

**LEARNING INNOVATION DEPARTMENTS AS TRANSFORMATIONAL CHANGE AGENTS FOR  
HIGHER EDUCATION**

**Sean Hobson, M.S.**

Thesis submitted for the degree of Doctor of Philosophy

Dublin City University

Humanities and Social Sciences | Fiontar agus Scoil na Gaeilge

Supervisors:

Dr. Mairéad Nic Giolla Mhichíl

Prof. Mark Brown

July 2024

## DECLARATION

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Philosophy, is entirely my own work, that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

Signed: 

I.D. No: 20212788

Date: 14/07/24

*"Massive change is not about the world of design; it's about the design of the world." – Bruce Mau*

## ACKNOWLEDGMENTS

*“Find a group of people who challenge and inspire you, spend a lot of time with them, and it will change your life.” – Amy Poehler*

There are many people to acknowledge in support of this work. I certainly didn't set out to complete a pandemic Ph.D. I wasn't motivated by a singular academic or career goal, rather, I was driven by the intellectual and personal challenge and to prove to myself and those closest to me that if you work hard enough and long enough, you can accomplish great feats. As someone who limped out of the academic achievement gates, this represents a long personal transition to becoming a passionate learner.

To Teresa, thank you for listening and supporting me when my mind is only half in the present and half solving some other problem. You have been the foundation and leader of our family and so much more to me and the kids. None of this would have been possible without your sacrifice to support this project. If I could give you an honorary degree, I would!

To Sydney, it's my greatest gift and responsibility to be your father. I see myself in you every day, and I thank you for helping me learn more about myself in these last four years than I ever could have imagined. Hopefully, someday you will read this with your own goals and aspirations and be able to say, “Wow, if he can do it, so can I!”. I'm proud of the young woman you have become over this time.

Isaac, you make me proud every day, and I can't wait to see what the future holds for you. You're my biggest fan and have been the best type of distraction for me as I've gone through this

journey. You're always ready for a game of football on the trampoline, and I wish I could slow down this time I have had with you! Keep working hard and you too will surprise yourself someday.

To Mom and Dad, thanks for showing me the way, and having unwavering belief and support for whatever life has brought my way. You set an example for me to follow and are always there to offer words of encouragement and listen to my updates with excitement.

Mairéad and Mark, you have been terrific mentors and guides throughout this process. It takes a special person to be a master teacher, and you did a brilliant job letting me drive the car but steering me clear from the cliffs. This is a shared accomplishment and I hope you are proud of the end result.

To Dr. Crow, Dr. Regier, and my professional colleagues in and around ASU, this work would not have been possible without the commitment and support of many who measure their success “not by whom they exclude, but by whom they include and how they help to succeed.” Words to live by, in sickness and in health, that have guided this project and the connecting work to come.

## TABLE OF CONTENTS

<b>DECLARATION .....</b>	<b>II</b>
<b>ACKNOWLEDGMENTS.....</b>	<b>IV</b>
<b>TABLE OF CONTENTS .....</b>	<b>VI</b>
<b>LIST OF TABLES .....</b>	<b>IX</b>
<b>LIST OF FIGURES .....</b>	<b>X</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>XI</b>
<b>ABSTRACT .....</b>	<b>XII</b>
<b>GLOSSARY .....</b>	<b>XIII</b>
<b>CHAPTER 1: INTRODUCTION .....</b>	<b>1</b>
IMPORTANCE OF THIS RESEARCH .....	3
BACKGROUND .....	5
ROLE OF THE RESEARCHER .....	7
THEORETICAL AND ORGANIZATIONAL FRAMEWORK .....	8
RESEARCH QUESTIONS .....	12
DESCRIPTION OF THE RESEARCH APPROACH .....	13
SCOPE OF THE STUDY.....	14
SUMMARY OF THE FINDINGS AND ORIGINAL CONTRIBUTION .....	16
SUMMARY.....	19
<i>Organization of the Thesis.....</i>	<i>20</i>
<b>CHAPTER 2: LITERATURE REVIEW.....</b>	<b>21</b>
DESIGN STUDIES .....	22
<i>Design Thinking .....</i>	<i>26</i>
ORGANIZATIONS.....	30
ORGANIZATIONAL DESIGN .....	31
<i>Organizational Design and Higher Education .....</i>	<i>33</i>
<i>Centers for Teaching and Learning.....</i>	<i>35</i>
ISOMORPHISM .....	39
ORGANIZATIONAL CHANGE.....	40
PARADIGMS OF CHANGE .....	41
THEORIES OF CHANGE IN HIGHER EDUCATION .....	44
<i>Scientific Management.....</i>	<i>45</i>
<i>Evolutionary Theories .....</i>	<i>46</i>
<i>Political Theories.....</i>	<i>48</i>
<i>Social Cognition Theories.....</i>	<i>50</i>
<i>Cultural Theories.....</i>	<i>51</i>
<i>Institutional Theories.....</i>	<i>53</i>
INNOVATION, ADAPTATION, AND STRATEGIC CHANGE .....	58
TRANSFORMATIONAL CHANGE .....	60

THEORETICAL FRAMEWORK: MOBILE MODEL FOR TRANSFORMATIONAL CHANGE .....	64
<i>Suitability of the Model</i> .....	69
<i>Core and Supporting Strategies</i> .....	70
<i>Culture and Change</i> .....	73
<i>Balance</i> .....	74
<i>Think Differently</i> .....	75
SUMMARY.....	77
<b>CHAPTER 3: METHODOLOGY.....</b>	<b>78</b>
SUMMARY OF THE ANALYSIS .....	78
<i>Data Analysis and Findings</i> .....	79
RESEARCH QUESTIONS.....	83
RESEARCH DESIGN .....	84
<i>Population and Sample for Interviews</i> .....	89
<i>Setting</i> .....	90
<i>Recruitment</i> .....	92
<i>Data Sources</i> .....	93
DATA ANALYSIS .....	96
<i>Document Analysis</i> .....	97
<i>Interview Analysis</i> .....	98
<i>Triangulation</i> .....	100
<i>Credibility</i> .....	101
<i>Transferability</i> .....	101
<i>Dependability</i> .....	102
ROLE OF THE RESEARCHER .....	103
<i>The Researcher's Insider Role Involvement</i> .....	105
ETHICAL CONSIDERATIONS.....	109
DATA MANAGEMENT .....	110
METHODOLOGICAL LIMITATIONS OF THE STUDY.....	110
SUMMARY.....	111
<b>CHAPTER 4: FINDINGS .....</b>	<b>113</b>
THE CASE: EDPLUS AT ARIZONA STATE UNIVERSITY .....	115
<i>A New American University Design</i> .....	116
<i>Distance Education</i> .....	122
<i>From ASU Online to EdPlus at ASU</i> .....	131
FINDINGS AND THE MOBILE MODEL STRATEGIES.....	135
<i>Senior Administrative Support</i> .....	136
<i>Collaborative Leadership</i> .....	142
<i>Flexible Vision</i> .....	153
<i>Visible Action</i> .....	156
<i>Staff Development</i> .....	158
MOBILE MODEL INTERRELATED THEMES .....	162

<i>Think Differently</i> .....	162
<i>Balance</i> .....	167
AFFECTED CULTURE: PRIMARY MEASUREMENT OF TRANSFORMATION .....	170
NEGATIVE IMPACT FROM CHANGE .....	172
SUMMARY.....	177
<b>CHAPTER 5: DISCUSSION.....</b>	<b>180</b>
CENTRAL FINDING: LEARNING INNOVATION DEPARTMENT (LIDs) .....	180
<i>What is an LID?</i> .....	181
<i>Evolved CTL</i> .....	183
<i>Characteristics of the LID</i> .....	184
THEORETICAL FRAMEWORK REVISITED .....	186
SUMMARY.....	187
<b>CHAPTER 6: CONCLUSION AND RECOMMENDATIONS .....</b>	<b>188</b>
REFLECTION ON THE RESEARCH QUESTIONS .....	189
IMPLICATIONS OF THE FINDINGS .....	193
<i>Recommendations for Scholars and Researchers</i> .....	193
<i>Recommendations for University Administrators</i> .....	196
<i>Recommendations for EdPlus at ASU Leaders</i> .....	200
CONTRIBUTION TO NEW KNOWLEDGE .....	202
<i>Theoretical Contribution</i> .....	203
<i>Research Contribution</i> .....	204
<i>Contribution for Practitioners</i> .....	205
<i>Contribution for Leaders</i> .....	205
LIMITATIONS.....	206
FINAL REMARKS .....	208
<b>APPENDICES .....</b>	<b>249</b>
APPENDIX A: SEARCH STRATEGIES .....	249
APPENDIX B: OVERVIEW OF PARTICIPANTS .....	253
APPENDIX C: DATA SOURCE TABLES.....	255
APPENDIX D: EDPLUS CRITICAL INCIDENTS .....	264
APPENDIX E: PARTICIPANT RECRUITMENT LETTER .....	269
APPENDIX F: INFORMED CONSENT TEMPLATE .....	271
APPENDIX G: PLAIN LANGUAGE STATEMENT.....	273
APPENDIX H: DCU REC APPROVAL LETTER.....	276
APPENDIX I: ASU IRB DETERMINATION.....	277
APPENDIX J: DOCUMENT COLLECTION PROTOCOL.....	279
APPENDIX K: INTERVIEW PROTOCOL.....	280
APPENDIX L: RESEARCH ACTIVITIES BY PHASE.....	282
APPENDIX M: EDPLUS PARTNERSHIP WALL.....	285
APPENDIX N: ASU TRIFOLD BROCHURE WITH GOALS .....	286



## LIST OF TABLES

<b>Table 1:</b> <i>Summary of Original Contributions</i> .....	18
<b>Table 2:</b> <i>Five Waves of Change in Design Research</i> .....	25
<b>Table 3:</b> <i>Design Thinker Characteristics</i> .....	28
<b>Table 4:</b> <i>Components, Capabilities, and Functions of CTLs</i> .....	37
<b>Table 5:</b> <i>Scientific Management Theories and Transformational Change</i> .....	46
<b>Table 6:</b> <i>Evolutionary Theories and Transformational Change</i> .....	48
<b>Table 7:</b> <i>Political Theories and Transformational Change</i> .....	49
<b>Table 8:</b> <i>Social Cognition Theories and Transformational Change</i> .....	50
<b>Table 9:</b> <i>Cultural Theories and Transformational Change</i> .....	52
<b>Table 10:</b> <i>Institutional Theories and Transformational Change</i> .....	54
<b>Table 11:</b> <i>Six Approaches to Change in Higher Education</i> .....	56
<b>Table 12:</b> <i>Mobile Model Core Change Strategies Background</i> .....	67
<b>Table 13:</b> <i>Definitions of the Mobile Model Core Strategies</i> .....	71
<b>Table 14:</b> <i>Findings by Themes with Embedded Categories</i> .....	82
<b>Table 15:</b> <i>Overview of Research Design</i> .....	95
<b>Table 16:</b> <i>Research Questions, MM Strategies, and Interlinking Themes</i> .....	150
<b>Table 17:</b> <i>Unique New HR Job Titles Created by EdPlus Since 2018</i> .....	150
<b>Table 18:</b> <i>Key Terms Used by the EdPlus EMC</i> .....	151
<b>Table 19:</b> <i>Organizational Themes from the Data Analysis</i> .....	177
<b>Table 20:</b> <i>Characteristics of the LID, Amplified, with EdPlus Examples</i> .....	185
<b>Table 21:</b> <i>Themes and Strategies for EdPlus leaders</i> .....	185
<b>Table 22:</b> <i>Summary of Original Contributions</i> .....	202
<b>Table 23:</b> <i>Overview of the Literature Review</i> .....	249
<b>Table 24:</b> <i>Criteria for Literature</i> .....	251
<b>Table 25:</b> <i>Participants’ Demographics (N = 28, 1 participant interviewed twice)</i> .....	255
<b>Table 26:</b> <i>Documents Analyzed</i> .....	260
<b>Table 27:</b> <i>Timeline of Critical Incidents in the History of EdPlus</i> .....	264
<b>Table 28:</b> <i>Interview Protocol</i> .....	280
<b>Table 29:</b> <i>Research Activities by Phase</i> .....	280

## LIST OF FIGURES

<b>Figure 1:</b> Eckel and Kezar's (2003) Mobile Model of Transformational Change .....	10
<b>Figure 2:</b> The ASU Design Aspirations.....	24
<b>Figure 3:</b> The Relationship of Fit and Misfit to Performance .....	32
<b>Figure 4:</b> Understanding Change .....	42
<b>Figure 5:</b> Typology of Change .....	62
<b>Figure 6:</b> A Mobile.....	65
<b>Figure 7:</b> ASU Online Learning Platform by Learning Challenge .....	130
<b>Figure 8:</b> The Placement of EdPlus within the ASU Enterprise.....	132
<b>Figure 9:</b> Current Structure of EdPlus with Goals, R&D Projects, and Support Areas.....	134
<b>Figure 10:</b> EdPlus Matrixed Leadership Structure as of July 1, 2023 .....	143
<b>Figure 11:</b> Award Poster for Study Hall .....	148
<b>Figure 12:</b> Visual Map of Themes for Literature Review .....	252

## LIST OF ABBREVIATIONS

**ASU:** Arizona State University  
**CAS:** Complex Adaptive System  
**CTL:** Center for Teaching and Learning  
**EdTech:** Educational Technology  
**EMC:** EdPlus Management Committee  
**HEI:** Higher Education Institution  
**ID:** Instructional Designer  
**IDNM:** Instructional Design and New Media  
**IT:** Information Technology  
**LID:** Learning Innovation Department  
**MM:** Mobile Model for Transformational Change  
**OD:** Organizational Design

## **ABSTRACT**

### **Learning Innovation Departments as Transformational Change Agents for Higher Education. Sean Hobson, M.S.**

Technological, demographic, financial shifts, and especially the impacts of COVID-19, call for higher education to become accessible to more students nationally and globally. This study examined the organizational design and strategic role of Learning Innovation Departments (LIDs) in effecting transformational change in higher education. The research fills a gap in the literature on investigation of the organizational design and function of LIDs and the application of the Mobile Model for Transformational Change (MM) (Eckel & Kezar, 2003b). The capabilities of LIDs extend beyond traditional academic services to include more enterprise services as essential for university transformational change.

