subquestions were formulated. Figure 3 illustrates the number of codes that were found

for each of the major themes of this study.

Figure 3

Number of Codes for Each Research Question

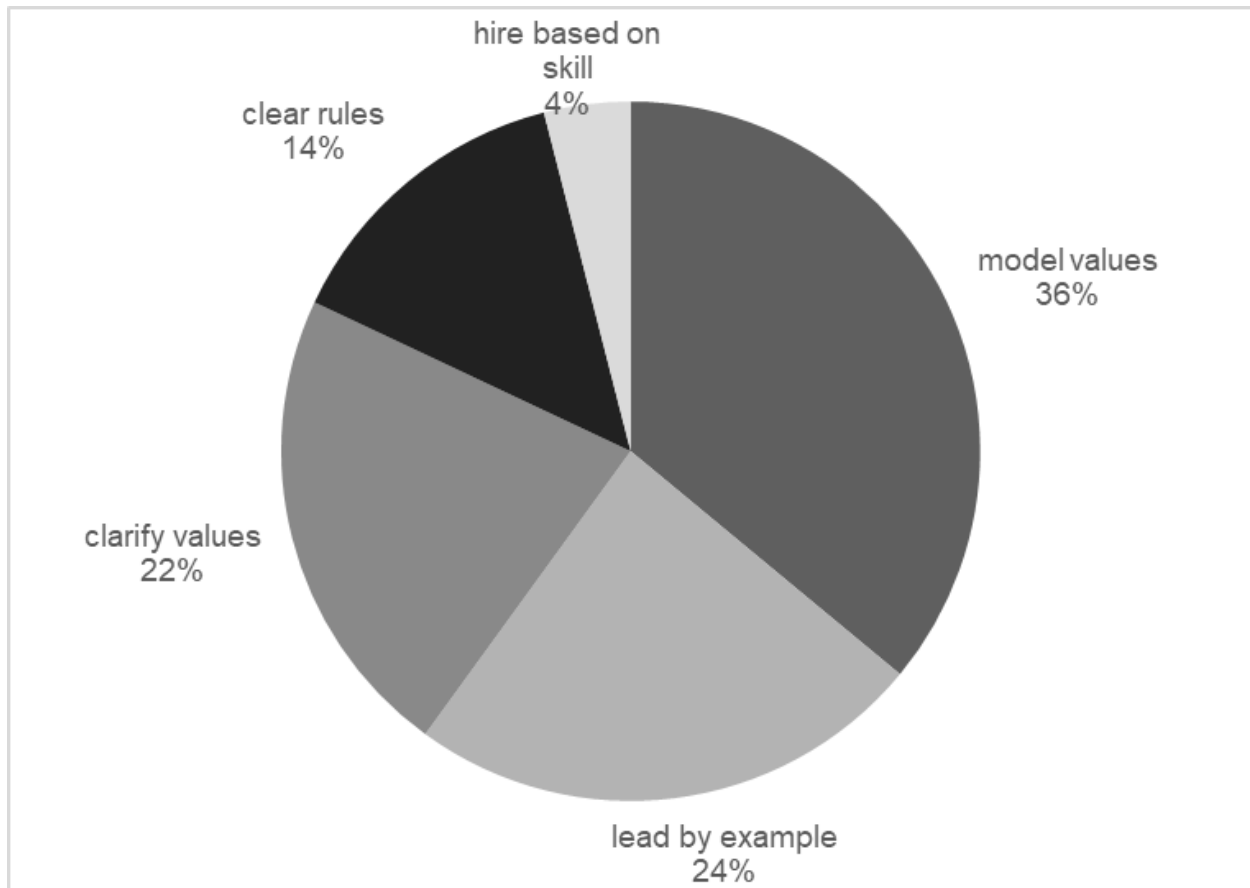


Research Subquestion 1 and Corresponding Data

Research Subquestion 1 asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that model the way? This particular research subquestion is derived from the theoretical framework's model the way theme. Seven interviews were conducted, and 50 codes were discovered. Codes found to be connected with the themes are as follows: (RS1a) model values, (RS1b) lead by example, (RS1c) clarify values, (RS1d) clear rules, and (RS1e) hire based on skill. The codes for research subquestion 1 are shown in Figure 4.

Figure 4

Research Subquestion 1 and Associated Codes



Code RS1a: Model Values. This code examined how academic leaders model their belief system. Eighteen codes were identified as areas in which academic leaders can model their values. Some examples include:

- “And hopefully that models for them, how they should be interacting with each other, how they should be interacting with you, how they should be interacting with students, how they should be interacting with staff” (Participant C).
- “We have our mission statements and our statements of values and things, and we

actually pay attention to that, and one of them is honesty and transparency. So, what I think we've all tried to do is whenever we're confronted with a fraught situation or a dilemma where there's not necessarily going to be happiness on all sides of the equation when it's done. Just to stick with our values" (Participant B).

- "And what I try to do for faculty is support them and mentor them in these areas. But I also try to fulfill those obligations on my own by taking on teaching assignments that others wouldn't" (Participant E).

Code RS1b: Lead By Example. Academic leaders lead by example by providing examples of how their behaviors provide faculty with methods to change. There were 12 codes that were identified between all the participants.

- "One thing I would mention is taking a collaborative approach to decision making so I rarely make a decision in a vacuum" (Participant F).
- "When I'm sitting with them and trying to support and advise them, I can point to courses like graduate courses that I've taken on that are fairly new, and that I've built out data science courses that I've built out, and the different techniques that I use in the area of scholarship. That's something that I also stay on top of and publish on a regular basis. I just finished writing a textbook, co-authoring a textbook, I should say and so that's very helpful. You have to lead out a little bit" (Participant E).
- "It is a way of sort of dealing with situations as they arise, rather than sort of waiting until they become chronic" (Participant B).

Code RS1c: Clarify Values. In modeling the way, academic leaders also need to clarify their values to their faculty. Eleven codes were found that described the various ways that academic leaders clarify their values to their faculty.

- “I motivate them by trying to accomplish common goals and I work with a small group of people who are in a somewhat leadership position, and the main thing is to build common objectives, and common goals to accomplish what we need to accomplish” (Participant A).
- “The guidance that we provide is through identifying priorities contextualizing against what the Provost and the President are thinking about, or actively communicating around a particular topic” (Participant G).
- “Set expectations for the folks as they come in, but I get to articulate them [values] with every single potential new hire. What my expectations for them are” (Participant D).

Code RS1d: Clear Rules. In order for faculty to follow their academic leader, clear rules also need to be established. Seven codes from the interview participants describe the way they communicated rules.

- “And there's a whole lot more that we do in the hiring process to ensure that we have broad and diverse pools, but that's for me setting the standards are setting the standards at the time of hiring” (Participant D).
- “They know that I take their feedback seriously and they know that there's honesty and transparency behind my reasoning for the decision making” (Participant C).
- “Faculty governance processes that through those processes lead to identification or structure of committees” (Participant G).

Code RS1e: Hire Based on Skill. Hiring can be of importance when academic leaders are forming their faculty teams. There were only two instances of quotes for hiring based on skill. One quote references how to hire new faculty:

- “I really focus on working with department leads and search committees to create a

structure that ensures that we are actually hiring very, very appropriately for the positions that we've got” (Participant D).

The other quote references how to bring faculty through the tenure and promotion process:

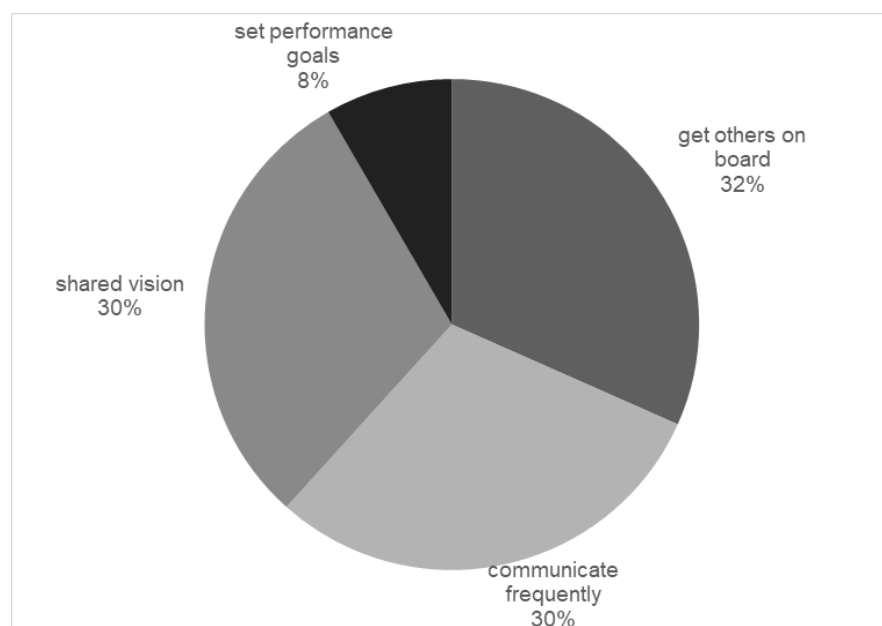
- “There are different guidelines in terms of the promotion and tenure process, and those are the key aspects that I try to model as a dean. So, we have a teaching component. We have a scholarship component, and we have a service component” (Participant E).

Research Subquestion 2 and Corresponding Data

Research Subquestion 2 asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that inspire a shared vision? This research subquestion stems from the theoretical framework's emphasis on the importance of inspiring a shared vision. Sixty codes were found. Thematically related codes are as follows: (RS2a) get others on board, (RS2b) communicate frequently, (RS2c) shared vision, and (RS2d) set performance goals. Subquestion 2 research codes are shown in Figure 5.

Figure 5

Research Subquestion 2 and Associated Codes



Code RS2a: Get Others on Board. For academic leaders to inspire a shared vision amongst their faculty teams, they need to get them on board to their vision. Nineteen codes were identified that describe how academic leaders were able to get their faculty on board to their vision.

- “The nature of the collaborative structure of faculty and the self-governance nature of the faculty and things are a lot easier to accomplish if it is motivated by faculty” (Participant A).
- “Creating a new department is really hard. It requires a vote of the faculty, and it was a multi-year process of engaging from the bottom up, talking to the faculty, who'd be engaged. Make sure they want to do this” (Participant B).
- “Helping to inform folks of what is going on, and why changes are either necessary or beneficial” (Participant D).

Code RS2b: Communicate Frequently. The interviewed academic leaders also emphasized that they need to communicate frequently with their faculty in order for their vision to be understood across their teams. Eighteen codes were identified that presented solutions for how academic leaders can communicate with greater frequency.

- “Lots of discussions, tours talking, talking to smaller larger groups of faculty, engaging a wide cross section of the faculty in this campaign, and then that culminated in an official vote of the faculty which was overwhelmingly positive” (Participant B).
- “I spent probably 6 months just talking to people about how the budget worked” (Participant D).
- “Part of it is dialogue that may, depending on the initiative, start with the unit. Leadership may start with individual faculty. It really depends upon the nature of the opportunity”

(Participant G).

Code RS2c: Shared Vision. In order for change to occur, academic leaders often create a shared vision of the change they want to implement. Eighteen different codes were identified that describe how academic leaders have created a shared vision with their faculty teams.

- “If we are considering change there needs to be a mission driven imperative” (Participant C).
- “So, I do tend to center on what benefits our students in the long run, their success getting them through programs” (Participant E).
- “Bring it back to the mission that everybody has kind of signed up for when they took this job” (Participant F).

Code RS2d: Set Performance Goals. When academic leaders set goals for their faculty, they are able to begin moving towards being inspired by and understanding the vision of their academic leader. Five codes identified areas in which academic leaders set performance goals to inspire their faculty.

- “Having various planning exercises to look at the risk matrix of who would potentially be affected by these changes, or both in a positive and negative way” (Participant B).
- “Background explanation about what the opportunity is and beginning to...I did articulate what some of the really positive impacts could be along the way to understanding what the unit or that group’s questions are. What are their concerns?” (Participant G).