A qualitative single case-study design was used, centered on EdPlus at Arizona State University (ASU), a leader in learning innovation. The MM provided the theoretical framework, focusing on EdPlus' strategic functions and change implementation approaches. The researcher's role as an insider (employee of ASU) was acknowledged, providing advantages and drawbacks. Semi-structured interviews were conducted with 28 ASU administrators, faculty, and staff closely connected to the design and evolution of EdPlus. 49 primary source documents were collected and analyzed.

The overarching research question was this: How do leaders designing the LID at Arizona State University approach transformational change initiatives that help the university advance its strategic public charter? Six sub-research questions were explored as part of the interviews, and qualitative methods were used for data analysis. The following themes emerged: Student Engagement and Support, Collaborative Partnerships, Operational Flexibility and Innovation, Strategic Leadership and Planning, Transparency and Governance, Research and Development, and Communication and Relationship Building.

The principal finding of this research is a case study that constructs EdPlus at ASU uniquely characterized as a Learning Innovation Department (LID) which plays an empirical role in ASU's transformational change. This finding may advance higher education theory and practice with descriptions of LID organizational design characteristics, underscoring the important role of design in university transformation and emphasis on the balance between digital education support services and innovation research and development. Future research could focus on LIDs in relation to recent phenomena, such as COVID-19, the transition to remote learning and Artificial Intelligence. Implications of the study may guide higher education leaders to implement transformational changes with the approach of EdPlus as a blueprint for effective LIDs. The findings may also be implemented for similar institutional initiatives to bring online higher education to more individuals throughout the world.

## GLOSSARY

**Change Agent.** A change agent works within a change agency as a "professional who influences innovation decisions in a direction deemed desirable by a change agency" (Lunenborg, 2010; Rogers & Shoemaker, 1971, p. 35).

**Critical Incident.** This term refers to a time when a behavior, action, or occurrence impacted (either positively or negatively) a specified outcome, such as the accomplishment of a given task (Flannigan, 1954).

**Culture.** Culture is the dominant patterns of shared assumptions, values, beliefs, ideologies, and meanings that people have about their organization that shapes what individuals do and how they think (Peterson & Spencer).

**Design.** Design is a structured yet flexible process that begins before a project starts. The design guides participants to carefully study and fully understand a problem before commencing work on a solution. Essential to the process is participants' holistic thinking and challenging of assumptions by viewing them as hypotheses to be tested and validated. The design utilizes evidence to inform and frame the steps toward the solution. Creativity, validation, and iteration generate and refine ideas and solutions. Design can be applied to the tangible (visuals and objects) and intangible (interactions and systems), from individual craft to mass production, and is a tool for exploring possible futures (Kearney, 2018). The products of design may be material objects, verbal and visual communications, organized activities and services, or complex systems or environments for living, playing, working, and learning

(Buchanan, 1990). Design is viewed both as a science (Fuller & McHale, 1964; Gregory, 1966; Simon, 1988) and methods (Archer, 1965; Brown & Katz, 2011; Cross, 2006) and ways of knowing (Cross, 2006) within the discipline of design studies (Buchanan, 2015; Cooper, 2019).

**Design Movement.** This term describes an activity involving many interrelated sectors that "seek to bring innovations—sometimes radical innovations—to organizations that must adapt to new circumstances of economic competition, social expectation, and cultural understandings" (Buchanan, 2015, p. 5).

**Distance Education.** Planned (distance) learning typically occurs in different environments from teaching and as a result requires special techniques of course design, special instructional techniques, unique methods of communication by electronic and other technology, and unique organizational and administrative arrangements. (Moore & Kearsley 1996, p. 2). Distance education is viewed within the discipline of higher education studies as a catalyzing activity from which transformational change occurs, and LID organizations support it (Friedman & Friedman, 2011).

**Distance Learning.** Distance learning "is an outcome of distance education. Where learners and teachers are separated by geographical and temporal distance, a form of mediated learning can be achieved with a combination of technologies" (Wheeler, 2012, p. 5). Distance learning can be differentiated from e-learning, which may be undertaken at a distance, contiguously, or as a combination of both (blended learning) (Wheeler, 2012).

**EdPlus at ASU:** EdPlus is the Learning Innovation Department (LID) unit within Arizona State University which is the department of focus for this study. Within ASU, EdPlus is described

as an enterprise support unit that helps advance much of what the university does around digital teaching and learning, with a primary focus on supporting ASU Online (<http://asuonline.asu.edu>), a portfolio of fully online degree programs offered by the university. EdPlus applies new technologies in ways that increase access to university education and the success of students, thereby amplifying the transformative impact of ASU faculty on individual students, their families, and future generations (internal EdPlus at ASU presentation).

**Formal Learning.** Formal learning occurs within traditional educational settings, such as schools, colleges, universities, and training departments. “Formal learning usually incorporates a set structure, regardless of whether physical attendance is required. Often, this type of learning has clear, specific goals, but sometimes the objectives are more general or directional” (Hagar, 2012, pg. 17).

**Informal Learning.** Informal learning takes place naturally in everyday life, generally within families or communities. Informal learning includes what an individual reads, watches, listens to, hobbies, and social activities. Unlike formal or non-formal learning, no teacher or guide is involved. Learners are driven by their interest and decide how to learn what they want or need to know (Hagar, 2012).

**Institutional Culture.** This is the “dominant pattern of shared assumptions, values, beliefs, ideologies, and meanings that people have about their organizations. The culture shapes individuals' actions and thoughts” (Peterson & Spencer, 1991, as cited in Eckel & Kezar, 2002, p. 27).

**Institutional Leaders.** In this study, these individuals are members of ASU's community who are categorized as leaders, "taking the organization or some part of the organization in a new direction, solving problems, being creative, initiating new programs, building organizational structures, and improving quality" (Davis, 2003, p. 4). They are part of the ASU University Council.

**Instructional Designer (ID).** The title of Instructional Designer refers to a staff function within higher education in which the designer typically supports faculty and administrators in designing their in-person, hybrid, and online course offerings. ID is a central service function at EdPlus.

**Learning Innovation.** This is combination of practices, methods, and designs implemented by higher education institutions to respond to changing demographics and economics in higher education to teach improved and more effective and accessible student learning. "The practices bring together learning science, applied educational technologies, and learning analytics within the institutional structures, policies, investments, and strategic leadership" as well as institutional sustainable innovations (Maloney & Kim, 2020, p. 6).

**Learning Innovation Department (LID).** For the purpose of this study, a learning innovation department is defined as an organizational structure rooted in a services model culture of centers for teaching and learning (CTL), continuing and professional development centers, central information technology offices, libraries, technology transfer offices, and the change agents working within them. Based on the researcher's personal knowledge as an insider researcher and the work of Maloney and Kim (2020), LIDs are believed to be a new and



necessary addition to the traditional university organizational design. Although LIDs still offer traditional faculty services, such as pedagogical expertise and educational technology support, their new capabilities, such as business model design and creation, new product development, advanced operational support, partnership development, visual design, and communications in support of new revenue streams for the university, are unique to the modern LID.

**Nonformal Learning.** Nonformal learning takes place in a structured yet flexible way (as differentiated from informal learning) within entities, groups, and circumstances outside the traditional realms of formal or informal education. Non-formal learning has the common feature of being facilitated like formal education, the drive for learning is often entirely self-motivated by the individual learner (Eschash, 2007).

**Online Learning.** Broadly defined, online learning “uses electronic technologies via the Internet to engage learners and facilitate their learning. Multiple Internet tools exist and are used to create a diverse online learning environment. Such an environment is complex, providing multiple opportunities for collaboration, interaction, and communication with instructors, other students, and content experts worldwide at any time” (Sunai & Wright, 2012, pg. 27). These opportunities are supported by a wide range of technologies, including but not limited to text, video, audio, and multimedia presentations that may occur synchronously or asynchronously (Sunai & Wright, 2012).

**Organization.** This term refers to the pattern of communications and relations among a group of human beings, including the processes for making and implementing decisions (Simon, 1997, pp. 18-19). Burton and Obel (2014) expanded the definition to include individuals

collectively arranged and directed to fulfill specific needs or attain shared objectives.

Organization features an administrative framework that establishes how various tasks and personnel interrelate. This framework also delineates and delegates distinct roles, duties, and powers for executing varied functions. Coordination of these activities is essential for achieving the group's overarching goals. Hence, the critical decisions in shaping an organization revolve around its structure and the coordination of its operations (Burton & Obel, 2014, p. 1).

**Organizational Change.** This term refers to the process by which a company or institution transitions from its current method of operation to a new one. These transformations can manifest in various ways, including alterations to the company's structure, strategic direction, policies, processes, technology, or cultural norms. Such changes can be carefully planned well in advance or may be unexpectedly imposed due to external environmental factors. Depending on the circumstances, organizational change can be profound, completely reshaping the organization's operational methods, or subtle, gradually adjusting existing procedures (Kotter, 1996).

**Organizational Design (OD).** OD “prescribes how an organization should be structured to function effectively and efficiently. OD systematically aligns structures, processes, leadership, culture, people, practices, and metrics to enable organizations to achieve their mission and strategy. The basic premise is that there is no best way of organizing and that different organizations are not equally effective or efficient” (Burton & Obel, 2018, p. 2).

**Organizational Theory.** This term refers to the theoretical underpinnings for OD. Organization theory “describes and explains understanding of how the world works; in

complement, organization design builds on this theory to develop understanding of how the world could work. Organization theory is a positive science to explain and understand an organization's structure, behavior, and effectiveness" (Burton & Obel, 2018, p. 3).

**Sensemaking.** In the setting of institutional change, this term relates to the meaningful construction and application of ideas, concepts, and activities by individuals involved in the change "to develop a meaningful framework for understanding the nature of the intended strategic change" (Gioia & Chittipeddi, 1991, p. 442).

**System.** This term refers to the relationship of parts that work together in an organized manner to accomplish a common purpose (Brown et al., 2020).

**Transformational Change.** In application to design or theory, this term denotes the alteration of "the culture of the institution by changes in underlying assumptions and overt institutional behaviors, processes, and structures. The change is deep and pervasive, affecting the whole institution; is intentional; and occurs over time" (Eckel et al., 1998, p. 3).

**Unbound Design.** This definition relates to a design that seeks to define a new toolset for a world that is "rapidly changing, increasingly interconnected, and where, because of this increasing interconnectivity, everything is more contingent on the world around it (Pendleton & Brown, 2018, p. vii).



## CHAPTER 1: INTRODUCTION

*"I am always doing that which I cannot do, in order that I may learn how to do it."* – Pablo Picasso

Higher education has seen massive shifts in the last two decades. Management guru Clayton Christensen famously theorized that by the year 2025, "disruptive innovation" would cause half of all United States (U.S.) colleges and universities to close (Christensen & Eyring, 2011, p. 12). Proponents of this assumption have pointed to advancements in technology (Leapold et al., 2018), wavering confidence in educational outcomes (Fingerhut, 2017), changing demographics (Grawe, 2018), international competition, and student loan debt (Chamie, 2017), as symptoms for a broader impending disruption. The COVID-19 pandemic accelerated the need for change in higher education, with many universities experiencing unstable financial circumstances and models unable to adapt to a remote first model. Some universities closed and others announced mergers and system redesigns, such as the New Hampshire, Pennsylvania, and Vermont systems (Bauer-Wolf, 2021).

The environment around universities is dramatically changing, but the question may be asked, Do those in academia know how to change with it? As education writer and theorist Shirkey (2014) argued, "The biggest threat to those working in colleges and universities is not video lectures or online tests. It is the fact that we live in institutions perfectly adapted to an environment that no longer exists." (para. 2).

The stakes are high. Many universities contemplate reinvention in the face of these undeniable changes (Kezar, 2018). However, a gap exists in the literature on the

design of organizations and departments within higher education to incorporate and lead transformational change initiatives. Colleges and universities are characterized as complex, adaptive systems (Hartzler, 2019), and traditional change models and strategies rarely consider their complex cultures. Moreover, if planning and execution of change are not carried out with foresight and courage, reorganization efforts can be harmful or fail (Eckel, 2006; Gillespie, 2020).

Compounding this challenge is that change is always complicated, and more than 70% of all corporate change initiatives, including educational initiatives, fail (Kezar, 2018). Change is constant, but most change in universities is incremental in scale and scope and faculty centric. Crow and Anderson further explained:

Deliberate and designed transformational change involves the radical pursuit of design-specific aspirations that redefine the why, what, and how of a university's operations. The difference between routine change and transformational change is therefore not a difference of degrees, but a difference of kinds. (2022, p. 2)

The difficulty is evident in the 5½-year study of 28 institutions of higher education by Eckel and Kezar (2003b) of endeavors to effect institutional transformation. The analyses showed that only six of the 28 (21%, under one-quarter) successfully implemented transformation. Failure was attributed to breakdowns in the implementation of the change process. Little data exist about the success or failure of transformational change within higher education because transformation is less studied than traditional business types of change, such as innovation, adaptation, and strategic change (Eckel & Kezar, 2003b).

## **Importance of this Research**

Situated in the science of design (Cross, 2006; Simon, 1988) and organizational change (Bestedo, 2012; Demers, 2007; Kezar, 2018), this research focuses on learning innovation as a discipline (Maloney & Kim, 2020; Salmon 2014) within the broader category of academic innovation in higher education. No studies to date have investigated the organizational design of Learning Innovation Departments (LIDs) and the role they might play within their universities. For the purpose of this study, the LID is defined as an organizational design rooted in a services model culture of continuing and professional development centers, central information technology offices, centers for teaching and learning, libraries, technology transfer offices, and the change agents working within them.

Based on the researcher's knowledge as an insider researcher and the work of Maloney and Kim (2020), this study explored whether LIDs are a new and necessary addition to the traditional university organizational design. Although LIDs offer traditional faculty services, such as pedagogical expertise and educational technology support, their new capabilities, such as business model design and creation, new product development, advanced operational support, partnership development, visual design, and communications in support of new revenue streams for the university are unique to the modern LID. The researcher's objective was to explore how one university at the forefront of learning innovation has designed itself and is using its resources to drive change for its parent university.

Maloney and Kim (2020) defined learning innovation as the interplay among the complex set of practices, methods, and designs that are part of the attempts by higher education to improve teaching and student learning. These “practices bring together learning science, applied educational technologies, and learning analytics within the framework of the institutional structures, culture, policies, investments, and strategic leadership that enable change” (pg. 6). In this respect, learning innovation is as much about innovations in teaching and learning (in the classroom, course, or curriculum) as sustainable innovations at the institutional level. The pairing of "learning" and "innovation" brings together an array of ideas, concepts, theories, arguments, and data into a synthetic field of inquiry (p. 6).

A midlevel center or department on campus can sustain university change initiatives (Kezar & Eckel, 2002). LIDs are increasingly the venue in which such initiatives take place. New multimillion-dollar organizations are being built to support these initiatives and are finding ways to integrate the growing educational technology (EdTech) market within the U.S. and around the globe (HolonIQ, 2022).

However, no blueprint exists for designing an LID to maximize success in transformation initiatives and balance multiple responsibilities. The result is that “each new department, college or university that is working on these transformations is doing so--*de novo*,” that is, from the beginning (Maloney & Kim, 2020, p. 15). This behavior is consistent with what is known as institutional isomorphism in the organizational change literature (Cardona et al., 2020; DiMaggio et al., 1983) which is explored further in Chapter 2.



LIDs and the change agents working within them are new and necessary additions to the university. To flourish in a state of perpetual change, institutions must strategize for transformational change and dedicate departments and change leaders to advance transformation efforts. The leaders must account for the complex aspects of higher education that make the transference of traditional change approaches less suitable for colleges and universities (Birnbaum, 1992; Martin, 2020; Skinner, 1974).

Rooted in a service model culture, LIDs offer traditional faculty services, such as pedagogical expertise and EdTech support. However, it is the new capabilities, such as business model design and creation, new product development, advanced operational support, partnership development, design, and communications, that are unique to the LID (Ablesar & Moore, 2018; Frantz, 2004; Maloney & Kim, 2020). At its core, an LID is a service unit that helps project and advance the university forward in new and complex ways. Digital and online education are often the largest and most significant activities the LID supports (Joosten et al., 2020; Maloney & Kim, 2020; Salmon, 2014).

## **Background**

This study aimed to explain and discover how LIDs function as transformational change agents in higher education institutions. Studies on transformational change in higher education have not yet explored the role of LIDs. In addition, no comprehensive definition of an LID has been formulated, considering its interrelationship with other university service units. Several studies have been conducted in higher education on transformational change initiatives (Cornell, 2009; Eckel & Kezar, 2003; Evans, 2016; Gillespie, 2020; Hurd, 2007; Langham, 2012; White, 2016); the experience of change

agents (Kezar, 2018); and the need for a convergence of bottom-up and top-down approaches (Kezar, 2012; Metzger, 2020). Several U.S. universities have already developed transformational initiatives with mature departments, economic models, and, most importantly, outcomes that can be studied and shared with the broader academic community. However, the current study is the first to focus on a specific and successful LID, EdPlus at ASU, in the context and discipline of organizational design. In this interdisciplinary study, the researcher used literature from the fields of design studies, management, and education innovation.

The researcher has participated in the organizational design, development, and scaling of one of these LID initiatives, EdPlus at Arizona State University (ASU). EdPlus served as the primary case for this study. As a result of this selection, the particularization of this study is uniquely North American, specific to Arizona and ASU. As the EdPlus chief design officer, the researcher has unique access to the evolution, successes, and failures of this organization within ASU.

ASU is widely regarded as one of the most innovative universities in the United States, with a well-documented record of growth and excellence 2023 (Hall, 2020; Faller, 2023, ASU News). It is the largest university by enrollment nationwide as of 2023, with 155,000 students across its four residential campuses and online (Arizona State University, 2022c). This growth is mainly due to the ASU institutional redesign and the growth of ASU Online, an activity primarily supported by EdPlus. Chapter 4 presents a descriptive history and case of ASU and EdPlus.

The researcher's experience and access to professionals in the field, with broader existing research, inform this study, and help fill the literature gap of LIDs and their transformative role within higher education. The particular application to EdPlus at ASU and the findings of this study offer guidelines to current and future leaders on how to design and implement their LIDs to meet similar goals at their public research universities, particularly in the North American HEI context with some findings of potential benefit to other institutions in similar international contexts.

### **Role of the Researcher**

The researcher was hired at ASU in December 2006 as an instructional designer in the Office of Distributed Learning. Working directly with faculty and a small team of IDs, media developers, and technology specialists, the researcher's primary task was to develop online courses and job aids across the university.

In a first major design project, ASU101 was the focus of a university-wide redesign, a 1-credit course mandated for all first-year students. For the first time, working through university-level structures and roles was required to consolidate them into a single course. Close to sixty faculty and administrators contributed content and assessments.

After ASU101, the primary focus became part of the design team building the first online degrees for the university outside of the engineering and business school. In addition to the ASU Online courses and degrees, the team began a series of special initiatives requiring instructional design and creative design. The researcher's

participation led to development as a designer of systems, partnerships, problems, and instruction and learning.

In 2012, the researcher left ASU Online to become Director of Instructional Design (ID) at the ASU College of Liberal Arts and Sciences. He worked within an academic unit, supporting departments and faculty in the natural sciences, social sciences, and humanities. Expanded responsibilities included collegewide digital innovation initiatives and management of the academic strategic partnership with Mayo Clinic to help this institution redesign the medical school curriculum.

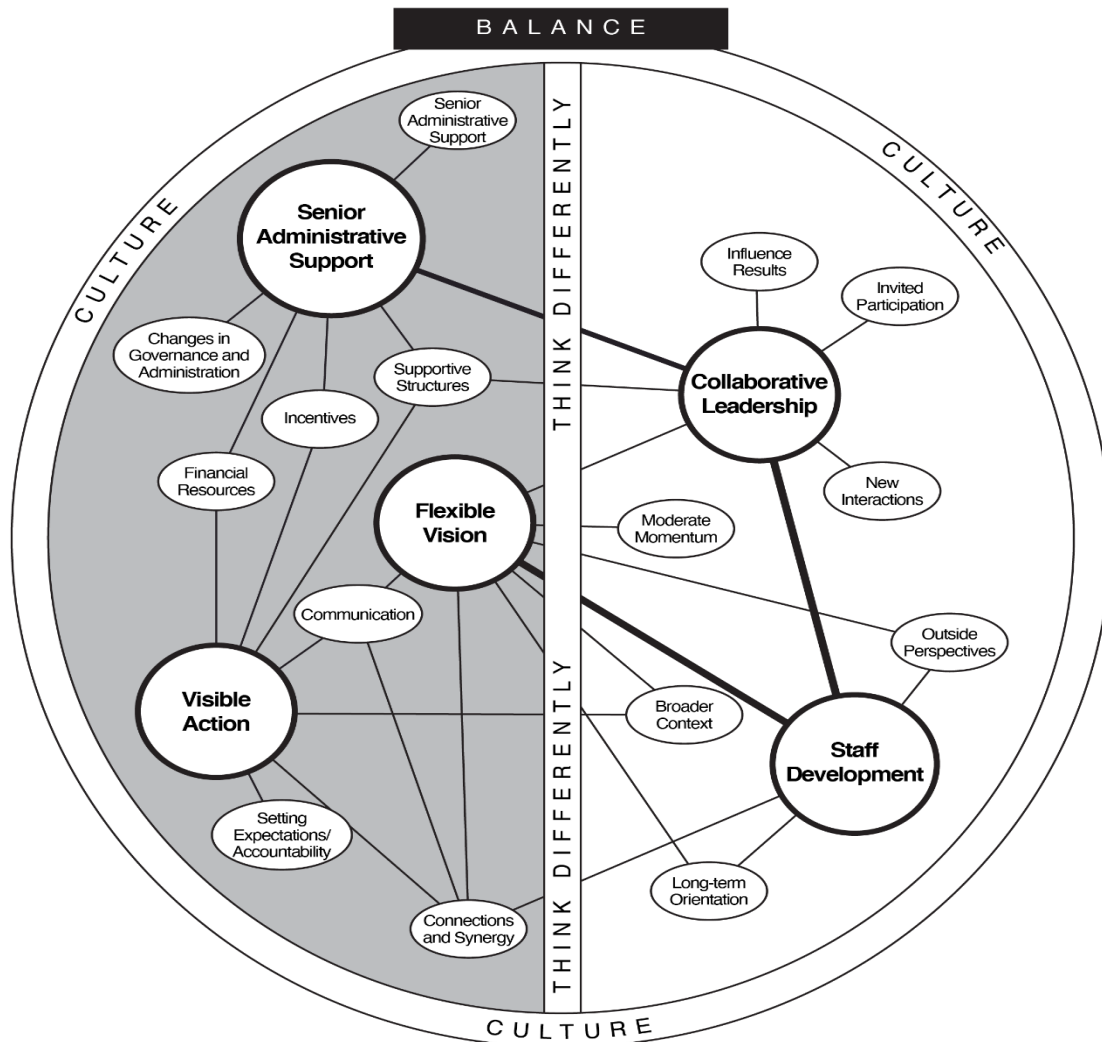
In 2014, the researcher moved back to EdPlus as the Assistant Vice President and Chief Design Officer (and as the first Chief Design Officer of ASU). Responsible projects included more advanced partnership and design work (e.g., National World War II Museum in New Orleans, Uber, Google, and YouTube). Additional contributions included speaker and panelist presentations and organizational design work with dozens of universities to help them understand the ASU model for digital education. As a result of this history, the researcher's firsthand experience with the evolution and success of EdPlus and organizations like it across higher education were used to inform and conduct the current research.