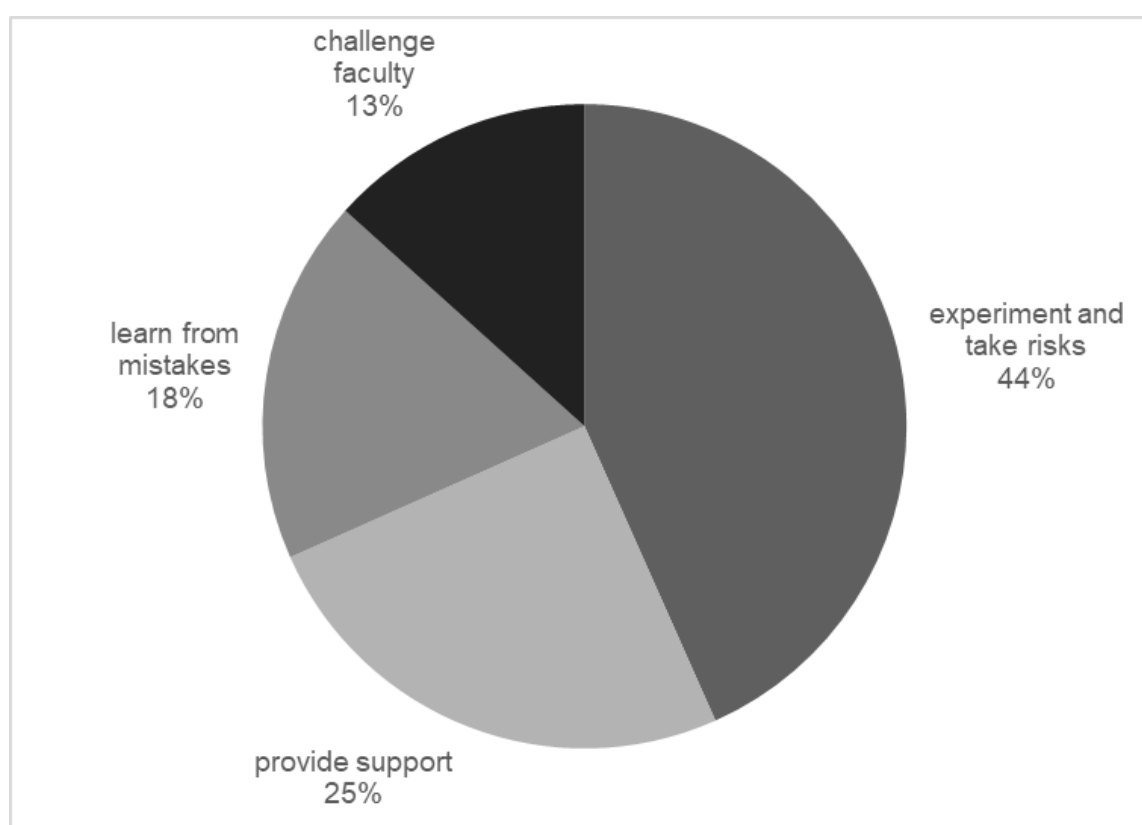
Research Subquestion 3 and Corresponding Data

Research Subquestion 3 asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that challenge the process?

This specific research topic is developed from the challenge the process theme of the theoretical framework. Sixty codes were uncovered for this theme. The following codes were determined to be associated with the themes: (RS3a) experiment and take risks, (RS3b) provide support, (RS3c) learn from mistakes, (RS3d) challenge faculty, and (RS3e) clear standards. Figure 6 displays the research subquestion three codes.

Figure 6

Research Subquestion 3 and Associated Codes



Code RS3a: Experiment and Take Risks. Academic leaders encourage their faculty to experiment and take risks so they can feel emboldened to try new things. Twenty-six codes describe the numerous ways that academic leaders encourage experimentation and risk-taking.

- “You can do that by putting in structures that encourage experimentation. Encourage change. Reward change. Reward trying” (Participant B).

- “You can go try things that aren't necessarily, historically core to your discipline. And we think that's good” (Participant D).

There were also quotes that expressed experimenting and taking risks in the form of valuing innovation or innovative faculty:

- “Rely on the faculty's own initiative. That they are researchers. They are innovators” (Participant A).
- “Constant communication. Meaning you value innovation. You support risk taking. And, in fact, one of our school’s values is supporting risk taking, to communicate directly that oftentimes innovation is not going to work out the way you envision” (Participant G).

Code RS3b: Provide Support. Not only do academic leaders encourage experimentation and risk-taking amongst their faculty teams, they also provide support for them during the experiment. Fifteen codes were identified that provide instances in which academic leaders support their faculty.

- “And if I can, it's to stay out of their way and to provide whatever resources they need” (Participant A).
- “So, we emphasize to our faculty that we will support them across the board” (Participant E).
- “Let's not worry about the rules too much” (Participant F).

Code RS3c: Learn From Mistakes. Academic leaders also ask their faculty teams to learn from their mistakes if an experiment did not work out. There were 11 codes found that describe how academic leaders encourage their faculty to learn from their mistakes.

- “If something fails, then we move on to the next thing” (Participant A).
- “The overriding message that we send out is that it's okay to not succeed” (Participant E).

- “Communicating that oftentimes, even if that particular experiment doesn't turn out the way that you had envisioned it inevitably. You're expecting data experiences that inform the next successful undertaking” (Participant G).

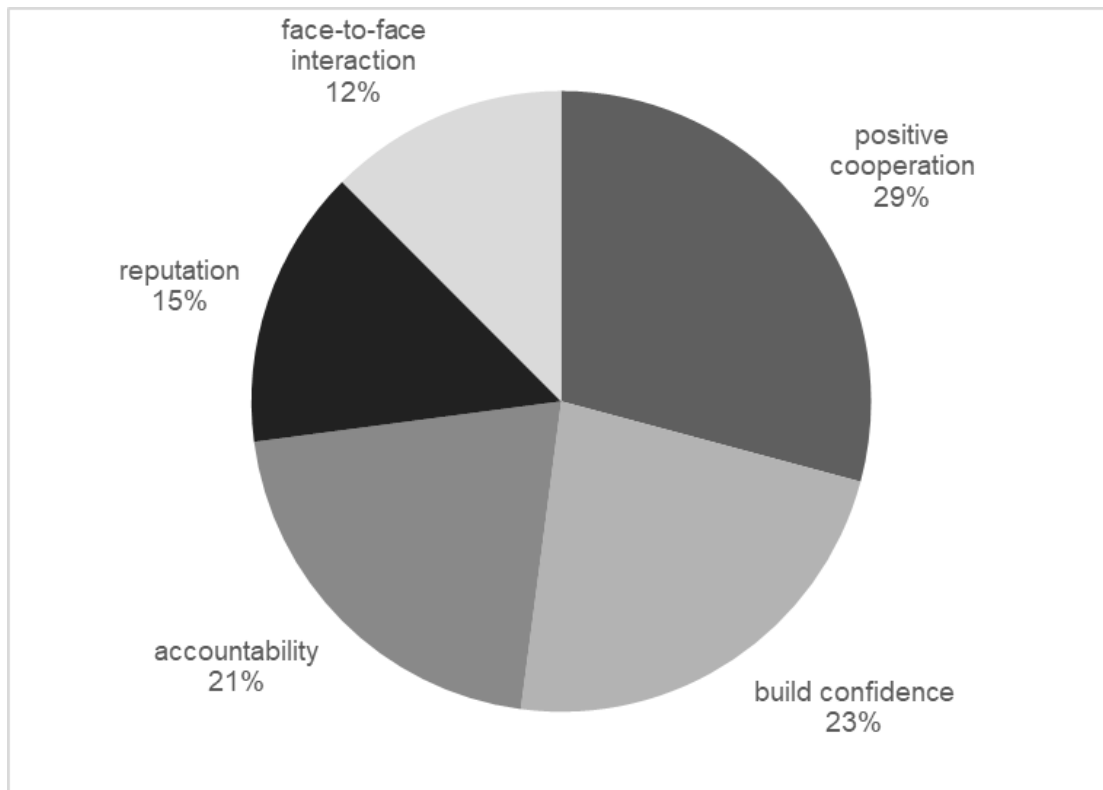
Code RS3d: Challenge Faculty. In challenging faculty, academic leaders seek to inspire them to innovate and try new things. Eight codes were found between the interview participants that specifically describes how academic leaders challenge their faculty.

- “And so, we have to in many ways to once again make sure that the faculties are tuned into the outside world in terms of teaching. And most of the time faculty are receptive” (Participant A).
- “It's even in that concept of inspiring change and inspiring people to be willing to do things differently that nothing is set in stone” (Participant C).
- “We expect innovation and entrepreneurship. (Participant F).

Research Subquestion 4 and Corresponding Data

Research Subquestion 4 asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that enable others to act? This specific research subquestion is drawn from enabling others to act in the theoretical framework of this study. Forty-eight codes were found that were associated with this theme. The codes that align are the following: (RS4a) positive cooperation, (RS4b) build confidence, (RS4c) accountability, (RS4d) reputation, and (RS4e) face-to-face interactions. Figure 7 displays the research subquestion four codes.

Figure 7

Research Subquestion 4 and Associated Codes

Code RS4a: Positive Cooperation. Academic leaders that are able to describe how and why faculty should work together and are able to build positive cooperation are identified in this code. Specifically, several participants described how they were able to build positive cooperation by relating to the faculty after having been faculty in the past. Fourteen codes were identified that described instances where academic leaders were able to find ways to create positive cooperation with their faculty.

- “A lot of listening and confronting the issue, head on with the various groups of stakeholders” (Participant B).
- “A lot of times I can point to things where I've tried it. And again, I think that is the key element that allows faculty to back up and say, okay. All right. Let's have a discussion. I

understand” (Participant E).

- “I sit with them and discuss my experiences with them, and again I encourage them to talk to other folks” (Participant E).
- “I came through the faculty rank. I had the same M.O. throughout, and so more than gaining is keeping good trust” (Participant F).

Code RS4b: Build Confidence. To enable faculty to act, it is important for academic leaders to build confidence in their faculty so they can feel free to take action. Several academic leaders pointed to referencing their own experience as faculty to build confidence in their faculty members. Eleven codes were identified that describe how academic leaders have built confidence in their faculty.

- “You know you've gone this route, or at least tried to go this route. So, let's talk about it, and how it might be able to benefit faculty” (Participant E).
- “I understand the role of leadership and supporting and enabling the faculty” (Participant G).
- “So, I’m going to continue to be that collaborative person with extreme frankness” (Participant F).

Code RS4c: Accountability. Leaders that are accountable to their actions and decisions are often able to build trust within their faculty. Ten codes were found that provide insights into how academic leaders hold themselves accountable.

- “There's to educate faculty, and to make them understand that I'm not in their way to just be a roadblock to what they want” (Participant A).
- “And I'm gonna share an update every quarter, and anybody who wants to come and ask me questions can come and ask me questions” (Participant C).

- “So, if a faculty member asks me a question, and I have the answer, and it doesn't violate anything to share it with them. I'll tell them” (Participant D).

Code RS4d: Reputation. A positive reputation amongst the faculty can assist in enabling the faculty to act and building trust amongst them. There were seven codes that were identified amongst the various participants that describe how their reputation enabled them to build trust.

- “You build a reputation through both actions large and small and hopefully when you are confronted with a challenge where you need the trust of your faculty, they will abide by your decision making and say, okay, even though I may not totally agree with the outcome of that process. I trust that they were good actors, and faithfully deliberated” (Participant B).
- “Just really being honest and not giving faculty a reason not to trust me” (Participant C).
- “I haven't changed at all the way I approach decision making, and they see this, and so I came from my position to trust, and I didn't change my m.o.” (Participant F).

Code RS4e: Face-to-Face Interaction. Some academic leaders described several (six) instances where face-to-face interaction was important in order to enable their faculty to act.

- “Calling people up and getting their opinions over coffee” (Participant B).
- “And I'm gonna share an update every quarter, and anybody who wants to come and ask me questions can come and ask me questions” (Participant C).

Research Subquestion 5 and Corresponding Data

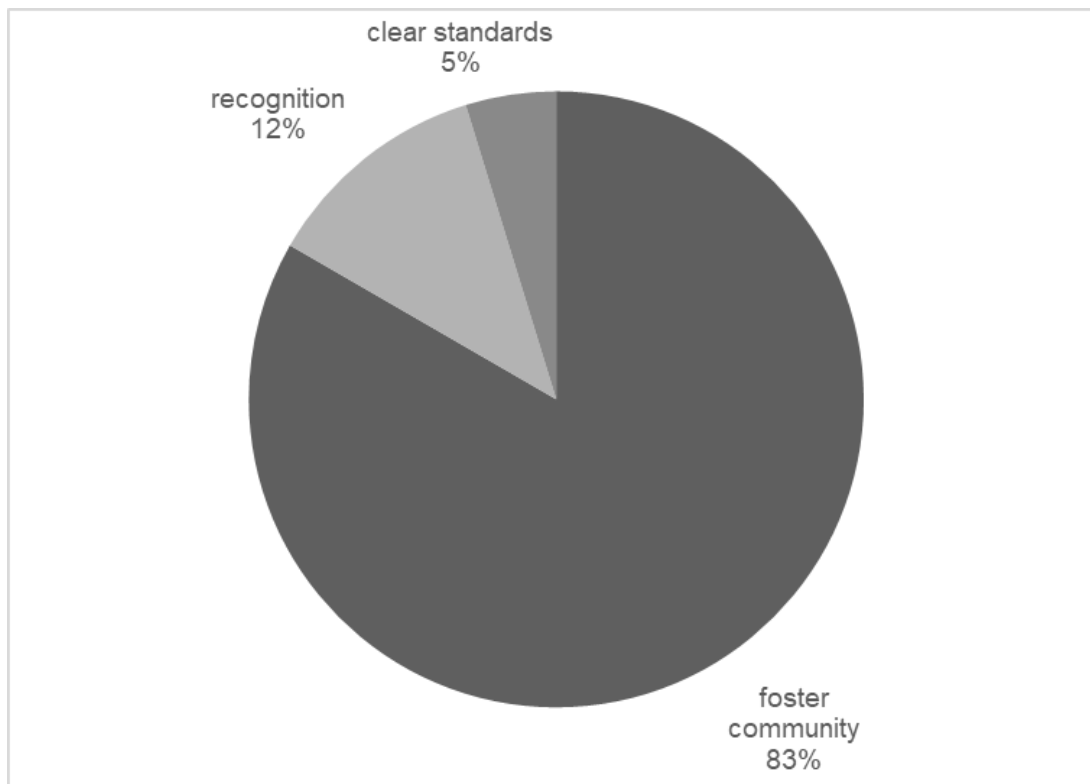
Research Subquestion 5 asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that encourage the heart?

This research subquestion stems from the theoretical framework's underlying encourage the heart

theme. As a result of the seven interviews, 42 codes were deciphered. Thematically related codes are as follows: (RS5a) foster community, (RS5b) recognition, and (RS5c) clear standards. The fifth research sub-question codes are shown in Figure 8.

Figure 8

Research Subquestion 5 and Associated Codes



Code RS5a: Foster Community. The most frequently occurring code (35) described how academic leaders felt that fostering community amongst their faculty was the most important way to encourage collaboration.

- “To be productive to foster a healthy and positive environment” (Participant A).
- “Finding ways to enable more in-person interactions has turned out to be really useful” (Participant B).
- “Finding opportunities to get people in a room together” (Participant C).

- “We are going to create spaces that support engagement of diverse groups and support their ability to develop friendships” (Participant D).
- “New faculty are welcomed in a lot of different ways, and they're made to feel at home with the faculty that have been there for a while” (Participant E).
- “And social interaction is, you need to see your fellow faculty as someone like you need to know a little bit about their family” (Participant F).
- “Promote a lot of dialogue, conversation, and just connection” (Participant G).

Code RS5b: Recognition. Some academic leaders described how recognizing the accomplishments of their faculty was an important aspect of building camaraderie. Five codes were identified that spoke to recognizing faculty.

- “I created some inclusivity awards” (Participant C).
- “Recognize that this good idea can be supported” (Participant G).

Code RS5c: Clear Standards. A lesser found code (2) had academic leaders setting clear standards for their faculty to follow so they are able to understand the expectations of the community.

- “Being clear and consistent about shared vision around goals supporting their effort, providing tangible support” (Participant G).

Another academic leader described how setting standards for faculty to share course materials contributed to them bonding:

- “And I've encouraged other faculty as mentors to the new faculty as well as sharing their course material just straight up...that builds the trust and the camaraderie, and incentivizes conversations between faculty, which I think is a key thing” (Participant E).

Summary

The fourth chapter described the data analysis procedure and the findings of research that examined how academic leaders build high-performing faculty teams for a technology-focused department in higher education. The five steps of data analysis outlined by Creswell and Creswell (2018) served as a broad framework for the data analysis procedure. During data processing, Hyatt's (2013) 10-step procedure for collaborating with a secondary reviewer was also utilized to enhance the study's dependability. Furthermore, member checking (Guba & Lincoln, 1985), and data triangulation (Creswell & Poth, 2017) were used and described in this chapter. This chapter concluded with results derived from the study questions. Seven semi-structured, one-on-one interviews were conducted throughout the data gathering phase. The data analysis provided an overview of how academic leaders build high-performing faculty teams for technology-focused departments. Five core themes were identified as part of this research that correlates to the theoretical framework from Kouzes and Posner (2019): model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. Each of these five themes was used to create the code categories. Fundamental coding constructs were established under these five themes. First, to model the way, academic leaders model values, lead by example, clarify their values, have clear rules, and hire based on skill. Next, to inspire a shared vision, academic leaders get others on board, communicate frequently, share their vision, and set performance goals. Third, in challenging the process, academic leaders will specifically challenge their faculty, encourage them to experiment and take risks, to learn from their mistakes, and they will provide faculty with support. Fourth, by enabling faculty to act, these academic leaders would have positive cooperation, build a good reputation, be accountable, build confidence in their faculty, and encourage face-to-face interactions. Finally, to encourage the

heart, academic leaders would foster community, recognize their faculty accomplishments, and be clear about their standards for faculty in their departments. A discussion and summary on the key findings, conclusions, and implications are presented in the final chapter.

Chapter 5: Findings and Conclusions

Higher education institutions have increasing difficulties adjusting to quickly evolving technologies (Wildavsky et al., 2011). Academic programs in technology-focused departments of higher education must regularly update their curriculum to keep up with the fast pace of technological advancement (Ra et al., 2019; Valverde, 2016). There is constant demand on academic programs to ensure that their curriculum maintains pace with the rapid changes in technological growth and innovation (Gibbons, 2016). It might be difficult for academic programs in higher education to keep up with these technological developments. Leaders of academic technology-focused departments who are forward-thinking may offer academic programs with the tools required to implement change in their technology-focused departments. Moreover, academic leaders who transform their departments' faculty into high-performing teams would be more successful at instituting the essential continuing reforms to keep their departments current with modern technologies (Hutt & Speh, 2007).

This research investigates the ways that academic leaders in higher education might use to build high-performing teams for technology-focused departments. This is an area with far-reaching significance that enhances the efficacy of higher education institutions and their ties to industry (Getz et al., 1997; Wildavsky et al., 2011). This study aims to address these difficulties by providing academic leaders with techniques for building high-performing faculty teams capable of addressing these issues within their technology-focused departments.

Chapter Structure

This chapter's aim is to provide a synopsis of the research, including such topics as the issue, the study's goals and questions, the theoretical framework, the methodology, the protection of human subjects, the study's participants, and the data collecting and analysis procedure. The

study's results, conclusions, and limitations are explored, as are its implications and recommendations for further investigation.

Review of Purpose and Research Questions

The objective of this research is to analyze the many ways that leaders in higher education might use in order to build high-performing faculty teams for departments that are focused on technology. The following research questions were employed to better understand this objective.

The central guiding research question for this study is:

- What are the leadership strategies that build high-performing faculty teams in higher-education technology departments?

Subquestions that support this study are:

- Research Subquestion 1: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that model the way?
- Research Subquestion 2: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that inspire a shared vision?
- Research Subquestion 3: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that challenge the process?
- Research Subquestion 4: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that enable others to act?

- Research Subquestion 5: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that encourage the heart?

Review of Theoretical Framework

The Leadership Model: The Five Practices of Exemplary Leadership Model by Kouzes and Posner (1987, 2019) was used as the theoretical basis for this study's research. As a foundational model for the activity of leadership, Kouzes and Posner (2019) provided five exceptional leadership principles as an overarching framework. The five practices that they defined are as follows: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart (Kouzes & Posner, 2019). A thorough evaluation of the relevant literature showed a correlation between leadership and high-performing teams. For this reason, the study will continue to explore high-performing faculty teams in technology-focused departments within higher education institutions by using the five leadership principles described by Kouzes and Posner (2019).

Review of the Methods

This qualitative research used a narrative method. After receiving approval from the IRB at Pepperdine University, qualitative data were collected through Zoom video interviews with a total of seven participants. The selection of participants followed a purposeful sampling (Creswell & Poth, 2017) strategy, with the goal of eliciting feedback from academic leaders who have experience leading technology-focused departments at universities. Both inductive and deductive methods were used to assess the data.

Review of Human Subject Protections

Due to the minimal risk to research participants, this study qualified for exempt review

by the IRB. All standards and principles established by Pepperdine University's IRB were adhered to during the course of this research study. After a thorough assessment by the IRB committee at Pepperdine University, clearance was given to move forward with the research. All participants were informed of the processes and dangers involved in the study and the researcher answered any questions or concerns they might have had before the interview began. Each participant signed informed consent forms and they were gathered and stored in a secure location on an encrypted hard drive. All responses from participants were protected from disclosure. Each participant was allocated a pseudonym to conceal their identity (Roberts & Hyatt, 2019). All obtained electronic data were stored in a secured encrypted hard drive that is protected by a password.

Review of the Participants

Seven individuals were interviewed after being recruited via the use of purposive sampling. The seven participants were all qualified to take part in the research. There were four academic deans and three associate deans working at universities among these individuals who participated in the interview. There was a wide variety of experience among the participants, ranging from 4 to 23 years of serving as an academic leader at a university or college that is technology-focused.

Review of Data Collection and Analysis

Individual interviews ranging from 10 to 30 minutes in length were conducted with participants who agreed to take part in the research and satisfied the requirements for the study. Information that was freely accessible online, such as on university websites and LinkedIn were also investigated as part of this data collection. All files were encrypted and placed on an external hard disk that was kept in a secure location by the researcher. The data from the

interviews were transcribed using the auto-transcription tool provided by Zoom. The correctness of each of the recordings and transcriptions was checked, and any necessary corrections were made after the initial auto transcription. Afterwards, the procedure of member checking was performed in order to strengthen the credibility of the research. Each participant was provided with a transcript of their respective interview and given the opportunity to verify the correctness of the data.

The five steps of data analysis outlined by Creswell (2004) were utilized, and these steps were as follows:

1. Review data in the text files.
2. Separate text into smaller sections of information.
3. A code is used to identify each section of information.
4. Code duplication is identified.
5. Compress codes to allow for subject-based categorization.

Throughout the coding process, both inductive and deductive methodologies were employed. Taguette was used for the coding process throughout the data analysis procedure. Taguette proved to be a very useful tool in tagging and organizing codes for this study as it streamlined the process and allowed for better organization of codes. In addition, a doctoral student with expertise in leadership studies participated as a secondary reviewer in the coding process so that a credible assessment could be obtained. The usage of Taguette with the secondary reviewer was also beneficial, since it provided a straightforward method for communicating and understanding the data.