### **Theoretical and Organizational Framework**

Eckel and Kezar (2003b) defined transformational change in higher education this way: "Transformation (1) alters the culture of the institution by changing underlying assumptions and overt institutional behaviors, processes, and structures; (2) is deep and pervasive, affecting the whole institution. (3) is intentional, and (4) occurs over time" (p.

17). Based on this definition, the researcher used the theoretical framework developed by Eckel and Kezar (2003b) called the Mobile Model (MM) for Transformational Change. Figure 1 displays the MM. In this case study, the researcher expanded this framework beyond individual initiatives to the entire organizational design concerning EdPlus at ASU. As Figure 1 shows, the MM incorporates five core change strategies: (a) senior administrative support, (b) collaborative leadership, (c) staff development, (d) flexible vision, and (e) visible action. Additional strategies are connected to each of the five core strategies but are not implemented as frequently. Nevertheless, these additional 15 strategies play essential parts in implementing transformational change.

**Figure 1:** Eckel and Kezar's (2003b) Mobile Model of Transformational Change



From: From *Taking the Reins: Institutional Transformation in Higher Education*, by P.D. Eckel & A. J. Kezar, 2003, p. 148. Copyright 2003 by Rowman and Littlefield.

The overarching heading of "Balance" at the top of the figure indicates that whatever roles the strategies play, for effective transformational change to occur, *balance* must be maintained among all the strategies (Eckel & Kezar, 2003b). The terms

*balance* and *think differently* are italicized throughout this dissertation, from the MM model, as essential attributes of successful transformational change. In subsequent sections they are fully discussed.

Eckel and Kezar (2003b) further defined transformational change as having an effect on “institutional cultures, as deep and pervasive, as intentional, and as occurring over time. It requires a major shift in the many cultural elements of an institution. Culture is the dominant patterns of shared assumptions, values, beliefs, ideologies, and meanings” about an organization and “shapes what individuals do and how they think” (p. 27).

Culture is the “glue” that holds the entire framework together, and, as Eckel and Kezar (2003b) further explained, any institution “cannot make change without changing at least part of its culture. If a changed culture is the destination, prompting people to *think differently* is the journey” (p. 28). Changing mindsets is an essential part of the change process which alters behavior, beliefs, commitments, and priorities (Eckel & Kezar, 2003). In the literature, this process is called institutional sensemaking (Gioia & Chittipeddi, 1991; Weick, 1995). The theoretical model and underpinning literature will be described in more detail in Chapter 2. The theoretical framework was also used as an organizational framework for the data analysis and presentation of the findings.

At the conclusion of the study, the researcher had a discussion with Dr. Kezar on the application of the MM to single organization to which she offered, “The model itself was designed on overall institutional change, so it was initially applied thinking about

institutional change. There is no reason you couldn't use it for a unit level change.”

(peer conversation, 2024).

### **Research Questions**

The objective of this study was to investigate how administrators, faculty, and staff involved with change efforts in a single LID, EdPlus at ASU, responded to driving broader learning innovation and initiating institutional transformation through organizational design and change. The central research question was this: **How do leaders designing the learning innovation department at Arizona State University approach transformational change initiatives that help the university advance its strategic public charter?**

To support the answering of this question, the following sub-questions were explored:

1. How does the Mobile Model for Transformational Change explain the case of Learning Innovation Departments at ASU and within the literature?
2. How do institutional leaders categorize EdPlus in terms of transformational change?
3. What role does EdPlus play in changing the culture of the university?
4. What strategies and processes were used in the planning, development, and implementation of the transformation initiatives?
5. How has the organization changed over time to support transformation initiatives?
6. What are the critical incidents that have shaped and evolved the design and role of EdPlus?



## Description of the Research Approach

The qualitative research design of this work is a single case study narrative approach (Creswell, 2018; Shkedi, 2005; Stake, 1995; Yin, 2018). Data were obtained from the primary sources of 28 participant semi-structured interviews (Appendix C, Table 26) and 49 primary documents (Appendix C, Table 27). The researcher conducted the interviews using the virtual conferencing software Zoom. These interviews were open-ended and semi-structured to elicit the participants' responses to the research questions. A sampling approach was used to select participants centering on their knowledge of EdPlus and organizational roles which they held within the university. The documents are related to the university design, the transformation efforts, and the LID under investigation. The documents are transcriptions of presentations made to the EdPlus governing body and represent an amalgamation of hundreds of secondary source documents.

Following data collection, qualitative analytic techniques were applied. These techniques involved deep iterative review of the data, especially the interview data, with searches for patterns and concepts (Miles et al., 2014). The Mobile Model was also used as an organizational framework to support data analysis and interpretation (McCann, 2007; Evans, 2016; Fallon, 2020; Gillespie, 2020;). The analysis focused primarily on the critical incidents (Flanigan, 1954) taking place in the evolution of EdPlus and the transformative impetus and roles the inciting incidents played within the larger institutional context and mission (Butterfield et al., 2005). As is accepted in qualitative data analysis, the researcher assigned codes to the data, each representing a concept or

abstraction for inquiry toward generating themes (Maxwell, 2013). The research methods used are described in detail in Chapter 3.

### **Scope of the Study**

Within the scope of the qualitative case study, several limitations were present. Qualitative findings can be highly contextual and case dependent. In the present case, however, these characteristics allow for greater depth into this critical case. As a result, broad generalizations of the study findings may be challenging.

First, the study of EdPlus at ASU is a case study of a single LID in a single U.S. institution. Thus, generalizations about other LIDs and universities must be made cautiously. However, the decision for the single LID was made to allow for a deeper discovery of one of the early and most prominent LIDs in the academy.

Second, the data were collected from participants at a public, research-based university in the United States. Therefore, generalizations to private universities, community colleges, for-profit universities, and universities outside of the U.S. may not apply.

Third, although selection of a mature LID helps study longitudinal progress, this choice also increases the difficulty of delving sufficiently into the early stages of the evolution of the LID because of knowledge erosion.

Fourth, the theoretical framework was one particularly designed for transformational change in higher education and is well suited for the unique features of the university organization and LID under study.

Fifth, due to the nature of the interview sample which focused on the internal ASU leaders building and shaping EdPlus at ASU. Interviews were not conducted with stakeholders within ASU i.e. representatives of faculty, professional staff and students were not included in the sample. Although some of these leaders were formed from the constituencies, they represented within ASU such as Deans. Without these contributions to the data, broad conclusions about the impact on institutional culture change are difficult to draw.

Lastly, because the researcher is an insider, data collection limitations with a purposive sample interview approach may include several drawbacks. As an insider, the researcher may affect the interviews in unknown ways (Hancock & Algozzine, 2017; Unluer, 2012). Because of his position at ASU, the researcher is also very close to the case and participants, and many factors, including personal bias, recall, self-serving motives, openness, and honesty, can influence their responses (Hancock & Algozzine, 2017).

However, a strength is the extensive inside knowledge the researcher brings to the study (Bonner & Tolhurst, 2002; Maxwell, 2013). Mercer (2007) recognized this strength, quoting Shah (2004, p. 556): "A social insider is better positioned as a researcher because of his/her knowledge of the relevant patterns of social interaction required for gaining access and making meaning" (p. 7). Thus, the researcher used his knowledge and personal relationships to encourage participants' responses for this study.

## Summary of the Findings and Original Contribution

The study and construction of the “EdPlus Case” (Stake, 1995), provides empirical evidence that EdPlus has expanded beyond the traditional scope of Centers for Teaching and Learning (Keehn & Bishop, 2018; Wright et al., 2018), indicating a shift towards a more integral role in academic innovation. This study systematically examined the EdPlus at ASU’s department's strategic alignment with the Mobile Model for Transformational Change (Eckel and Kezar, 2003b) and its role in the university's organizational design (Burton & Obel, 2018). Findings indicated that EdPlus operates with a unique approach, differentiated from traditional academic service organizations by its emphasis on a culture centric methodology (Bergquist, 1992, 2008; Manning, 2009) with design and the innovative use of technology as foundational pillars. This approach is characterized by the prioritization in hiring of individuals with emotional intelligence, inventiveness, and adaptability to ambitious and complex projects. EdPlus has achieved important milestones, including important partnerships and agreements contributing to ASU's broader goals and objectives. The department's distinct identity and operational success influence the university's ethos and strategic direction, positioning ASU as an innovative force in digital education.

The research highlights the evolving function of design and instructional designers (Bond, et al., 2023) in the context of digital education. Their role is central in the implementation of transformational change within the EdPlus at ASU. These individuals apply design methods (Buchanan 1992; Cross, 2006; Pendleton & Brown, 2018) that are potentially scalable for addressing broader organizational design and

transformation challenges across the university. A balance between support of digital education initiatives and engagement in research and development has been identified as a critical component of EdPlus' operational model.

The study also addressed a gap in the literature by examining transformational change within higher education versus other types of change. It contributed to the empirical literature through the development of a case study (Stake, 1995) using the Mobile Model in the study of Learning Innovation Departments like EdPlus, particularly in the context of organizational design and change management. This application yielded new insights, especially regarding the role of design and designers as catalysts for change in higher education organizations (Brown et al., 2020). The study fills a gap in existing academic research by introducing a novel framework for such departments and a means for analyzing them. In addition, a detailed description is presented of the organizational characteristics that define Learning Innovation Departments. Change agents working within and around the LID now have a lexicon to use in describing their work.

On a practical level, the findings are informative for practitioners in learning innovation (Kim & Maloney, 2020). The study findings suggest that integration of design functions into the higher echelons of university decision-making could be beneficial and emphasize the strategic value of instructional designers. These individuals utilize a systems-thinking approach to create extensive partnerships and enhance the student experience (Bond et al., 2023). The study also provides a blueprint for leaders desiring to implement systemic and transformational changes (Eckel & Kezar, 2003b; Crow &

Anderson, 2022) with explanation of the necessary leadership competencies and organizational structures for successful management of service design (Goldstein et al., 2002) and development of entrepreneurial innovation within a university's online educational offerings.

The unique contributions of this study to theory, research, practitioners, and higher education leaders are summarized in Table 1. These contributions are further discussed in the Conclusion chapter, allowing readers to gauge the study's impact.

**Table 1:** *Summary of Original Contributions*

Aspect	Original Contribution
Theory	<ul style="list-style-type: none"> <li>• Applied the Mobile Model for Transformational Change to an organizational design focusing on Learning Innovation.</li> <li>• Situated the LID within specific types of change –transformation versus innovation, adaptation, organic and strategic change.</li> <li>• Presented the convergence and divergence of the LID across four paradigms and six distinct approaches to change within Higher Education.</li> </ul>
Research	<ul style="list-style-type: none"> <li>• Situated the LID as rooted in attributes of the CTL but introduced new and unique characteristics uncovered from the data.</li> <li>• Defined unique characteristics of the LID beyond traditional university service organizations including CTL's.</li> <li>• Categorized the LID within five organizational themes using supporting literature: service, design, enterprise, digital, and learning.</li> <li>• Unveiled and presented detailed narrative descriptions of the evolution, utility, and impact of EdPlus at ASU as The Case and LID.</li> <li>• Explained the LID's long-term impact on the institutional culture while presenting its unique subculture and approaches to change work.</li> <li>• Developed the "EdPlus at ASU" case as a central finding.</li> </ul>

Aspect	Original Contribution
Practitioners	<ul style="list-style-type: none"> <li>• Offered insights on the critical alignment among goals, leadership, resources, and assignments of the LID.</li> <li>• Examined the crucial MM interrelated themes of <i>Balance</i> and <i>Think Differently</i> to assist practitioners in their LID organizational design and change efforts.</li> <li>• Uncovered the catalyzing role of Design, and more specifically instructional design and its pronounced impact on supporting change.</li> <li>• Provided a new lexicon for change agents working within and around LIDs on their unique value and role within the university.</li> </ul>
Higher Education Leaders	<ul style="list-style-type: none"> <li>• Introduced a roadmap for designing and organizing an LID, drawing on the unique case of EdPlus at ASU.</li> <li>• Showed the critical balance between top-down leadership and the LID's daily activities and approaches.</li> <li>• Introduced governance, resource allocation, and cultural tenets for the LID, considering environmental factors that might influence a LID's quality and scaling efforts.</li> <li>• Analyzed and differentiated the utility and value of the LID compared to traditional service units within a public research university with a particular emphasis on the incumbent Center for Teaching and Learning.</li> </ul>

*Note.* Researcher-created.

### Summary

The stakes for bold institutional transformational change are high, and failure for a university to adequately envision and develop an implementation plan for growth and for wider student access can prevent success and lead to negative economic consequences (Lewis, 2011). This chapter introduced the problem of necessary changes facing higher education. The background was provided with the conceptual framework and recognition of the gap in the literature on learning innovation in higher education. The research approach was also discussed for the current case study of EdPlus at ASU.

The research objective, research questions, role of the researcher, primary setting, and definition of terms were provided, and assumptions and limitations were acknowledged. A summary of the findings and original contribution conclude the chapter. Chapter 2 reviews the relevant literature for this study.

***Organization of the Thesis***

Chapter 1 reviewed the background of the study and provided an overview, including the theoretical framework, research questions, approach, role of the researcher, definition of terms, and limitations. Chapter 2 reviews the pertinent literature, including the design movement and organizations. From there, the conceptual framework is discussed in detail. Chapter 3 describes the study methodology, including the research design, data collection and analysis techniques, study trustworthiness, recap of the researcher's role, ethical considerations, data management protocol, and methodological limitations of the study.

Based on the methodology and analysis, Chapter 4 presents the study findings. Chapter 5 considers the study's implications for higher education, LIDs, and future research. Chapter 6 concludes the study, including the researcher's reflections on the research questions, the unique contribution of new knowledge, as well as recommendations for further studies and the design of LIDs.



## CHAPTER 2: LITERATURE REVIEW

*“The only true wisdom is in knowing you know nothing.” – Socrates*

This qualitative case study investigated how learning innovation departments (LIDs) function as transformational change agents in higher education institutions. The definition of LIDs was described in the Glossary and for the purpose of this study refers to EdPlus at Arizona State University (ASU). This chapter reviews the literature relevant to the overarching research question introduced in Chapter 1. Much has been written about the changes in higher education. However, the literature review and analysis in this chapter revealed that only a few studies have investigated how to design higher education institutions (HEIs) or structures to ensure they are financially viable and evolving to meet ever-changing societal needs (Smith, 2011).

Multiple sources can be found for design studies and Organizational Design (OD) within higher education, but a dearth exists in the literature for design uniquely as a combination of elements for transformational change. The current study considered these disciplines, with a special emphasis on the LID at ASU and how its OD model can serve as a transformational change agent for ASU and higher education.

For this literature review, definition of the study's parameters and development of an appropriate literature search and review strategy were important. A range of strategies could have been adopted for review of the literature. However, after consideration of different approaches' strengths and weaknesses, the researcher deemed a systematic approach the most suitable for answering the overarching

research question and reviewing the design, management, and education innovation literature.

In contrast to a critical review of a single discipline or a rapid review of a sole topic or policy, the systematic approach allowed for a multistep process that utilized a backwards design—beginning with identifying the aims and purpose of the literature search (Grant & Booth, 2009). Furthermore, as is customary with a systematic approach, a citation mining technique was followed to locate seminal studies (Wohlin et al., 2022).

The software package, Zotero, was used to store, organize, and sort the literature by topics, categories, and themes. A detailed presentation of the search strategies can be found in Appendix A.

In this chapter, the following disciplinary areas are explored: (a) Design Movement, including design studies and design thinking; (b) Organizations, including organizational design and the higher education context, organizational change, change paradigms, and theories of change within the higher education context; and (c) the Theoretical Framework—Mobile Model for Transformational Change. A summary concludes the chapter.

### **Design Studies**

For ASU and its LID, EdPlus, design has been an essential approach for change. Design is a helpful way to situate this study, and this section builds on the previous definition of design, with relevant literature related to this evolving discipline. Most of the research applications of design focus on beauty, attitudes, skills, methods, and techniques (Buchanan, 2015). However, Buchanan (2015) pointed to an emerging design

movement “that seeks to bring innovations—sometimes radical innovations—to organizations that have to adapt to new circumstances of economic competition, social expectation and cultural understanding” (p. 5). In clarification, Buchanan (2015) characterized the “product to be designed” as “not an artifact or a customer service but the organization itself” (p. 8). This definition applies to LIDs and connects them to the organizational literature on transformational change, explained later in this chapter.

As the seminal scholar Herbert Simon (1968) described, “Everyone designs who devises courses of action aimed at changing existing situations into preferred ones” (p. 352). Further, Pendleton et al. (2018) formulated a more recent concept of unbound design: “Unbound design seeks to define a new toolset for a world that is rapidly changing, increasingly connected, and where, because of this increasing interconnectivity, everything is more contingent on everything else happening around it” (p. vii). These design definitions, with those previously presented, informed the current research in the explanation of how a specific ASU organization, EdPlus, was designed and organized and its roles within the ever-changing parent institution.

Design has also come to have a unique meaning at ASU under President Michael Crow’s leadership. In his book, *Designing the New American University* (Crow & Debars, 2014), Dr. Crow used design as a catalyst for ASU’s overall operational model and trajectory. As principles for communication and organization at ASU, nine guiding and interrelated “Design Aspirations” chart the ongoing evolution of the university (Crow, 2010). These are presented in Figure 2.

**Figure 2: The ASU Design Aspirations**

- 
- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• <b>Leverage Our Place</b><br/>ASU embraces its culture, socioeconomic and physical setting.</li> <li>• <b>Enable Student Success</b><br/>ASU is committed to the success of each unique student.</li> <li>• <b>Transform Society</b><br/>ASU catalyzes social change by being connected to social needs.</li> <li>• <b>Fuse Intellectual Disciplines</b><br/>ASU creates knowledge by transcending academic disciplines.</li> <li>• <b>Value Entrepreneurship</b><br/>ASU uses its knowledge and encourages innovation.</li> </ul> | <ul style="list-style-type: none"> <li>• <b>Be Socially Embedded</b><br/>ASU connects with communities through mutually beneficial partnerships.</li> <li>• <b>Conduct Use-Inspired Research</b><br/>ASU research has purpose and impact.</li> <li>• <b>Engage Globally</b><br/>ASU engages with people and issues locally, nationally and internationally.</li> <li>• <b>Practice Principled Innovation</b><br/>ASU places character and values at the center of decisions and actions.</li> </ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
- 

Adapted from “Differentiating America's Colleges and Universities: A Case Study in Institutional Innovation in Arizona,” by M. M. Crow, 2010, *Change: The Magazine of Higher Learning*, 42(5), 36-41 (doi:10.1080/00091383.2010.505164). Copyright by Taylor & Francis.

The roots of the discipline known as Design Studies can be traced to the inception of the inaugural journal bearing this name, which was first published in 1979. As Cross (2019) observed, “notable progression and evolution have taken place in the field of design over the four-decade span from 1979 to the present, signifying its maturation as a distinct academic discipline” (p. 2). As previously mentioned, in the early days of design research, it was organized into two categories, Design as a Science and Design Methods. Cooper (2019) described this relationship:

Scholars fully integrating the nature of design and the degree to which it was a science, a method, a process, or way of working that could be codified. In doing so, they highlighted the unique nature of design and provided the context for further development of research generally and more specifically for later work into the way in which designers think and practice. (p. 2)

Although there has been a transition and variety of applications of design from the early days, it was the release of Papanek's (1971) book *Design for the Real World* that led to the phenomenon that "designers saw they could work not only towards the benefit of society and the environment but also that what they designed could be damaging to the planet" (p. 34, as cited in Cooper, 2019, p. 7). Thus, the social and moral responsibility of design was brought into play.

In tracing and synthesizing the literature on Design Research over a 50-year period, Cooper (2019) outlined five Waves of Change. This is a helpful way to view the evolution of the field. Table 2 summarizes these waves, and the subsequent section discusses these waves in context of Organizational Design.

**Table 2:** *Five Waves of Change in Design Research*

Wave of Change	Description
First Wave: Establishment 1960s and 1970s	<ul style="list-style-type: none"> <li>• Design education gets established internationally, supported by theories of its methods and processes.</li> <li>• Established through a period of activism that influenced the role of design in society and the economy.</li> </ul>
Second Wave: Education 1980s and 1990s	<ul style="list-style-type: none"> <li>• Massive shift and growth in design education generally, with new emphasis on funding for design research.</li> <li>• Growth in conferences and journals.</li> <li>• Start of collaboration and connectivity between design and other disciplines, primarily in management.</li> <li>• User-centered design emerges (Vredenburg et al., 2002), as does</li> </ul>

Wave of Change	Description
Third Wave: Corporatization 2000s	<p>connection between design and innovation (Brown &amp; Katz, 2019).</p> <ul style="list-style-type: none"> <li>• Application of design theory and methods to innovation, productivity, and economic challenges.</li> <li>• Beginning of service and policy design emerging (Buchanan, 2001).</li> </ul>
Fourth Wave: Expansion 2010s	<ul style="list-style-type: none"> <li>• Adoption of design by other fields, resulting in an increase to number of design theories, new investigation into the way designers think, and evolutions to applications of design to drive the economy forward and improve services in the public and private sectors (Cooper &amp; Boyko, 2011).</li> </ul>
Fifth Wave: Optimism 2020s and beyond	<ul style="list-style-type: none"> <li>• Using design to understand the future with a focus on new systemic and social problems, such as sustainability, healthcare, education, and food systems (Cooper, 2018).</li> </ul>

Adapted from “Design Research--Its 50-year Transformation,” by R. Cooper, *Design Studies*, 65, 6-17 (<https://doi.org/10.1016/j.destud.2019.10.002>). Copyright 2019 by Elsevier.

### ***Design Thinking***

Design thinking as a process is best defined as a series of steps to solve a problem (Brown, 2009). Design thinking has received much attention in the management literature (Dunne, 2018). Pendleton et al. (2018) observed, “Design is optimistic. It brings new things to the world. Designers take on problems, model them,

frame them, and create responses through the distribution of material, real or virtual in space” (p. 26).

Organizations are drawn to the potential impacts of design thinking on transformation and innovation (Brown, 2009), for better decision-making (Liedtka, 2015), and for competitive advantage (Martin, 2009), as well as other advantages. Large organizations incorporate design thinking throughout all divisions, and Kolko (2015) noted, “This new approach is in large part a response to the increasing complexity of modern technology and modern business” (p. 1). Many corporations have established design programs and processes, and many universities have created curriculum and executive education programs teaching the design thinking process. In an internal memo to all Arizona State University managers (500+), Dr. Crow declared that ASU is “a large, design thinking organization” (internal email, December 16, 2015).

The design process is iterative, exploratory, and sometimes chaotic, beginning with an idea, summarized in a brief, and finalized with a product (Razzouk & Shute, 2012). Three major cognitive processes are required in design thinking: “(a) preparation, (b) assimilation, and (c) strategic control” (Razzouk & Shute, 2012, p. 336). The preparation process pinpoints what is relevant and should be the focus of the process. Considerations include “specifications and constraints of the problem, reinterpretation of ideas, visualization, problem reformulation (including situation assessment and elaboration)” (Razzouk & Shute, 2012, p. 336).

In the assimilation process, designers consider proposed solutions, data, and observations emerging from the environment (e.g., prototypes). In the strategic control

process, designers are called upon to make many decisions, such as ideas to follow up on, elaborate on, or experiment with in adapting and setting priorities. Designers must move through all facets flexibly and alertly, and in a timely manner to capitalize on all developments (Kolodner & Wills, 1996; Razzouk & Shute, 2012). Table 3 summarizes the characteristics of design thinkers; these characteristics are illustrated in the Mobile Model as the interrelated theme called, “*think differently*” (Eckel & Kezar, 2003b).

**Table 3: Design Thinker Characteristics**

Characteristic	Description
Human and environment-centered concerns	Designers continually think about how to create what will respond to human needs. Designers also consider environmental interests at a level with human interests as primary constraints for the design process.
Ability to visualize	Designers work visually (i.e., depict ideas).
Predisposition toward multifunctionality	Designers look at different/multiple solutions to a problem and keep in mind the big picture of the problem while focusing on its specifics.
Systemic vision	Designers treat problems as system problems with opportunities for systemic solutions involving different procedures and concepts to create a holistic vision.
Ability to use language as a tool	Designers verbally explain their creative process, forcing invention where detail is lacking and expressing relationships not apparent visually (i.e., an explanation should accompany the creative process).



---

Characteristic	Description
Affinity for teamwork	Designers develop interpersonal skills to communicate and work with others across disciplines.
Avoiding the necessity of choice	Designers search for competing alternatives before moving to choice-making or decision-making. They try to find ways to arrive at new configurations. This process leads to a solution that avoids overly complex decisions and combines the best possible choices.