Key Findings

Academic leaders were able to provide insights into leadership practices that gave

thoughtful reflection of the study's central research question: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments? The data analysis resulted in a synthesis of data pertinent to the study's overarching research question.

Five main themes related to the theoretical framework were identified: academic leaders practice leadership strategies in building high-performing faculty teams for technology-focused departments by: (a) modeling the way, (b) sharing an inspired vision, (c) challenging the faculty process, (d) enabling faculty to act, and (e) encouraging the heart. Within these five main themes, sub themes of academic leadership emerged:

- In modeling the way, academic leaders model values, lead by example, clarify values, set clear rules, and hire based on skill.
- To inspire a shared vision, academic leaders get others on board, communicate frequently, share their vision, and set performance goals.
- In challenging the faculty process, academic leaders encourage faculty to experiment and take risks, they provide support for their faculty, allow them to learn from their mistakes, and challenge them to innovate.
- To enable faculty to act, academic leaders have positive cooperation with faculty, build confidence in them, are accountable, have a good reputation, and encourage face-to-face interaction.
- To encourage the heart, academic leaders foster community with their faculty, recognize faculty accomplishments, and have clear standards.

Conclusions

The literature evaluation validated the study's results and contributed to the existing body of research. After a thorough review of the research data, five conclusions were formed for this

study. Each conclusion is accompanied by a discussion of the significance for academic leaders and potential leadership strategies.

Conclusion 1: Academic Leaders Model the Way

According to Kouzes and Posner (2019), before leaders model the way and effectively guide others, they must first have a firm grasp on their own identity. The clarity of their identity allows for them to share their values and guiding principles with their team. It is much simpler for a leader to gain the trust of their team if they are transparent about the values they uphold (Kotter, 2012). Leaders set the example for their teams and exemplify the behaviors they expect of their followers (Kouzes & Posner, 2019).

The results of this study indicate that academic leaders at various universities across the country model the way for their faculty teams in technology-focused departments by using several approaches of building high-performing teams. A majority of the academic leaders in this study have different ways in which they model their values (Brockner and Higgins, 2001), lead by example (Fredberg & Pregmark, 2022; Potters et al., 2007) and clarify their values (Kouzes & Posner, 2019) to their faculty teams. The literature notes that how a leader models their behavior can have an impact on the overall culture of the team (Whitehurst, 2017). Therefore, academic leaders would want to consider ensuring that they model and clarify these values to ensure that the culture of their department is reflective of themselves. Participants noted that sticking their values and articulating them to their faculty was incredibly important to them to be successful leaders. Some academic leaders also indicated that the clear rules (Grossman, 1997; Katzenbach & Smith, 2005; Lambert et al., 2002; Schiefer & van der Noll, 2017) they state and maintain allows faculty to further understand and trust (Chan et al., 2006) their decision-making. Thus, it would be important for academic leaders to consider developing clear rules and guidelines for

the faculty to follow to ensure they are able to build understanding and trust amongst their faculty team. Participants in the study reflected on how the clear rules they set for their faculty leads to greater understanding and improved process flow. Furthermore, other academic leaders reflected on the importance of the hiring and promotion of faculty based on their qualifications and skills (Boynton & Fischer, 2015). When hiring based on skill, academic leaders are able to fill voids and ensure that the values of the institution would also be values of the new faculty member. Some participants commented on how important it was to be part of the hiring process to ensure that the values of the people they are hiring align with that of the team and the university. These findings support the literature on high-performing teams and its connection to modeling the way.

Research subquestion 1: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that model the way? The major sub themes that were found to associate with this question were: model values, lead by example, clarify values, clear rules, and hire based on skill. These leadership strategies were identified as ways in which academic leaders could model the way:

- Strategy 1: Modeling values and exhibit behaviors they seek of their faculty team.
- Strategy 2: Lead by example by demonstrating to their faculty what is expected of them and by doing the action that is expected of them.
- Strategy 3: By clarifying their values with the faculty, the academic leader could contribute significantly to the formation of a cohesive faculty team.
- Strategy 4: Set clear rules and guidelines have greater cooperation with the faculty.
- Strategy 5: Hire based on skill and build teams with values in mind is an important aspect of modeling the way.

Conclusion 2: Academic Leaders Inspire a Shared Vision

Kouzes and Posner (2019) described leaders that have a shared vision as needing to be clear, describe events that might happen, articulate the best interests of the team, the vision is realistic for the team, and is easy to communicate. Additionally, they noted the importance of getting followers on board with the plan as one of the incredibly important aspects of having a shared vision. Leaders that listen deeply to their followers can allow them to manage their team and allow them to form that shared vision to move forward on their goals (Garvin & Roberto, 2005; Kouzes & Posner, 2019).

The findings of this research suggest that academic leaders may inspire a shared vision among their faculty teams in technology-focused departments by using a number of the strategies for building high-performing teams. The vast majority of the academic leaders who participated in this research offered a variety of ways that they get others on board and develop a shared vision with their faculty teams. Faculty are more likely to get on board with an academic leader's plans if they can share in the leader's aspirations of the future (Kouzes & Posner, 2019; Senge, 2006). Participants described how they needed to work from the bottom up starting with faculty to get them aligned with their goals in order to move forward. Results also indicated that academic leaders believe that communicating frequently with their faculty is important to move towards shared goals. The frequency of communication and who is communicated to is important if academic leaders have broad goals they are seeking to accomplish (Friedman, 2021). Academic leaders might want to consider encouraging communication outside of their faculty teams (Pentland, 2015) to promote greater trust and collaboration (Chan et al., 2006). Many of the participants described how the frequency in which they communicated was important towards building a shared understanding of the goals of the university. Additionally, academic

leaders reflected on how setting performance goals is important for developing the shared vision of the team. Setting performance goals allows academic leaders to provide minor successes, (Amabile & Kramer, 2011) or a shared understanding of the goals (Lambert et al., 2002) they have laid out for the faculty and can improve communication and collaboration efforts (Kotter, 2012). Research showing a correlation between high-performing teams and the ability to inspire a shared vision is supported by these results.

Research subquestion 2 asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that inspire a shared vision? The major sub themes that connect with this question were: get others on board, communicate frequently, developing a shared vision, and set performance goals. These leadership strategies were found as ways in which academic leaders could inspire a shared vision:

- Strategy 1: Listen deeply and express the vision in a way that allows faculty to understand goals.
- Strategy 2: Communicate frequently with faculty teams so that the goals can be clearly understood.
- Strategy 3: Establishing a shared vision with the faculty allows academic leaders to collaboratively move forward with their goals.
- Strategy 4: By setting performance goals for their faculty, academic leaders are enabling their faculty to have a clear understanding of the vision so they can move forward cohesively.

Conclusion 3: Academic Leaders Challenge the Process

Leaders that challenge the process ask their followers to take risk and to take initiative

(Kouzes & Posner, 2019). Furthermore, Kouzes and Posner (2019) describe resilience as being a trait that leaders should work towards fostering in their followers so they would be more willing to take risks. Through resilience, followers can learn from mistakes and continue to take more risks and try innovative approaches.

The results of this research imply that academic leaders may be able to challenge the processes of their faculty teams in technology-focused departments by using a variety of strategies for developing high-performing teams. The majority of academic leaders in this research engage faculty in different ways that ask them to experiment and take risks and learn from mistakes. Experimentation allows faculty to be challenged with new information and can present new opportunities to learn and make mistakes (Katzenbach & Smith, 2005). Participants spoke of how important it was to encourage experimentation and how they ask faculty to move outside of their area of comfort. Additionally, the results indicated that academic leaders believe that providing significant support for faculty during these experiments will allow them to continue to innovate. Academic leaders want to reflect on developing a safe space for their faculty to make mistakes by providing the support and resources necessary to experiment (Katzenbach & Smith, 2005). Faculty that do not feel supported are unlikely to want to experiment. Many participants remarked how they do not ask their faculty to experiment without also providing support for them when they take those risks. Furthermore, academic leaders noted that when they challenge the faculty in a variety of ways it often leads to further innovation. For example, study participants spoke of how they ask their faculty to be aware of what is happening in the outside world, so they can understand the changes that are coming in technology. This awareness allows faculty to continue to innovate their classes as they are made aware of changes that are occurring in the industry. Academic leaders who consider challenging their faculty to

surpass expectations are likely to have faculty who innovate (Boynton & Fischer, 2015). The correlation between high-performing teams and challenging the process is supported by these findings.

Research subquestion 3 asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that challenge the process? The major sub themes that were found to associate with this question were: experiment and take risks, provide support, learn from mistakes, and challenge faculty. These leadership strategies were identified as ways in which academic leaders could challenge the process:

- Strategy 1: Encourage faculty to experiment and take risks.
- Strategy 2: Provide support that will allow faculty to innovate.
- Strategy 3: Encourage faculty to learn from their mistakes as these learnings can further faculty innovation.
- Strategy 4: Challenge faculty to grow and move past their current knowledge and capabilities to spark innovation.

Conclusion 4: Academic Leaders Enable Others to Act

Trust is one of the foundations of enabling others to act as followers are less likely to engage in any goals of the leader if no trust is established (Kouzes & Posner, 2019). Once a climate of trust is established, followers can work cooperatively and communicate more effectively with their leaders and goals are more likely to be reached (Nienaber et al., 2015).

The outcomes of this study indicate that academic leaders may enable their faculty to act by using a variety of approaches for building high-performing teams. A majority of the academic leaders in this study have diverse ways in which they positively cooperate with their faculty and build confidence in them. Participants described that they would positively cooperate with their

faculty by listening and creating reasons for them to work with other faculty. Academic leaders who create positive experiences and express them outwards are more likely to have faculty cooperate (Friedman, 2021). To build confidence in a faculty team, academic leaders want to consider how they could first build trust (Schiefer & van der Noll, 2017). Research participants noted that relating to the faculty in a way that enables them to understand that they know where the faculty member is coming from can be one step towards building trust. Once trust is built, confidence can follow by using positive reinforcement to allow the faculty to increase their effectiveness in the department (Cameron et al., 2011). Additionally, results indicated that academic leaders who hold themselves accountable and focus on building a good reputation amongst their faculty are likely to be successful enabling action with their faculty teams.

Accountability can be found by sticking to the standards and guidelines that the academic leaders put in place for the faculty to follow so they can perform at a high level (Grossman, 1997). These standards are important for building cooperation and trust (Fukuyama, 2000) between the faculty and the academic leader. An academic leader's reputation could be damaged if they do not hold themselves accountable to their actions and do not follow their own set of standards. One participant noted, once trust is lost with the faculty, it is incredibly difficult to get it back. Furthermore, academic leaders stated that face-to-face interaction with the faculty is important for spurring action towards common goals. It is important for academic leaders to create opportunities for faculty to be face-to-face with them and each other as this is a common theme for building a successful team (Pentland, 2015). These results corroborate the research linking high-performing teams with enabling faculty to act.

Research subquestion 4 asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that enable others to act?

The major sub themes that were found to associate with this question were: positive cooperation, build confidence, accountability, reputation, and face-to-face interaction. These leadership strategies were identified as ways in which academic leaders could enable faculty to act:

- Strategy 1: Develop positive cooperation with faculty by developing a reason for them to work together or build an understanding towards a common goal.
- Strategy 2: When mentoring faculty teams, build confidence by empathizing with their circumstances and relating prior experiences to theirs.
- Strategy 3: To be accountable, academic leaders own their actions and words and do not falter or change their stance on issues.
- Strategy 4: Build and maintain the reputation they want to have within their faculty team.
- Strategy 5: Continual face-to-face interaction amongst the faculty to further build trust for academic leaders with their faculty.