---

Adapted from “What Is Design Thinking and Why Is It Important?” by R. Razzouk & V. Shute, 2012, *Review of Educational Research*, 82(3), p. 336 (<https://doi:10.3102/0034654312457429>). Copyright 2012 by Sage.

Although many organizations have adopted design thinking, Dunne (2018) pointed out that organizational design challenges include unclear goals, the need to build legitimacy, cultural resistance, and leadership turnover. Such challenges can compromise the work of design programs. Therefore, equal attention must be placed on the design of the organization and the processes within them. In a recent ethnographic study on design thinking and organizational change, Felder et al. (2023) found that although the design thinking process did not produce “revolutionary ideas,” it did establish the role of the designer as a catalyst for change (p. 16). This conclusion is supported by the role that the instructional designer plays in helping faculty work through a change process typically in their instructional activities (Campbell et al., 2006, 2009; Chen & Carliner, 2020; Kenny et al., 2005; Schwier et al., 2007).

In universities, as Kezar (2001) pointed out, organizational change can result from educational strategic planning or academic reorganization. The following section

discusses these ideas through the lens of the literature on organizations and change, within the context of higher education. In 2024, near the conclusion of this study, the researcher had a discussion with Dr. Kezar, the co-author of the conceptual model for this study, about the relationship between design and change. She had this to offer:

So when an institution or organization is not designed for all groups, then design thinking is particularly helpful. I don't know that you need it for all change processes, but it's very helpful for those specific kinds of changes because it's aimed at a type of innovation specifically, and I use the social science derivative of design thinking which is liberatory design thinking, design for social systems and has an equity lens to it like about how systems can either be designed equitably or inequitably and I don't want to design inequitable systems and structures. So, that's how I've come to think about design thinking. (peer conversation, 2024).

### **Organizations**

In this study, colleges or universities are viewed as *organizations*, a concept that has held a central position in higher education for over five decades (Gumport, 2012). In another management study looking at the history of organizations, Bastedo (2012) concluded that “modern organizational theory was built upon the study of colleges and universities” (p. 3). “Organizational studies are now acknowledged as a distinct field, but their boundaries remain undefined, given their origins as an interdisciplinary pursuit predominantly based in social science disciplines” (Bastedo, 2012, p. 4). The studies have assimilated ideas from scientific management and human relations to form the foundation of this field (Scott, 2004). With researchers bringing different interests, backgrounds, and locations to their research, organizational studies and organizational change, the primary concepts of this literature review have multiple paradigms and schools of theory (Gumport, 2012). These are explored in detail later in this section.

## Organizational Design

As a category within the Organizations literature, organizational design is a relatively new field and fits within Cooper's (2019) Fourth and Fifth Waves of Design Studies Research (Table 2). These are rooted in 20th-century organization and management theory, which evolved from 19th-century positivism (Eastman & Bailey, 1994). The first volume of the *Journal of Organizational Design* (JOD) was published in 2012 and addressed topics such as rethinking OD for complex endeavors, OD for business ecosystems, and open innovation through OD (Obel & Snow, 2012). The evidence shows that the design of an organization has a significant impact on the performance of the organization (Doty et al., 1993).

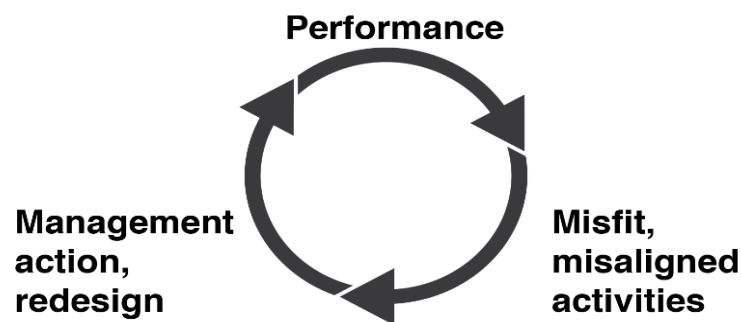
Thus, as pointed out above, a central inquiry for this study was how a learning innovation organization should be designed (Burton & Obel, 2018). Burton and Obel (2018), like Simon (1996), argued that OD can be viewed as a science. OD is "knowledge and understanding about the world through observation of what is, and experimentation of 'what is' and 'what might be'" (p. 2).

Experimentation and simulation are critical aspects of this approach, and experimentation is at the heart of the OD challenge (Van de Ven, 2013), which is also central to Design Studies as a whole. This observation is particularly appropriate to higher education, where learning innovations and new technologies are introduced and tested rapidly. In a review of text analysis and abstracts in the JOD, Joseph (2018) found that "fit" was the most prevalent topic in articles published since the journal's founding. Burton (2020) explained "fit" as central to modern OD. "The main idea is that the design

of an organization needs to align its strategy with other contingency factors. Designs that fit deliver better performance; misfit produces disorganization and consequently lower performance” (p. 1).

Burton and Obel (2004) enumerated four criteria for design fit: “strategy among the given contingencies, contingency of the strategy to the design, design among the internal contingencies, and total fit among the previous three” (p. 1). They also cited Puranam et al. (2014), who listed four elements for successful OD: “task division, task allocation, reward distribution, and information flows” (p. 13). Burton and Obel commented, “Any design that does not address these elements is incomplete and likely in a state of misfit” (p. 1). This concept is revisited in Chapters 4 and 5 of this study in discussions of EdPlus’ orientation within its parent institution, ASU. Figure 3 illustrates the relationship between fit and misfit for successful OD and performance.

**Figure 3:** *The Relationship of Fit and Misfit to Performance*



From “Fit, Misfit, and Design: JOD Studies That Touch Reality,” by R. M. Burton. 2020, *Journal of Organizational Design*, 9(5), p. 2 (<https://doi.org/10.1186/s41469-020-000810>). Open Access.

***Organizational Design and Higher Education***

To understand how transformational change (defined earlier in the Glossary) takes place at universities, one must first understand, from the literature, what makes colleges and universities unique. Birnbaum (1988) argued, “Learning how colleges and universities work requires seeing them as organizations, as systems, and as inventions” (p. 1). When universities are viewed as a complex adaptive system (CAS), as Mitchell (2009) pointed out, “many parts are irreducibly entwined, and the field of complexity is itself an entwining of many different fields” (p. 4). The question must then be asked:

What makes a university a complex system?

The literature shows that, like most organizations, universities have many interconnected components. These include students, faculty, staff, administration, and various academic and service functions. Universities are also subject to external environmental forces, including governing policies, economic and funding sources, and societal expectations and behaviors. These components interact with each other in complex and dynamic ways (Martin, 2019).

Each of these interconnected components can lead to complex behavior and adaptations to changes within the system they are a part of or the external environment around them. This is considered within theoretical model later in this chapter using the metaphor of a Mobile, which is always changing in recognition of the environment within and around it. Management of a university as a complex adaptive system can be challenging, requiring a deep understanding of the various interrelationships within the system and the ability to anticipate and respond to the unexpected changes (Nelson &

Squires, 2017). It is clear from the literature on complexity that effective management within this system requires that the organization's leadership learns continuously and adapts to anticipate needed changes and make decisions based on evolving needs of the organization (Goldstein, 2011). These abilities include building adaptive capacity and developing a culture of continuous learning and improvement to navigate the challenges and opportunities that arise from operating within a university as a complex system (Nelson & Squires, 2017).

Sammut-Connici (2015) analyzed how traditional industry has adopted CAS. In cases such as for-profit organizations eBay and Amazon, CAS has led to moving from "hierarchical retail stores and publishing businesses to self-organizing systems that can more rapidly respond to customer preferences and demands" (p. 3). However, Sammut-Connici observed that "building CAS into a business strategy may be risky because these systems cannot be directed to take a predetermined course, and the end result is unpredictable" (p. 3).

Given these cautions, the research university is especially complex. The public research university must *balance* its roles in research, teaching, public service, and faculty advancement with service of the public good. All of these components are dependent on its ability to attract research and state funds and provide value to its stakeholders. In a summary of the characterization of the public research university, Atkinson and Blanpied (2008) concluded,

Research universities in the United States are fundamentally conservative institutions. When they do change, they most often do so deliberately. Clearly, US research universities cannot afford to rest on their laurels or assume that the

public understands and appreciates the essential role they play in the furtherance of society's fundamental goals. (p. 46)

Kezar (2018) used institutional theory as is often employed in higher education literature (Bastedo, 2012; Peterson, 1974) to argue that higher education qualifies as a societal institution. Kezar (2018) explained this as “analogous to other societal pillars, such as healthcare and government, the label suggests that higher education should remain relatively stable, resisting the sway of external factors or market volatility, while maintaining traditional missions vital to the community” (p. 116). Kezar described the environment in higher education as a "Professional Bureaucracy," which sets it apart from environments typical of business or government sectors (p. 117). Later in this chapter, other paradigms, and approaches to change within higher education will be reviewed. These concepts were an important factor in the decision to use the Mobile Model as the Theoretical Model for this study. Like a Mobile, illustrated in Figure 6 on page 61 below, the model is intended to adapt to the prevailing and complex environmental changes in and around it.

### ***Centers for Teaching and Learning***

The literature search revealed that the LID model, as defined for the purpose of this study, also has important roots in CTLs. Therefore, this section begins with a brief history of CTLs. These centers originated from the conviction that the effectiveness of a faculty member is related to the individual's ability to grow and mature over time in terms of knowledge and teaching skills. Certain supports and services can facilitate this evolution (Schumann et al., 2013).

The focus of a traditional CTL is of staff working directly with faculty to improve teaching and learning skills through the transfer of knowledge from traditional pedagogical models to new ones (Schumann et al., 2013; Singer, 2002). Services may include workshops and seminars, course design and redesign, teaching evaluation and assessment tools, resources for course design and delivery, technology training and assistance, observation, and feedback services for instructors. Bass (2020) defined the goal of a CTL as “matching pedagogical practice to instructional needs” (p. 4).

In the United States, the first CTL began at the University of Michigan in 1962. In 1975, the Danforth Foundation provided grants for the creation of five additional CTLs at Empire State College in New York, Harvard, Northwestern, Spelman, and Stanford (Singer, 2002).

By the 1990s, CTLs appeared on most campuses, and several supporting professional organizations were well established, such as the Professional and Organizational Development Network in Higher Education (POD), American Association for Higher Education (AAHE), and Association for American Colleges and Universities (AACU).

At the time of this research project, there were over 1,200 teaching and learning centers in educational institutions and 1,755 members of the POD network, the most comprehensive professional network and digital resource for CTLs (POD Network, 2023; Sorcinelli, 2002). In the U.S., most CTLs are in academic affairs offices and the staff report to the Provost or Chief Academic Officer (Wright et al., 2018). Members of the POD have argued, almost from the beginning of the founding of the network, for a need



to evolve (Levinson-Rose & Menges, 1981) and establish measurements for the impact of CTLs (Kolomitro & Anstey, 2017; POD Network, 2018). Similar critiques persist in the Australian context (Holt et al., 2011).

There is a large body of research on the roles and evolution of CTLs (Ableser & Moore, 2018; Carlisle & Weaver, 2020, Frantz et al., 2004; Wright et al., 2018). The studies generally examine how the CTLs cocreate value (Schumann et al., 2013) and describe the roles they play in supporting change at the institution (Keehn & Bishop, 2018; Wise et al., 2022). A fairly recent report from the POD Network (2018) enumerated the most salient capabilities and functions of the modern and comprehensive CTL. Participants at the 2017 POD Network presidential address were asked, “What are you most proud of?”. Table 4 shows the responses, organized by capabilities and functions in order of preference.

**Table 4:** *Components, Capabilities, and Functions of CTLs*

<b>Component</b>	<b>Capability, Function (Participants’ Responses)</b>
Hub	“In this capacity, CTLs serve as a forum, in the ancient Roman sense, as a place for exchange of ideas and where collaborative actions can occur, such as adaptation, translation, redistribution, and crosspollination” (p. 6).
Incubator	“As incubators, CTLs prioritize fostering growth and development, cultivating individuals and communities, nurturing relationships, promoting transformation, and creating a sense of belonging” (p. 7).

---

Component	Capability, Function (Participants' Responses)
Temple	“The secular temple metaphor . . . vides legitimacy, credibility, authority, and even recognition for instructors through support of teaching, learning, and educational development. . . the temple is a sanctuary, a space where campus teaching and learning communities can find hope and inspiration, as well as an institutionally sanctioned space for exploring pedagogy” (p. 8).
Sieve	“The sieve function reflects vetting roles that a CTL might play. Essential for this function is the value of evidence-based practice . . . as institutions strive to adopt data-driven priorities. CTLs act as sieves that both ‘filter in’ and ‘filter out’ as needed in different contexts” (p. 9).

---

Adapted from POD Network. (2018). “Defining what matters: Guidelines for comprehensive Center for Teaching and Learning (CTL) evaluation,” pp. 1-11 ([https://podnetwork.org/content/uploads/POD\\_CTL\\_Evaluation\\_Guidelines\\_\\_2018\\_.pdf](https://podnetwork.org/content/uploads/POD_CTL_Evaluation_Guidelines__2018_.pdf)). Copyright 2018 by POD Network.

In their often-cited 2014 research project, Keehn and Bishop found that “an increasing number of institutions were re-designing their CTLs to help lead their organizations in transforming and advancing student success through academic innovation and improved support for students and faculty” (p. 1). At the time, Keehn and Bishop defined academic change as a university’s effort to “improve student success by creating optimally effective learning environments that simultaneously increase access, affordability and quality of higher education for all those who want a postsecondary degree” (p. 1). At the time, Keehn and Bishop concluded that most of the change within CTLs took place with a shift of mission from “a reactive faculty development focus to a more proactive teaching and learning transformation focus” (p. 13).

## Isomorphism

Isomorphism is a foundational concept in organizational sociology that explains the process through which organizations in the same discipline become similar over time. Coined by DiMaggio and Powell (1983) in their seminal work, *“The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields,”* isomorphism denotes the tendency of organizations to emulate practices, structures, and norms that are considered successful or legitimate in their environment. There are three types of isomorphic change: coercive, mimetic, and normative, which are shaped by regulatory pressure, uncertainty, and the professionalization of roles, respectively (DiMaggio & Powell, 1983).

In the context of higher education, isomorphism is particularly relevant as universities often mirror successful practices or structures in response to the dynamic demands of their environments (Morphew, 2002). Morphew (2009) showed that institutions, from the 1970s to the present day, have become progressively more alike instead of preserving their distinct features. For example, community colleges might adopt 4-year degree programs, resembling universities, to enhance their institutional status (Dougherty et al., 2012). Conversely, traditional 4-year schools may offer shorter certificates and degrees. These adoptions can be seen as responses to the pressure from the wider educational field or can be viewed as strategic decisions made in the context of organizational change (Birnbaum, 1991).

Isomorphism therefore provides a useful theoretical lens to understand and explain distinct organizational change, or lack thereof, in higher education institutions.

This concept helps to illustrate why certain organizational practices, structures, or norms become standard in the sector, even when these may not be the most efficient or effective approach (Tolbert & Zucker, 1983). Isomorphism is deeply embedded in the literature of organizational change, providing critical insights into how higher education institutions adapt, innovate, and navigate their changing landscapes.

### **Organizational Change**

The change process involves “the why, what, and how the change happens, as well as the target of change” (Kezar, 2001, p. 6). By definition, this is a transformation of an organization between two points in time (Barnett & Carroll, 2013). An institution must be ready to change, and the culture must support the change, both the change process and change outcome, although the process can be independent of the outcome (Van Knippenberg et al., 2006). In the design literature, this distinction is labeled the design process and design of products (Cross, 2006).

Because design outcomes or products can often be ill-defined, the design process “is more likely to reflect the nature of the design task and [be] of the nature of the kinds of problems the designer tackles” (Cross, 2006, p. 7). Kotter (2012) observed that organizational change is not a “quick fix” solution but a continuous exploration for existence and survival. Dr. Philip Regier, the current and founding Dean and CEO of EdPlus at ASU observed, “Quality of adaptation is dependent on the quality of stress. How organizations best adapt to change is contingent on the types of problems they face and how they respond” (personal communication, January 12, 2016). A sense of

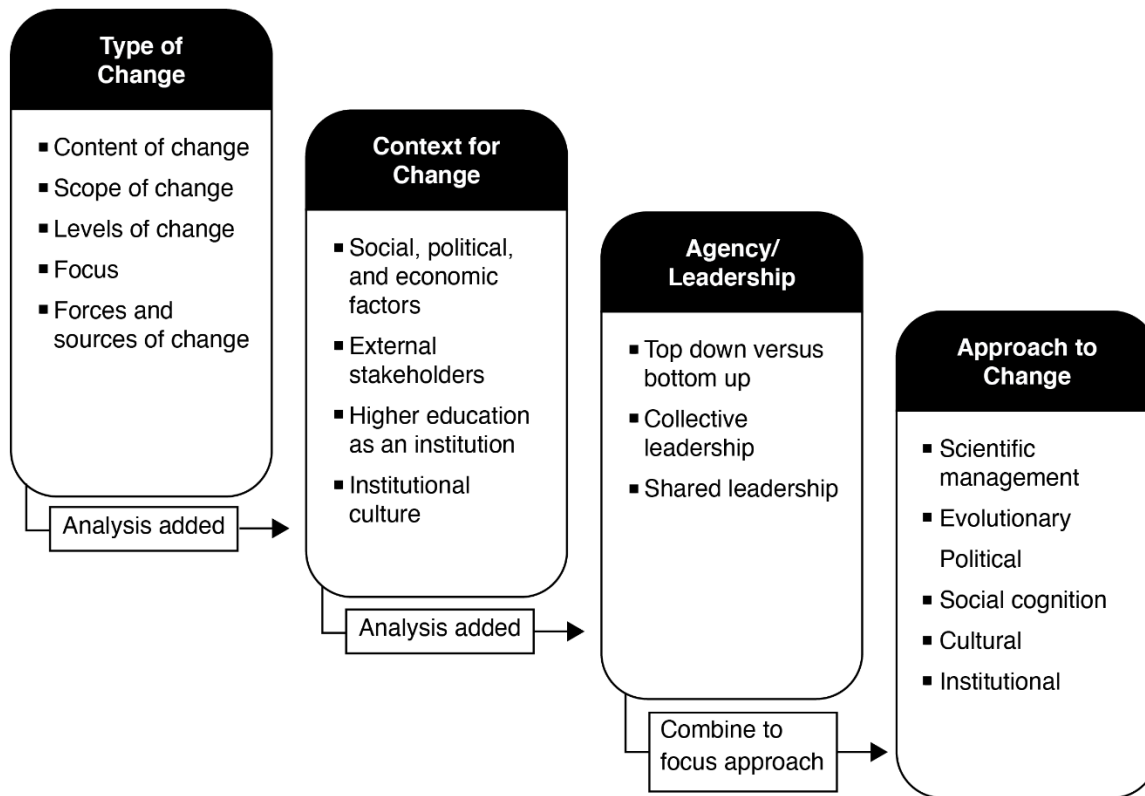
urgency is necessary to motivate and implement the change, and the stakeholders must have knowledge of the costs of not changing (Kotter, 2012).

In the sections that follow transformational change is compared and contrasted as a unique type of change central to this research, with other types of change, drawing on various paradigms and theories of change. As defined in Chapter 1, transformational change is more radical than organic change. Transformational change “(1) alters the culture of the institution by changing underlying assumptions and overt institutional behaviors, processes, and structures; (2) is deep and pervasive, affecting the whole institution; (3) is intentional; and (4) occurs over time” (Eckel & Kezar, 2003b, p. 17). Kezar (2018) provided a useful framework for organizational change within higher education that includes essential components for change and the factors within each component. These are “type of change, context for change, agency/leadership and approach to change” (p. 66). Figure 4 illustrates this framework.

### **Paradigms of Change**

Paradigms and theories, although interconnected, serve different roles in scientific inquiry. A paradigm represents a foundational framework or worldview that underpins a scientific discipline, defining its basic assumptions, methods, and areas of inquiry. A theory is a specific explanation about an aspect of the natural world within which that paradigm that can be tested, modified, or discarded based on empirical evidence (Kuhn, 1962). In other words, paradigms are “the underlying assumptions that drive all decisions about studying and theorizing organizational change and affect the questions asked of change, and outcomes” (Collins, 1998, as cited in Kezar, 2012, p. 4).

Figure 4: Understanding Change



From *How Colleges Change: Understanding, Leading, and Enacting Change* (2nd ed.), by A. Kezar, 2018, p. 65. Copyright 2018 by Routledge.

The four paradigms of change identified by Kezar (2012) all offer distinct approaches to understanding and managing change. These paradigms are functionalist, interpretive, critical, and postmodern. The functionalist paradigm is the most common and is rooted in positivist epistemology (Burrell & Morgan, 1979). This paradigm assumes that reality is objective and can be quantified, in which proponents advocate for incremental changes based on systematic, fact-based decision-making (Burrell & Morgan, p. 27). In this paradigm, “change occurs because of strategic planning, management techniques, and careful implementation of a rational and linear process” (Kezar, 2012, p. 183).

In contrast, the evidence from the interpretive paradigm asserts that reality is a social construct and subjective in nature, implying that change relies on common understanding and communication (Berger & Luckmann, 1966). This paradigm underscores the significance of dialogue and linguistic exchanges (Kezar, 2012). From this perspective, language not only helps mold social circumstances but also articulates the varying individual interpretations of change (Dill, 1982).

The critical paradigm goes a step further, exposing conflicts and power dynamics as integral elements of change. This paradigm challenges existing structures to stimulate and facilitate transformation (Habermas, 1984). With the critical paradigm, proponents not only study power imbalances but also seek to change them (Calhoun, 2012).

Lastly, the postmodern paradigm rejects the possibility of a single, unified reality, suggesting instead that multiple realities coexist simultaneously, and that change is inherently ambiguous and nonlinear, demanding continuous deconstruction and reinterpretation (Lyotard, 1984). All four paradigms provide ways of understanding and managing change but are not theories themselves. Rather, they represent underlying worldviews or frameworks within which specific theories are developed and tested, guiding the formulation of research questions, the methods of investigation, and the interpretation of results (Kezar, 2012).

With regard to this study, the postmodern paradigm is best suited to explore EdPlus as an LID and its role within ASU. EdPlus is an ever-adapting and innovative organization, and change is continuous and evolving over a long period of time. The changes in EdPlus are and must be highly adaptive to the rapid environmental factors

within and outside of the institution. These changes, almost by definition of its responsibility, create new innovation models.

### **Theories of Change in Higher Education**

Researchers have established organizational change theories drawing on different paradigms in the literature on higher education and across other disciplines (Bolman & Deal, 2018; Eckel & Kezar, 2013; Kotter, 1996; Lewin, 1951). The first guiding rule of higher education is that institutions are predominantly organized as professional bureaucracies (Buller, 2015; Kezar, 2013; Kezar & Lester, 2011; Metzger, 2020). Eckel and Kezar (2003b) argued that leading transformational change in higher education institutions involves five core strategies: (a) senior administrative support, (b) collaborative leadership, (c) flexible vision, (d) staff development, and (e) visible action.

These overarching categories resonate with the lived experience of the researcher as a professional in higher education and are well situated within the unique context of the U.S. public research university as the study setting. Kezar (2018) categorized and synthesized change theories within six schools of thought: scientific management, evolutionary, political, social cognition, cultural, institutional, and neo institutional. Collectively, these schools offer essential insights for comprehending change and present a multifaceted perspective. Subsequent sections of the current work provide brief overviews of each school, with note of their points of convergence with or divergence from transformational change.



***Scientific Management***

Scientific management has attracted the most research and models (Kezar, 2001). This school focuses on several related models and theories of change, including planned change, organizational development, strategic planning, adaptive learning, and rational approaches (Van de Ven & Poole, 1995). Change motivations are based on internal organizational features rather than external environmental ones. Critical aspects of the change process include “planning, assessment, incentives and rewards, stakeholder analysis and engagement, leadership, scanning, strategy, restructuring, and reengineering” (Van de Ven & Poole, 1995, pg. 9).

The leader is at the center of the process and is responsible for aligning goals, setting expectations, communications, and rewards and incentives. Context is largely ignored, as strategies are viewed as transcending context (Kezar, 2018). The benefits of this type of management include “an emphasis on the roles of leadership and change agents, the role of collaboration, staff development, the ability to forecast or identify the need for change, and the ability for organizations to adapt and demonstrate flexibility during challenging and difficult times” (Kezar, 2018, pg. 26).

Although scientific management theories of change have been lauded for increasing efficiency and productivity in the industrial era, they have been widely criticized for promoting dehumanizing work environments, disregarding individual needs, and limiting worker autonomy, leading to decreased job satisfaction and employee motivation (Buchanan & Huczynski, 2017). Scientific management theories lack adaptability, lead to exploitation of workers, and have proved inadequate for

modern 21<sup>st</sup>-century knowledge work (Drucker, 1999). In relation to this school, Kezar (2018) observed, “leadership emerges as perhaps the most important facilitator. Without change agents’ energy and enthusiasm, there would be little change” (p. 43). Popular models of this theoretical school include Kotter’s (1995) eight-step model for change, six sigma (Pande & Holpp, 2002), total quality management (Topalovic, 2001), and the theory of constraint (Goldratt, 1984). Table 5 illustrates the elements of scientific management theories in relation to transformational change.