Conclusion 5: Academic Leaders Encourage the Heart

Leaders encourage the heart by celebrating their followers' accomplishments and motivating their followers (Kouzes & Posner, 2019). Setting clear standards is important for leaders to implement as it can increase the confidence and motivation of their followers (Hollenbeck & Brief, 1987; Locke, 1968). Additionally, fostering community amongst followers allows for greater team building and allows them to share knowledge and find support within their community (Gratton and Erickson, 2021).

Findings from this study indicate that academic leaders may encourage the heart of faculty teams by using several strategies to form high-performing teams. The majority of academic leaders in this research foster community among their faculty in a variety of methods. All participants indicated that fostering community was of incredible importance to encourage

collaboration. Each participant noted that they tried to find ways to get faculty in the same room together and speaking on non-work topics. These academic leaders found that when faculty are able to interact in this way, they build greater bonds (Kraut et al., 2012) and are more comfortable reaching out and sharing knowledge (Gratton & Erickson, 2021). Furthermore, results indicated that academic leaders should recognize the accomplishments of their faculty to further foster a sense of community. Appreciation and praise of faculty can increase their motivation to work towards future goals (Kraut et al., 2012). Recognition can also create a positive work culture and improve the wellbeing of the faculty (Seppälä & Cameron, 2015). Lastly, academic leaders should create clear standards and goals for their faculty to follow to further align them with the community. Some participants mentioned that the standards that they set often are reciprocated by the faculty (Kouzes & Posner, 2019), so it was important for them to be clear about their standards (Katzenbach & Smith, 2005). These results corroborate the research on high-performing teams and their correlation to encourage the heart.

Research subquestion 5 asked: What are the leadership strategies that build high-performing faculty teams in higher-education technology departments that encourage the heart? The major sub themes that were found to associate with this question were: foster community, recognition, and clear standards. These leadership strategies were identified as ways in which academic leaders could encourage the heart:

- Strategy 1: Foster community with the faculty to build more connections and allow them to engage with their peers and their academic leader.
- Strategy 2: Provide recognition of accomplishments and rewards for goals that have been met.
- Strategy 3: Set clear standards to enable faculty to understand expectations and work

towards shared goals.

Results Overview

This study explored strategies that higher-education leaders can utilize to build high-performing teams for technology-focused departments. A qualitative narrative approach was used to conduct interviews with seven academic leaders from universities throughout the country. Data was analyzed and organized to correspond with the study's research questions. Following Hyatt's (2013) 10-step process, the researcher and a second reviewer examined the data to enhance the study's credibility. Codes were organized into sub themes that align with major themes defined by the theoretical framework of this study. Twenty-one strategies were discovered that academic leaders can use to build high-performing teams for their technology-focused departments. The strategies are divided amongst the core themes of the study. Five strategies correspond to the theme model the way, four strategies relate to the theme inspire a shared vision, four strategies connect to the theme challenge the process, five strategies coincide to the theme enable others to act, and three strategies align to the theme encourage the heart. The breakdown of the strategies and their alignment to the major themes can be seen in Table 8.

Table 8

Leadership Strategies Connections to Theoretical Framework

Leadership Principle	Leadership Strategy
Model the Way	<ul style="list-style-type: none"> ● Modeling values and exhibit behaviors they seek of their faculty team. ● Lead by example by demonstrating to their faculty what is expected of them and by doing the action that is expected of them. ● By clarifying their values with the faculty, the academic leader could contribute significantly to the formation of a cohesive faculty team.

Leadership Principle	Leadership Strategy
	<ul style="list-style-type: none"> ● Set clear rules and guidelines have greater cooperation with the faculty. ● Hire based on skill and build teams with values in mind is an important aspect of modeling the way.
Inspire a Shared Vision	<ul style="list-style-type: none"> ● Listen deeply and express the vision in a way that allows faculty to understand goals. ● Communicate frequently with faculty teams so that the goals can be clearly understood. ● Establishing a shared vision with the faculty allows academic leaders to collaboratively move forward with their goals. ● By setting performance goals for their faculty, academic leaders are enabling their faculty to have a clear understanding of the vision so they can move forward cohesively.
Challenge the Process	<ul style="list-style-type: none"> ● Encourage faculty to experiment and take risks. ● Provide support that will allow faculty to innovate. ● Encourage faculty to learn from their mistakes as these learnings can further faculty innovation. ● Challenge faculty to grow and move past their current knowledge and capabilities to spark innovation.
Enable Others to Act	<ul style="list-style-type: none"> ● Develop positive cooperation with faculty by developing a reason for them to work together or build an understanding towards a common goal. ● When mentoring faculty teams, build confidence by empathizing with their circumstances and relating prior experiences to theirs. ● To be accountable, academic leaders own their actions and words and do not falter or change their stance on issues. ● Build and maintain the reputation they want to have within their faculty team. ● Continual face-to-face interaction amongst the faculty to further build trust for academic leaders with their faculty.
Encourage the Heart	<ul style="list-style-type: none"> ● Foster community with the faculty to build more connections and allow them to engage with their peers and their academic leader. ● Provide recognition of accomplishments and rewards for goals that have been met. ● Set clear standards to enable faculty to understand expectations and work towards shared goals.

The themes of this study indicate a direct connection between approaches to building

high-performing teams and Kouzes and Posner's Five Practices of Exemplary Leadership (2019).

Implications

This narrative qualitative research study sought to examine and determine the leadership strategies that academic leaders use to build high-performing faculty teams for their technology-focused departments. The results of this study could be used to support other academic leaders in delivering strategies that they could use to improve upon their leadership or for new academic leaders to use as a guide in starting their position. The 21 strategies that have been identified can lead to academic leaders in technology-focused departments to improve their leadership strategies with their faculty to promote greater collaboration and innovation amongst their faculty teams.

The conducted research indicated several strategies that academic leaders can use to build high-performing teams. To model the way, academic leaders must model their values, lead by example, clarify their values, set clear rules, and hire based on skill. Academic leaders who inspire a shared vision should get others on board, communicate frequently, share their vision, and set performance goals. To challenge the process, academic leaders encourage their faculty to experiment and take risks, provide support for experimentation, allow faculty to learn from mistakes, and challenge their faculty to learn more. To enable their faculty to act, academic leaders positively cooperate with their faculty, build confidence in their faculty, hold themselves accountable, maintain their reputation, and encourage face-to-face interactions. Lastly, to encourage the heart, academic leaders foster community amongst their faculty, recognize faculty accomplishments, and set clear standards for their faculty to follow. The implications of this research provide actionable strategies that academic leaders can follow to build high-performing teams.

Limitations of the Study

There are some limitations that are associated with this study. First, while the COVID-19 pandemic was not a hurdle in interviewing the participants as all participants expressed that they were back on campus after having been remote. However, each participant identified the pandemic as a challenge for them in fostering community amongst their faculty. Many expressed challenges in getting their faculty to come to campus outside of their class times to collaborate. The results of the study indicated this challenge by a large margin with the sub theme of “fostering community” being the largest area of agreement (83%) for all codes analyzed in this study. If conducted at a different time, academic leaders may have expressed different results or challenges to encourage the heart amongst their faculty teams. Second, the interviews were limited to seven academic leaders throughout the United States. The results may differ if other academic leaders from specific parts of the country or other countries were selected as part of this research.

Recommendations for Future Research

Kouzes and Posner’s Five Practices for Exemplary Leadership (2019) served as a good foundation for this research study. It provided a broad set of tools that academic leaders can use to become better leaders. This is a framework that could be used further to find other connections that might exist in other areas of academia.

Because the COVID-19 pandemic was identified as a limitation due to how prevalent the “fostering community” subtheme was in this study, future researchers could investigate conducting this study at a later time when the issues that came about in the aftermath of the COVID-19 pandemic are not as persistent. Another area of consideration would be to expand upon the people interviewed in this study within academic technology-focused departments. This

research study focused on only academic leaders and their relationships with faculty in their departments. Future areas of research could look at connections that academic leaders have outside of the faculty and how these connections might also intersect. For instance, one of the participants of this research study suggested that further research could be done to look at how staff play a role in building high-performing teams. This participant stated:

There has to be intentionality in fostering a sense of teamwork between faculty and staff...a leader at my level needs to ensure that they tend to both communities, and they also tend at the totality of that community as one team.

Researchers could investigate the relationship between faculty, staff, and the academic leader and how these leadership strategies might be different. Additionally, since this was a qualitative study, researchers could conduct a quantitative approach that may yield more expansive results which could provide supplementary information to gain deeper insights into this area of research. Furthermore, researchers could conduct a new area of research that looks into how academic leaders are fostering community post-pandemic. The prevalence of “fostering community” in the research indicates that more investigations into how academic leaders are fostering community amongst their faculty and staff is needed. Moreover, this research only questioned academic leaders, but a study that interviews faculty and staff to determine what they believe constitutes high-performing faculty teams might give greater insight into how academic leaders can develop their leadership strategies.

Summary

Academic leaders in technology-focused departments within universities often face challenges in staying up-to-date with ever evolving technology (Wildavsky et al., 2011). While there is considerable literature on high-performing teams (Abbott & Bush, 2013; Bush & Glover,

2012; Goodall, 2013), there is a lack of research in how high-performing teams intersect with higher education technology-focused departments. The lack of research in this area provided an opportunity to grow the knowledge of this field in a different area and explore how high-performing teams can relate to academic technology-focused departments.

The results of this study indicated that academic leaders of technology-focused departments use leadership strategies that closely align with key factors and approaches that build high-performing teams. Twenty-one strategies were uncovered that breakdown and intersect with the key themes of Kouzes and Posner's Five Practices of Exemplary Leadership (2019). Further areas of research could explore how staff might also enhance team cohesion and performance within faculty teams. This study builds upon the research of high-performing teams and adds to the growing body of literature by incorporating how faculty within technology-focused higher education departments can become a high-performing team.

REFERENCES

- Abbott, I., & Bush, T. (2013). Establishing and maintaining high-performing leadership teams: A primary perspective. *Education 3-13*, 41(6), 586–602.
<https://doi.org/10.1080/03004279.2011.611813>
- Al-Husseini, S., El Beltagi, I., & Moizer, J. (2019). Transformational leadership and innovation: the mediating role of knowledge sharing amongst higher education faculty. *International Journal of Leadership in Education*, 24(5), 670–693.
<https://doi.org/10.1080/13603124.2019.1588381>
- Alexander, P. A. (2003). The development of expertise: The journey from acclimation to proficiency. *Educational Researcher*, 32(8), 10–14.
<http://www.jstor.org/stable/3700080>
- Altbach, P. G. (1991). Patterns in higher education development: Toward the year 2000. *Review of Higher Education*, 14(3), 293–316. <https://doi.org/10.1353/rhe.1991.0015>
- Amabile, T., & Kramer, S. (2011). The power of small wins. *Harvard Business Review*.
<https://hbr.org/2011/05/the-power-of-small-wins>
- Arzi, H. J., & White, R. T. (2008). Change in teachers' knowledge of subject matter: A 17-year longitudinal study. *Science Education*, 92(2), 221–251. <https://doi.org/10.1002/sci.20239>
- Assbeihat, J. M. (2016). The impact of collaboration among members on team's performance. *Management and Administrative Science Review*, 5(5), 248–259.
- Ball, D. L., & Cohen, D. K. (1996). Reform by the book: What is: Or might be: The role of curriculum materials in teacher learning and instructional reform? *Educational Researcher*, 25(9), 6. <https://doi.org/10.2307/1177151>
- Bass, B. M. (1985). *Leadership and Performance Beyond Expectations*. Free Press.
- Beauvais, C., & Jenson, J. (2002). Social cohesion: Updating the state of the research. *Canadian*

Policy Research Networks. 22.

- Beck, S., & Keyton, J. (2009). Perceiving strategic meeting interaction. *Small Group Research*, 40(2), 223–246. <https://doi.org/10.1177/104649640833300>
- Berger-Schmitt, R. (2000). Considering social cohesion in quality of life assessments: Concept and measurement. *Social Indicators Research Series*, 14, 403–428. https://doi.org/10.1007/0-306-47513-8_18
- Bills, D. B. (2016). Living, learning, and the new higher education. *Contemporary Sociology*, 45(6), 690–695. <https://doi.org/10.1177/0094306116671948>
- Bogdan, R. C. & Biklen, S. K. (1998). *Qualitative research in education: An introduction to theory and methods* (3rd ed.). Allyn & Bacon
- Boje, D. (2008). *Storytelling organizations* (1st ed.). SAGE Publications.
- Bolman, L. G., & Deal, T. E. (2017). *Reframing organizations: Artistry, choice, and leadership* (6th ed.). John Wiley & Sons.
- Boynton, A., & Fischer, B. (2015, July 15). Virtuoso teams. *Harvard Business Review*. <https://hbr.org/2005/07/virtuoso-teams>
- Bradler, C., Dur, R., Neckermann, S., & Non, A. (2016). Employee recognition and performance: A field experiment. *Management Science*, 62(11), 3085–3099. <https://doi.org/10.1287/mnsc.2015.2291>
- Brockner, J., & Higgins, E. T. (2001). Regulatory focus theory: Implications for the study of emotions at work. *Organizational Behavior and Human Decision Processes*, 86, 35–66. <https://doi.org/10.1006/obhd.2001.2972>
- Bryer, A. (2020). Making organizations more inclusive: The work of belonging. *Organization Studies*, 41(5), 641–660. <https://doi.org/10.1177/0170840618814576>

- Burns, J. M. (1978). *Leadership*. Harper and Row.
- Bush, T., & Glover, D. (2012). Distributed leadership in action: Leading high-performing leadership teams in English schools. *School Leadership & Management*, 32(1), 21–36. <https://doi.org/10.1080/13632434.2011.642354>
- Butina, M. (2015). A narrative approach to qualitative inquiry. *Clinical Laboratory Science*, 28(3), 190–196. <https://doi.org/10.29074/ascls.28.3.190>
- Cameron, K., Mora, C., Leutscher, T., & Calarco, M. (2011). Effects of positive practices on organizational effectiveness. *Journal of Applied Behavioral Science*, 47(3), 266–308. <https://doi-org./10.1177/0021886310395514>
- Campbell, U., Arrowood, S., & Kelm, M. (2013). Positive work culture: A catalyst for improving employee commitment. *American Journal of Health-System Pharmacy*, 70(19), 1657–1659. <https://doi.org/10.2146/ajhp120712>
- Cassell, K. J. (2021). When “following” the leader inspires action: Individuals’ receptivity to discursive frame elements on social media. *Political Communication*, 38(5), 581–603. <https://doi.org/10.1080/10584609.2020.1829761>
- Chan, J., To, H.-P., & Chan, E. (2006). Reconsidering social cohesion: Developing a definition and analytical framework for empirical research. *Social Indicators Research*, 75(2), 273–302. <https://doi.org/10.1007/s11205-005-2118-1>
- Chang, G. S.-Y., & Lorenzi, P. (1983). The effects of participative versus assigned goal setting on intrinsic motivation. *Journal of Management*, 9(1), 55–64. <https://doi.org/10.1177/014920638300900106>
- Chesla, C. A. (1995). Hermeneutic phenomenology: An approach to understanding families. *Journal of Family Nursing*, 1(1), 63–78. <https://doi-org/10.1177/107484079500100105>

- Ciulla, J. B. (2015). Meaningful work. *Wiley Encyclopedia of Management*, 1–3.
<https://doi.org/10.1002/9781118785317.weom020145>
- Civera, A., Donina, D., Meoli, M., & Vismara, S. (2020). Fostering the creation of academic spinoffs: does the international mobility of the academic leader matter?. *International Entrepreneurship and Management Journal*, 16(2), 439–465.
<https://doi.org/10.1007/s11365-019-00559-8>
- Clarke, N., & Mahadi, N. (2017). Mutual recognition respect between leaders and followers: Its relationship to follower job performance and well-being. *Journal of Business Ethics*, 141(1), 163–178. <https://doi.org/10.1007/s10551-015-2724-z>
- Connor, D. R. (1993). *Managing at the speed of change* (1st ed.). Random House.
- Cowin, K. M., Cohen, L. M., Ciechanowski, K. M., & Orozco, R. A. (2012). Portraits of mentor-junior faculty relationships: From power dynamics to collaboration. *Journal of Education*, 192(1), 37–47. <https://www.jstor.org/stable/42744006>
- Creswell, J. W. (2004). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Pearson.
- Creswell, J. W., & Creswell, D. J. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Cunliffe, A. (2009). The philosopher leader: On relationalism, ethics and reflexivity—A critical perspective to teaching leadership. *Management Learning*, 40(1), 87–101.
<https://doi.org/10.1177/1350507608099315>
- Dannenberg, A. (2015). Leading by example versus leading by words in voluntary contribution

- experiments. *Social Choice and Welfare*, 44(1), 71–85. <https://doi.org/10.1007/s00355-014-0817-8>
- Denzin, N. K., & Lincoln, Y. S. (2005). *The sage handbook of qualitative research* (3rd ed.). Sage Publications.
- Department of Health and Human Services. (2021, June 21). Code of federal regulations. *Office for Human Research Protections*. <https://www.hhs.gov/ohrp/regulations-and-policy/index.html>
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87(4), 611–628. <https://doi.org/10.1037/0021-9010.87.4.611>
- Drew, G. (2010). Issues and challenges in higher education leadership: engaging for change. *Australian Educational Researcher*, 37(3), 57–76. <https://doi.org/10.1007/BF03216930>
- Drouvelis, M., & Nosenzo, D. (2013). Group identity and leading-by-example. *Journal of Economic Psychology*, 39, 414–425. <https://doi.org/10.1016/j.joep.2013.06.005>
- Dworkin, S. L. (2012). Sample size policy for qualitative studies using in-depth interviews. *Archives of Sexual Behavior*, 41(6), 1319–1320. <https://doi.org/10.1007/s10508-012-0016-6>
- Eales-White, R. (2012). Building high-performing teams rapidly. *Industrial and Commercial Training*, 44(7), 424–428. <https://doi.org/10.1108/00197851211268018>
- Easterly, W., Ritzen, J., & Woolcock, M. (2006). Social cohesion, institutions, and growth. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.983117>
- Eckel, P., Green, M., & Barblan, A. (2015). The new (and smaller) world of higher education. *International Higher Education*, 29. <https://doi.org/10.6017/ihe.2002.29.7004>

- Edwards, C. J. (2022). *Experiences of Teacher Educators Utilizing Technology in Teacher Preparation Programs* [Doctoral dissertation, Bowling Green State University]. ProQuest Dissertations and Theses Global.
<https://lib.pepperdine.edu/login?url=https://www.proquest.com/dissertations-theses/experiences-teacher-educators-utilizing/docview/2670010300/se-2>
- Ellonen, R., Blomqvist, K., & Puumalainen, K. (2008). The role of trust in organisational innovativeness. *European Journal of Innovation Management*, 11(2), 160–181.
<https://doi.org/10.1108/14601060810869848>
- Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6). <https://doi.org/10.15406/bbij.2017.05.00149>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
<https://doi.org/10.11648/j.ajtas.20160501.11>
- Etzioni, A. (1968). Basic human needs, alienation and inauthenticity. *American Sociological Review*, 33(6), 870–885. <https://doi.org/10.2307/2092680>
- Fredberg, T., & Pregmark, J. E. (2022). Organizational transformation: Handling the double-edged sword of urgency. *Long Range Planning*, 55(2).
<https://doi.org/10.1016/j.lrp.2021.102091>
- Friedman, R. (2021, October 21). 5 things high-performing teams do differently. *Harvard Business Review*. <https://hbr.org/2021/10/5-things-high-performing-teams-do-differently>
- Fukuyama, F. (1995). Social capital and the global economy. *Foreign Affairs*, 74(5), 89–103.
<https://doi.org/10.2307/20047302>
- Fukuyama, F. (2000). Social capital and civil society. *SSRN Electronic Journal*, 2000(74).

<https://doi.org/10.2139/ssrn.879582>

Gambetta, D. (2000). Can we trust trust? *Trust: Making and Breaking Cooperative Relations*; Department of Sociology, University of Oxford. 213–237.

<http://www.sociology.ox.ac.uk/papers/gambetta213-237.pdf>

Garvin, D. A., & Roberto, M. (2005). Change through persuasion. *Harvard Business Review*.

<https://hbr.org/2005/02/change-through-persuasion>

George, B. (2004). *Authentic leadership: Rediscovering the secrets to creating lasting value* (1st ed.). Jossey-Bass.

Getz, M., Siegfried, J. J., & Anderson, K. H. (1997). Adoption of innovations in higher education. *Quarterly Review of Economics and Finance*, 37(3), 605–631.

[https://doi.org/10.1016/S1062-9769\(97\)90013-2](https://doi.org/10.1016/S1062-9769(97)90013-2)

Gibbons, A. (2016). Do “we” really live in rapidly changing times? Questions concerning time, childhood, technology and education. *Contemporary Issues in Early Childhood*, 17(4), 367–376. <https://doi.org/10.1177/1463949116677921>

Goodall, J. (2013). Recruit for attitude, train for skills: Creating high performing leadership teams. *Educational Management Administration & Leadership*, 41(2), 199–213. <https://doi.org/10.1177/1741143212468350>

Gratton, L., & Erickson, T. (2021, December 22). Eight ways to build collaborative teams.

Harvard Business Review. <https://hbr.org/2007/11/eight-ways-to-build-collaborative-teams>

Grossman, S. (1997). Managers at work: Turning technical groups into high-performance teams.

Research-Technology Management, 40(2), 9–11.

<https://doi.org/10.1080/08956308.1997.11671111>

- Guba, E. G., & Lincoln, Y. S. (1985). *Naturalistic inquiry*. Sage Publications.
- Gumport, P. J. (2007). *Sociology of higher education: Contributions and their contexts*. Johns Hopkins University Press.
- Günter, H., Schreurs, B., van Emmerik, H., & Sun, S. (2017). What does it take to break the silence in teams: Authentic leadership and/or proactive followership? *Applied Psychology: An International Review*, 66(1), 49–77. <https://doi.org/10.1111/apps.12076>
- Hammersley, M., & Atkinson, P. (1995) *Ethnography: Principles in practice* (2nd ed.). Routledge.
- Hollenbeck, J. R., & Brief, A. P. (1987). The effects of individual differences and goal origin on goal setting and performance. *Organizational Behavior and Human Decision Processes*, 40(3), 392–414. [https://doi.org/10.1016/0749-5978\(87\)90023-9](https://doi.org/10.1016/0749-5978(87)90023-9)
- Holton, J. A. (2007). The coding process and its challenges. *The Sage handbook of grounded theory*, 3, 265–289. <https://doi.org/10.4135/9781848607941.n13>
- Horton-Deutsch, S., Pardue, K., Young, P. K., Morales, M. L., Halstead, J., & Pearsall, C. (2014). Becoming a nurse faculty leader: Taking risks by doing the right thing. *Nursing Outlook*, 62(2), 89–96. <https://doi.org/10.1016/j.outlook.2013.12.003>
- Hunter, S. T., Tate, B. W., Dzieweczynski, J. L., & Bedell-Avers, K. E. (2011). Leaders make mistakes: A multilevel consideration of why. *The Leadership Quarterly*, 22(2), 239–258. <https://doi.org/10.1016/j.leaqua.2011.02.001>
- Hutt, M., & Speh, T. (2007). Undergraduate education: The implications of cross-functional, relationships in business marketing-the skills of high-performing managers. *Journal of Business-To-Business Marketing*, 14(1), 75–94. https://doi.org/10.1300/J033v14n01_08
- Hyatt, L. (2013, March). *Dynamic narrative qualitative approach*. [Paper Presentation].

- American Education Research Association Annual Meeting 2013. San Francisco, CA, United States.
- Ibarra, H., & Hansen, M. T. (2015, July 15). Are you a collaborative leader? *Harvard Business Review*. <https://hbr.org/2011/07/are-you-a-collaborative-leader>
- Jenson, J. (2010). *Defining and measuring social cohesion*. Commonwealth Secretariat.
- Jootun, D., McGhee, G., & Marland, G. R. (2009). Reflexivity: Promoting rigour in qualitative research. *Nursing Standard*, 23(23), 42–47.
<https://doi.org/10.7748/ns2009.02.23.23.42.c6800>
- Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative Health Research*, 19(11), 1632–1641. <https://doi.org/10.1177/1049732309350879>
- Karakowsky, L., & Mann, S. (2008). Setting goals and taking ownership. *Journal of Leadership & Organizational Studies*, 14(3), 260–270. <https://doi-org/10.1177/1071791907308047>
- Katzenbach, J. R., & Smith, D. K. (2005). *The wisdom of teams*. McGraw-Hill Education.
- Kearns, A., & Forrest, R. (2000). Social cohesion and multilevel urban governance. *Urban Studies*, 37(5–6), 995–1017. <https://doi.org/10.1080/00420980050011208>
- Kimberly, J. (1979). Issues in the creation of organizations: Initiation, innovation, and institutionalization. *Academy of Management Journal*, 22(3), 437–457.
<https://doi.org/10.2307/255737>
- Kisker, C. B., & Carducci, R. (2003). UCLA community college review: Community college partnership with the private sector—Organizational contexts and models for successful collaboration. *Community College Review*, 31(3).
<https://link.gale.com/apps/doc/A114286876/AONE?u=anon~529322ec&sid=googleScholar&xid=b9540c86>

- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of higher education*, 6(5), 26–41. <https://doi.org/10.5430/ijhe.v6n5p26>
- Koerber, A., & McMichael, L. (2008). Qualitative sampling methods. *Journal of Business and Technical Communication*, 22(4), 454–473. <https://doi-org/10.1177/1050651908320362>
- Kotter, J. P. (2012). *Leading change*. Reed Business Education.
- Kouzes, J. M., & Posner, B. Z. (1987). *The leadership challenge: How to get extraordinary things done in organizations* (1st ed.). Jossey-Bass.
- Kouzes, J. M., & Posner, B. Z. (2019). *Leadership in higher education: Practices that make a difference*. Berrett-Koehler Publishers.
- Kraut, R. E., Resnick, P., Kiesler, S., Burke, M., & Chen, Y. (2012). *Building successful online communities*. Amsterdam University Press.
- Krishnan, V. R. (2002). Transformational leadership and value system congruence. *International Journal of Value-Based Management*, 15(1), 19–33. <https://doi.org/10.1023/A:1013029427977>
- Lambert, L., Walker, D., Zimmerman, D. P., Cooper, J. E., Lambert, M. D., Gardner, M. E., & Szabo, M. (2002). *The Constructivist Leader* (2nd ed.). Teachers College Press.
- Latham, G., Borgogni, L., & Petitta, L. (2008). Goal setting and performance management in the public sector. *International Public Management Journal*, 11(4), 385–403. <https://doi-org/10.1080/10967490802491087>
- LeBlanc, L. A., & Nosik, M. R. (2019). Planning and leading effective meetings. *Behavior Analysis in Practice*, 12(3), 696–708. <https://doi.org/10.1007/s40617-019-00330-z>
- Levine, A. (1997). Higher education becomes a mature industry. *About Campus*, 2(3).

<https://doi.org/10.1177/108648229700200310>

Lewin, K. (1947). Frontiers in group dynamics: Concept, method and reality in social science:

Social equilibria and social change. *Human Relations*, 1(1), 5–41.

<https://doi.org/10.1177/001872674700100103>

Liao, H., & Hitchcock, J. (2018). Reported credibility techniques in higher education evaluation

studies that use qualitative methods: A research synthesis. *Evaluation and Program*

Planning, 68, 157–165. <https://doi.org/10.1016/j.evalprogplan.2018.03.005>

Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational*

Behavior and Human Performance, 3(2), 157–189. [https://doi.org/10.1016/0030-](https://doi.org/10.1016/0030-5073(68)90004-4)

[5073\(68\)90004-4](https://doi.org/10.1016/0030-5073(68)90004-4)

López-Arceiz, F. J., Bellostas, A. J., & Rivera-Torres, M. P. (2017). The slaughtered and the

survivors: Collaboration between social economy organizations as a key to success in

times of financial crisis. *Official Journal of the International Society for Third-Sector*

Research, 28(4), 1622–1647. <https://doi.org/10.1007/s11266-017-9836-2>

Lyubovnikova, J., Legood, A., Turner, N., & Mamakouka, A. (2017). How authentic leadership

influences team performance: The mediating role of team reflexivity. *Journal of Business*

Ethics, 141(1), 59–70. <https://doi.org/10.1007/s10551-015-2692-3>

Malviya, M., Buswell, N. T., & Berdanier, C. G. P. (2021). Visual and statistical methods to

calculate intercoder reliability for time-resolved observational research. *International*

Journal of Qualitative Methods, 20, 1–16. <https://doi.org/10.1177/16094069211002418>

Manning, K. (2017). *Organizational theory in higher education*. Routledge.

Martela, F., Ryan, R. M., & Steger, M. F. (2018). Meaningfulness as satisfaction of autonomy,

competence, relatedness, and beneficence: Comparing the four satisfactions and positive

- affect as predictors of meaning in life. *Journal of Happiness Studies*, 19(5), 1261–1282.
<https://doi.org/10.1007/s10902-017-9869-7>
- Marx, L. M., & Squintani, F. (2009). Individual accountability in teams. *Journal of Economic Behavior and Organization*, 72(1), 260–273. <https://doi.org/10.1016/j.jebo.2009.05.009>
- McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia Medica*, 22(3), 276–82. <https://doi.org/10.11613/bm.2012.031>
- McQueen, L., & Zimmerman, L. (2006). Using the interpretive narrative research method in interdisciplinary research projects. *The Journal of Nursing Education*, 45(11), 475–478.
<https://doi.org/10.3928/01484834-20061101-09>
- Meijer, P. C., Verloop, N., & Beijaard, D. (2002). Multi-method triangulation in a qualitative study on teachers' practical knowledge: An attempt to increase internal validity. *Quality and Quantity*, 36(2), 145–167. <https://doi.org/10.1023/A:1014984232147>
- Neves, P., & Caetano, A. (2006). Social exchange processes in organizational change: The roles of trust and control. *Journal of Change Management*, 6(4), 351–364.
<https://doi.org/10.1080/14697010601054008>
- Newman, P. A., Guta, A., & Black, T. (2021). Ethical Considerations for qualitative research methods during the COVID-19 pandemic and other emergency situations: Navigating the virtual field. *International Journal of Qualitative Methods*, 20.
<https://doi.org/10.1177/16094069211047823>
- Nienaber, A.-M., Romeike, P. D., Searle, R., & Schewe, G. (2015). A qualitative meta-analysis of trust in supervisor-subordinate relationships. *Journal of Managerial Psychology*, 30(5), 507–534. <https://doi.org/10.1108/JMP-06-2013-0187>
- Nightingale, J. (1978). On the Definition of 'Industry' and 'Market'. *The Journal of Industrial*

- Economics*, 27(1), 31–40. <https://doi.org/10.2307/2098116>
- Nolan, K. E., & Doyle, L. E. (2007). Teamwork and collaboration in cognitive wireless networks. *IEEE Wireless Communications*, 14(4), 22–27.
<https://doi.org/10.1109/MWC.2007.4300979>
- Noll, H., (2000). Towards a European system of social indicators: Theoretical framework and system architecture. *Social Indicators Research Series*, 9, 47–87.
https://doi.org/10.1007/0-306-47513-8_4
- Noone, L. K. P. (2000). *Perceived barriers to innovation in higher education among key institutional decision-makers at selected regionally accredited baccalaureate degree-granting institutions*. The Union Institute.
- Northouse, P. G. (2015). *Leadership: Theory and practice* (7th ed.). SAGE Publications.
- O’Neill, T. A., Hancock, S. E., Zivkov, K., Larson, N. L., & Law, S. J. (2015). Team decision making in virtual and face-to-face environments. *Group Decision and Negotiation*, 25(5), 995–1020. <https://doi.org/10.1007/s10726-015-9465-3>
- Orr, M. T. (2001). Community colleges and their communities: Collaboration for workforce development. *New Directions for Community Colleges*, 2001(115), 39–49.
<https://doi.org/10.1002/cc.29>
- Owens, E. O. (2006). Conversational space and participant shame in interviewing. *Qualitative Inquiry*, 12(6), 1160–1179. <https://doi.org/10.1177/1077800406293236>
- Owusu-Agyeman, Y. (2019). Transformational leadership and innovation in higher education: a participative process approach. *International Journal of Leadership in Education*, 24(5), 694–716. <https://doi.org/10.1080/13603124.2019.1623919>
- Pajo, B. (2017). *Introduction to research methods*. SAGE Publications.

- Paradis, E., O'Brien, B., Nimmon, L., Bandiera, G., & Martimianakis, M. A. (2016). Design: Selection of data collection methods. *Journal of Graduate Medical Education*, 8(2), 263–264. <https://doi.org/10.4300/JGME-D-16-00098.1>
- Patton, M. Q. (2001). *Qualitative research & evaluation methods* (3rd ed.). SAGE Publications.
- Pearce, C. L., & Conger, J. A. (2002). *Shared leadership: Reframing the hows and whys of leadership* (1st ed.). SAGE Publications.
- Pearce, C. L., & Sims, H. P. (2000). Shared leadership: Toward a multi-level theory of leadership. *Advances in Interdisciplinary Studies of Work Teams*, 7, 115–139. [https://doi.org/10.1016/S1572-0977\(00\)07008-4](https://doi.org/10.1016/S1572-0977(00)07008-4)
- Pentland, A. (2015, July 15). The new science of building great teams. *Harvard Business Review*. <https://hbr.org/2012/04/the-new-science-of-building-great-teams>
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107–142. [https://doi.org/10.1016/1048-9843\(90\)90009-7](https://doi.org/10.1016/1048-9843(90)90009-7)
- Potters, J., Sefton, M., & Vesterlund, L. (2007). Leading-by-example and signaling in voluntary contribution games: An experimental study. *Economic Theory*, 33(1), 169–182. <http://www.jstor.org/stable/27822588>
- Prigge, G. W. (2005). University-industry partnerships: What do they mean to universities? A review of the literature. *Industry and Higher Education*, 19(3), 221–229. https://readingroom.law.gsu.edu/faculty_pub/1645
- Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1994). *Making democracy work: Civic traditions in modern Italy* (1st ed.). Princeton University Press.

- Ra, S., Shrestha, U., Khatiwada, S., Yoon, S. W., & Kwon, K. (2019). The rise of technology and impact on skills. *International Journal of Training Research*, 17(sup. 1), 26–40. <https://doi.org/10.1080/14480220.2019.1629727>
- Rampin, R., & Rampin, V. (2021). Taguette: open-source qualitative data analysis. *Journal of Open Source Software*, 6(68), 3522, <https://doi.org/10.21105/joss.03522>
- Rego, A., Vitória, A., Magalhães, A., Ribeiro, N., & Cunha, M. P. (2013). Are authentic leaders associated with more virtuous, committed and potent teams? *The Leadership Quarterly*, 24(1), 61–79. <https://doi.org/10.1016/j.leaqua.2012.08.002>
- Roberts, C. M., & Hyatt, L. (2019). *The dissertation journey: A practical and comprehensive guide to planning, writing, and defending your dissertation* (Updated). Corwin.
- Rome, B. K., & Rome, S. C. (1967). Humanistic research on large social organizations. *Challenges of Humanistic Psychology*, 181–193.
- Rybnicek, R., & Königsgruber, R. (2019). What makes industry-university collaboration succeed? A systematic review of the literature. *Journal of Business Economics: Zeitschrift Für Betriebswirtschaft*, 89(2), 221–250. <https://doi.org/10.1007/s11573-018-0916-6>
- Schafft, K. A., & Brown, D. L. (2003). Social capital, social networks, and social power. *Social Epistemology*, 17(4), 329–342. <https://doi.org/10.1080/0269172032000151795>
- Schiefer, D., & van der Noll, J. (2017). The essentials of social cohesion: A literature review. *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement*, 132(2), 579–603. <https://doi.org/10.1007/s11205-016-1314-5>
- Senge, P. M. (2006). *The fifth discipline: The art & practice of the learning organization* (Revised & Updated ed.). Doubleday.

- Seppälä, E., & Cameron, K. (2015, December 1). Proof that positive work cultures are more productive. *Harvard Business Review*. <https://hbr.org/2015/12/proof-that-positive-work-cultures-are-more-productive>
- Sheldon, K. M., & Filak, V. (2008). Manipulating autonomy, competence, and relatedness support in a game-learning context: New evidence that all three needs matter. *The British Journal of Social Psychology*, 47(Pt 2), 267–283.
<https://doi.org/10.1348/014466607x238797>
- Shirey, M. R. (2004). Social support in the workplace: Nurse leader implications. *Nursing Economic\$, 22(6)*, 313–319.
- Silverman, D. (2013). *Doing qualitative research: A practical handbook* (4th. ed.). Sage.
- Simon, M. K., & Goes, J. (2010). *Dissertation and Scholarly Research*. Createspace Independent Pub.
- Sinkovics, R. R., Penz, E., & Ghauri, P. N. (2008). Enhancing the trustworthiness of qualitative research in international business. *Management International Review*, 48(6), 689–713.
<https://www.jstor.org/stable/40658289>
- Stanovich, P. J. (1996). Collaboration—The key to successful instruction in today’s inclusive schools. *Intervention in School and Clinic*, 32(1), 39–42.
<https://doi.org/10.1177/105345129603200108>
- Stewart, J. (2006). Transformational leadership: An evolving concept examined through the works of Burns, Bass, Avolio, and Leithwood. *Canadian Journal of Educational Administration and Policy*, (54), 1–29.
- Stogdill, R. M. (1950). Leadership, membership and organization. *Psychological Bulletin*, 47(1), 1–14. <https://doi.org/10.1037/h0053857>

- Sutton, J., & Austin, Z. (2015). Qualitative research: Data collection, analysis, and management. *The Canadian Journal of Hospital Pharmacy*, 68(3), 226–231.
<https://doi.org/10.4212/cjhp.v68i3.1456>
- Sutton, K. K., & DeSantis, J. (2017). Beyond change blindness: embracing the technology revolution in higher education. *Innovations in Education and Teaching International*, 54(3), 223–228. <https://doi.org/10.1080/14703297.2016.1174592>
- Tillman-Scott, R., Bates, M., Glynn, C., Bourgault, C., MacDonald, D., & Zevzavadgian, J. (1994). Education and collaboration: The key to success. *Journal of the American Dietetic Association*, 94(9), 47. [https://doi.org/10.1016/0002-8223\(94\)91748-5](https://doi.org/10.1016/0002-8223(94)91748-5)
- Turato, E. R. (2005). Qualitative and quantitative methods in health: Definitions, differences and research subjects. *Revista de Saude Publica* 39(3), 507–514.
<https://doi.org/10.1590/s0034-89102005000300025>
- U.S. Bureau of Labor Statistics. (2021, September 8). *Computer and information technology occupations*. <https://www.bls.gov/ooh/computer-and-information-technology/home.htm>
- Valverde, S. (2016). Major transitions in information technology. *Philosophical Transactions of the Royal Society of London, Series B, Biological Sciences*, 371(1701), 1–12.
<https://doi.org/10.1098/rstb.2015.0450>
- van Dyck, C., Frese, M., Baer, M., & Sonnentag, S. (2005). Organizational error management culture and its impact on performance: A two-study replication. *The Journal of Applied Psychology*, 90(6), 1228–40. <https://doi.org/10.1037/0021-9010.90.6.1228>
- Villarreal, A., & Silva, B. (2006). Social cohesion, criminal victimization and perceived risk of crime in Brazilian neighborhoods. *Social Forces*, 84(3), 1725–1753.
<https://doi.org/10.1353/sof.2006.0073>

- Walch-Patterson A. (2020). Exemptions and limited institutional review board review: A practical look at the 2018 common rule requirements for exempt research. *The Ochsner Journal*, 20(1), 87–94. <https://doi.org/10.31486/toj.19.0095>
- Walumbwa, F. O., Peterson, S. J., Avolio, B. J., Wernsing, T. S., & Gardner, W. L. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89–126. <https://doi.org/10.1177/0149206307308913>
- White, M. G. (2020). Why human subjects research protection is important. *The Ochsner Journal*, 20(1), 16–33. <https://doi.org/10.31486/toj.20.5012>
- Whitehurst, J. (2017, May 3). Leaders can shape company culture through their behaviors. *Harvard Business Review*. <https://hbr.org/2016/10/leaders-can-shape-company-culture-through-their-behaviors>
- Wildavsky, B., Kelly, A. P., & Carey, K. (2011). *Reinventing higher education: The promise of innovation* (Illustrated ed.). Harvard Education Press.
- Williams, N., Horrell, L., Edmiston, D., & Brady, M. (2018). The impact of positive psychology on higher education. *The William & Mary Educational Review*, 5(1), 83–94. <https://scholarworks.wm.edu/wmer/vol5/iss1/12>
- Wisniewski, M. A. (2003). Leadership education: a constructivist model for continuing higher education. *Journal of Continuing Higher Education*, 51(1), 31–37. <https://doi.org/10.1080/07377366.2003.10401212>
- Wrong, D. (1994). *The problem of order: What unites and divides society*. Free Press.
- Yeoman, R. (2013). Conceptualising meaningful work as a fundamental human need. *Journal of Business Ethics*, 125(2), 235–251. <https://doi.org/10.1007/s10551-013-1894-9>
- Zhan, L., Guo, D., Chen, G., & Yang, J. (2018). Effects of repetition learning on associative

recognition over time: Role of the hippocampus and prefrontal cortex. *Frontiers in Human Neuroscience*, 12, 277. <https://doi.org/10.3389/fnhum.2018.00277>

Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *The Academy of Management Journal*, 53(1), 107–128.
<http://www.jstor.org/stable/25684309>

APPENDIX A**Research Training Certificate**



Completion Date 24-Aug-2022
Expiration Date 23-Aug-2025
Record ID 50868334

This is to certify that:

Elizabeth Hollerman

Has completed the following CITI Program course:

Not valid for renewal of
certification through CME.

Graduate & Professional Schools HSR

(Curriculum Group)

Graduate & Professional Schools - Psychology Division Human Subjects Training

(Course Learner Group)

1 - Basic Course

(Stage)

Under requirements set by:

Pepperdine University

CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w73ea224d-72c3-4be2-a13d-e772454ad184-50868334

APPENDIX B

IRB Approval Letter

Pepperdine University
24255 Pacific Coast Highway
Malibu, CA 90263
TEL: 310-506-4000

NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: November 23, 2022

Protocol Investigator Name: Elizabeth Hollerman

Protocol #: 22-10-2009

Project Title: Leadership Strategies for Building High-Performing Faculty Teams in Technology-Focused Higher Education Departments

School: Graduate School of Education and Psychology

Dear Elizabeth Hollerman:

Thank you for submitting your application for exempt review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46.101 that govern the protections of human subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Since your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at community.pepperdine.edu/irb.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, Ph.D., IRB Chair

cc: Mrs. Katy Carr, Assistant Provost for Research

APPENDIX C

Participant Recruitment Email

Hello,

My name is Liz Hollerman, and I'm the Dean of the Institute for Business and Information Technology at Bellevue College in Bellevue, Washington. I'm also a doctoral candidate at Pepperdine University studying Organizational Leadership. I would like to invite you to participate in research that I am conducting titled: Leadership Strategies for Building High-Performing Faculty Teams in Technology-Focused Higher Education Departments. The intention of this research is to determine what leadership strategies academic leaders employ to build high-performing faculty teams within their technology departments. You are someone I would greatly love to speak to as your experience as an academic leader in technology-focused fields would greatly contribute to my research.

The study involves interviews with academic leaders that will ask each leader to answer a series of questions. Interviews will be conducted via Zoom and will not take very much time. Interviews can be as short as 30 minutes or less or longer depending on how much you might have to say. The interview will be recorded for transcription purposes.

Participation is completely voluntary, and you may withdraw from the study at any time. All data that is gathered will be stored on an encrypted hard drive and a pseudonym will be assigned to each participant for anonymity of the results. Your name will not be included in any of the results from this interview.

If you would like to participate in the study, please read the Informed Consent letter that is also attached to this message and reply to me via email with your wish to participate in this study. I will then work with you to schedule an interview at your convenience.

Your participation in the research will be of great benefit to myself and other academic leaders in higher education to learn more about how they might effectively build high-performing faculty teams for their departments.

Thank you for your time and participation.

Best Regards,

Liz Hollerman,
Dean, Institute of Business and Information Technology
Bellevue College
M.S, Doctorate Candidate, Pepperdine University

APPENDIX D

Informed Consent Form for Research Participants

IRB Number: 22-10-2009

Study Title: Leadership Strategies for Building High-Performing Faculty Teams in Technology-Focused Higher Education Departments

Invitation:

Dear [name],

My name is Liz Hollerman. I am doctoral candidate conducting a study on leadership strategies for building high-performing faculty teams in technology-focused higher education departments. If you manage a technology-focused academic program for 3 years or more at a university, you may participate in this research.

What is the reason for doing this research study?

Changing technology has required that technology-focused academic programs need to continuously update their curricula to stay current. This research project focuses on strategies that higher education academic leaders can utilize to build high-performing faculty teams for technology-focused departments.

In order to participate you must manage a technology-focused academic program for 3 years or more at a university.

What will be done during this research study?

Participation in this study will require approximately 30-60 minutes. You will be asked to answer a sequence of 5-6 interview questions with a potential for follow-up questions. Participation will take place via Zoom. Your consent will be requested in order to record the meeting on Zoom so I may transcribe the interview. After the interview, I will send a copy of the transcript to you for verification of your responses.

What are the possible risks of being in this research study?

There is no more than a minimal risk associated with this research study.

What are the possible benefits to you?

The results of this study will be used to provide insights on strategies that academic leaders could use to build high-performing faculty teams for their technology departments. You might find these results particularly beneficial to support building high-performing faculty teams for your department.

How will information about you be protected?

Your responses to this survey will be kept confidential. I will be using a pseudonym to protect your identity within the data that I record. All data will be kept on a password protected hard drive in a locked location.

What are your rights as a research subject?

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study.

For study related questions, please contact the investigator(s):

Liz Hollerman at elizabeth.hollerman@pepperdine.edu

For questions concerning your rights or complaints about the research contact the Institutional Review Board (IRB):

- Phone: 1(310)568-2305
- Email: gpsirb@pepperdine.edu

What will happen if you decide not to be in this research study or decide to stop participating once you start?

You can decide not to be in this research study, or you can stop being in this research study (“withdraw”) at any time before, during, or after the research begins for any reason. Deciding not to be in this research study or deciding to withdraw will not affect your relationship with the investigator or with Pepperdine University.

You will not lose any benefits to which you are entitled.

Documentation of Informed Consent

You are voluntarily making a decision whether or not to participate in this research study. By completing and submitting your survey responses, you have given your consent to participate in this research. You should print a copy of this page for your records.

Participant Feedback Survey

To meet Pepperdine University’s ongoing accreditation efforts and to meet the Accreditation of Human Research Protection Programs (AAHRPP) standards, an online feedback survey is included below:

<https://forms.gle/nnRgRwLgajYzBq5t7>

Participant Name:

Name of Participant: Please Print

Participant Signature:

Signature of Research Participant

Date