**Table 5: Scientific Management Theories and Transformational Change**

<b>Transformational Change Element</b>	<b>Convergence</b>	<b>Divergence</b>
Intentional	Leader as important facilitator planned	Lacks adaptability to the external environment
Occurring over time	Ability to forecast and adapt over time	Lacks adaptability to the external environment
Alters the culture		Inability to adapt
Affects entire institution		Disregards individual change Agents’ needs

Transformation Change elements from *Taking the Reins: Institutional Transformation in Higher Education*, by P.D. Eckel & A. J. Kezar, 2003. Copyright 2003 by Rowman and Littlefield.

### ***Evolutionary Theories***

In contrast to the importance of the leader, evolutionary theories assume that change is the result of, and dependent on, circumstances, situational variables, and the

environment faced by each organization (Morgan, 1986, as cited in Kezar, 2018, p. 50). Specific theories include “adaptation, resource dependence, self-organization, contingency and systems, strategic choice, punctuated equilibrium, and population ecology.” (Kezar, 2018, p. 50). These models focus on change due to environmental circumstances in which changes are required for survival (modeled on biological systems). The process is not emphasized; rather, change is primarily unplanned and adaptive to environmental factors.

A standard theory within this school is resource dependency theory, in which leaders make choices for the organization to adapt to the environment in an interdependent relationship. The focus is on transactions as part of the relationship (Gumpert & Pusser, as cited in Kezar, 2018). The leader role is downplayed. Instead, the focus is on the external factors leading to unplanned change processes. Limitations of this approach are that “it tends to overlook or ignore human agency and the role of leadership. Many studies have demonstrated that leadership can make a difference, particularly in managing external forces” (Kezar, 2018, p. 51). These theories are often viewed as too deterministic, implying that organizations are passively shaped by their environments and have limited capacity to influence their own evolution (Child, 1997). Table 6 illustrates the elements of evolutionary theories in relation to transformational change.

**Table 6: Evolutionary Theories and Transformational Change**

<b>Transformational Change Element</b>	<b>Convergence</b>	<b>Divergence</b>
Intentional		Less focused on the leader
Occurring over time	Adaptive to environmental change	
Alters the culture		Too dependent on environment to shape culture
Affects entire institution		Can lead to isomorphism

Transformation Change elements from *Taking the Reins: Institutional Transformation in Higher Education*, by P.D. Eckel & A. J. Kezar, 2003. Copyright 2003 by Rowman and Littlefield.

### ***Political Theories***

Somewhat similar to evolutionary theories, political theories of change are evident when two opposing patterns, values, ideals, or norms in an organization are always present (Kezar, 2018). When the opposition becomes too conflictive, a radical change of the initial belief system results. For a university, this change could take the form of a new charter or strategic plan for a new direction. “Political theories focus on bargaining, raising consciousness, persuasion, influence and power, and social movements as key elements of the change process” (Kezar, 2018, p. 52).

Social interactions with peers and leadership become critical toward resolutions, unlike environmental scanning, which is more critical in evolutionary theories. Kotter

(1985) pointed to agenda-setting, networking, forming coalitions, and bargaining and negotiating as the skills needed to advance political change. The more popular political theories are those that emphasize social movements because they provide solid visions for change (Kezar, 2018) and include the power-dependency theory (Emerson, 1962), and resource dependence theory (Pfeffer & Salancik, 1978). Several critics have asserted that these theories have limited applicability (Zald & Berger, 1978) and a lack of predictability due to the complex, chaotic and unpredictable nature of the political processes (Pettigrew, 1973). Table 7 illustrates the elements of political theories in relation to transformational change.

**Table 7: Political Theories and Transformational Change**

Transformational Change Element	Convergence	Divergence
Intentional	Establishes vision for change	
Occurring over time		Lacks predictability over time
Alters the culture	Long-term planning and social movements	
Affects entire institution	Coalition and network development	

Transformation Change elements from *Taking the Reins: Institutional Transformation in Higher Education*, by P.D. Eckel & A. J. Kezar, 2003. Copyright 2003 by Rowman and Littlefield.

### ***Social Cognition Theories***

Different from the above theories, social cognition theories emphasize the individual. These theories assume “that change can be best understood and enacted through individuals’ thought processes rather than organizational mandates” (Kezar, 2018, pg. 30). In studies of resistance to change, participants often agreed with the change but failed to understand it and how it affected them and their work and roles (Kezar, 2018). Kegan and Lahey (2009) found that change agents are often conflicted in their commitment to the change. Their underlying assumptions and beliefs may only sometimes align with the change initiative.

Bolman and Deal (1991) and Weick (1995) explored how individuals view organizations differently. A benefit of social cognition theories is focus on the individuals involved in the change. However, detriments may become evident because external forces, organizational structures, and culture should be more focused on or addressed (Kezar, 2018). Standard models emphasizing cognition include sensemaking (Weick, 1995) and organizational learning (Scott, 2003). Table 8 illustrates the elements of social cognition theories in relation to transformational change.

**Table 8:** *Social Cognition Theories and Transformational Change*

<b>Transformational Change</b>		
<b>Element</b> (Eckel & Kezar, 2003b)	<b>Convergence</b>	<b>Divergence</b>
Intentional		Focuses on the individual over the leader in planning

Occurring over time	Focuses on organizational learning through individuals	
Alters the culture	Culture changes is explained through the individual and their understanding of change	
Affects entire institution		Change can differ from individual to individual making entire institutional change difficult to observe

---

Transformation Change elements from Taking the Reins: Institutional Transformation in Higher Education, by P.D. Eckel & A. J. Kezar, 2003. Copyright 2003 by Rowman and Littlefield.

### ***Cultural Theories***

In contrast to social cognition theories and somewhat similar to political theories, the cultural theories change process tends to be long and slow; entails the alteration of values, beliefs, myths, and rituals; and focuses on profound transformational change over a long period (Kezar, 2018). Kezar (2018) observed, “Change strategies are successful if they are culturally coherent or aligned with the culture. Institutions that violate their institutional culture during the change process have often expressed difficulty” (p. 57). This difficulty is especially true in higher education transformation work, in which changing institutional cultures often require substantial shifts “in the many cultural aspects of an institution” (Eckel & Kezar, 2003b, p. 27).

The application of cultural change theories can lead to profound and long-lasting change. However, practitioners may have little practical or tangible advice for managing the change and facilitating the process (Kezar, 2018). The symbolic action approach is a widely used cultural theory (Shein, 1985), in which managers create change by seeking to modify organizational members' shared meaning. In Eckel and Kezar's (2003b) background for the Mobile Model for Transformational Change, the theoretical model used for this study, they connected transformational change to culture in the following way:

Transformational change requires a major shift in the many cultural elements of an institution. Culture is the dominant patterns of shared assumptions, values, beliefs, ideologies, and meanings that people have about their organization that shapes what individuals do and how they think. It's the invisible glue that creates a common framework that holds together an institution – the institution-wide patterns of perceiving, thinking, and feeling and the collective assumptions and common interpretive frameworks. (pp. 27-28)

Critics of cultural theories argue that it is difficult to define and measure culture (Martin, 2002), point out the overemphasis on internal dynamics (Pettigrew, 1979), and neglect of the roles of power and conflict and its impact on change (Alvesson & Willmott, 2002). Table 9 illustrates the elements of cultural theories in relation to transformational change.

**Table 9:** *Cultural Theories and Transformational Change*

---

<b>Transformational Change Element</b> (Eckel & Kezar, 2003a)	<b>Convergence</b>	<b>Divergence</b>
---------------------------------------------------------------	--------------------	-------------------

---



---

Intentional		Neglects the role of power and conflict dynamics. Little emphasis on the change agent
Occurring over time	Long and slow over a period of time	
Alters the culture	Focuses on the culture as the primary mechanism for change	Difficult to define cultural change
Affects entire institution		Overemphasis on internal dynamics

---

Transformation Change elements from *Taking the Reins: Institutional Transformation in Higher Education*, by P.D. Eckel & A. J. Kezar, 2003. Copyright 2003 by Rowman and Littlefield.

### ***Institutional Theories***

Institutional theories “explore how social institutions, including higher education, might change in different ways from other types of organizations” (Kezar, 2018, pg. 25). With elements similar to several of the other theories (e.g., cultural, social cognition), institutional theories posit change through the connections, relationships, and influences from organizations outside the institution, emphasizing and “identifying the interplay with the external environment” (Kezar, 2018, p. 60). These theories also examine why change might be difficult in longstanding institutions. Institutional theories suggest that universities will change more slowly and less often because of the universities’ connections to societal goals.

An important concept within institutional theories is institutional isomorphism (discussed earlier), “a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions” (DiMaggio &

Powell, 1983, p. 149). This phenomenon may explain why many universities become similar in structure, mission statements, student bodies served, approaches to research, teaching, and other components (Morphew, 2009). Neoinstitutional theory (Scott, 1987) emphasizes that institutions, including formal rules, informal norms, and cultural beliefs, affect the behavior of organizations. This theory asserts that organizations will conform to institutional pressure to gain legitimacy and survive in their fields.

The primary criticism of institutional theories is the difficulty of documenting the change process by separation of internal and external interests. Some critics believe too much emphasis is placed on the external organization (Kezar, 2018). However, a chief benefit of institutional theories is that they combine and account for internal and external analyses and position individuals as change agents. Table 10 illustrates the elements of institutional theories in relation to transformational change.

**Table 10:** *Institutional Theories and Transformational Change*

<b>Transformational Change Element</b> (Eckel & Kezar, 2003a)	<b>Convergence</b>	<b>Divergence</b>
Intentional	Combines internal and external factors in the planning	Accounts for isomorphism in the planning
Occurring over time	Understands context of higher education	
Alters the culture		Difficult to document culture in change process

Affects entire institution

Organizations will conform to institutional pressures.

---

Transformation Change elements from *Taking the Reins: Institutional Transformation in Higher Education*, by P.D. Eckel & A. J. Kezar, 2003. Copyright 2003 by Rowman and Littlefield.

Table 11 summarizes these six approaches to change.

**Table 11: Six Approaches to Change in Higher Education**

	<b>Scientific management</b>	<b>Evolutionary</b>	<b>Political</b>	<b>Social cognition</b>	<b>Cultural</b>	<b>Institutional and neo-institutional</b>
Why change occurs	Leaders; internal environment	External environment	Dialectical tension of values, norms, or patterns	Cognitive dissonance; appropriateness	Response to alterations in human environment	External pressures combined with internal norms
Process of change	Rational; linear; purposeful	Adaptation; slow; gradual; non-intentional	First-order, then occasional second order; negotiational and power	Learning; altering paradigms or lens; interconnected and complex	Long-term, slow; symbolic process; non-linear; unpredictable	Exchange of adaptation and schemas, norms
Outcomes of Change	New structures and organizing principles	New structures and processes; first order	New organizational ideology	New frame of mind	New culture	New schema and norms
Examples	Organizational development; strategic planning; re-engineering; quality management	Resource dependency; strategic choice; population ecology	Empowerment; bargaining; political change; Marxist theory	Single and double looped learning; organizational learning; paradigm shifting; sensemaking	Interpretive strategy; paradigm shifting; process change	Isomorphism; institutional entrepreneurship; academic capitalism
Types of change	Planned; organizational; first-order	Unplanned; external	First and second order; organizational and enterprise	Second order and more individual in focus	Second order; organizational; planned and unplanned	Unplanned; organizational changes tied to external environment
Tactics	Create infrastructure to respond to change	Create infrastructure to respond to changes; strong steering committee; have nimble and flexible structures	Create coalitions; identify allies; build agenda; create collective vision; negotiate	Create data teams; build data infrastructure; enhance systems thinking through training; facilitate interaction	Appeals of values; examine history and context to understand underlying values; alter mission; create new rituals	Understand external forces; buffer institutions; analyze existing schemas and norms; align external interests in support
Criticisms	Lack of human emphasis; deterministic quality	Lack of human emphasis; deterministic	Deterministic; lack of environmental concerns; little guidance for leaders	De-emphasizes environment; overemphasizes ease of change; ignores values and emotions	Impractical to guide leaders; focus on universalistic culture; mostly untested	Hard to document external forces; does not account for agency; often overemphasizes lack of change or static nature
Benefits	Environmental emphasis; systems approach	Environmental emphasis; systems approach	Change not always progressive; irrationality; role of power	Emphasize socially constructed nature; emphasis on individuals; habits and attitudes as barriers	Context; irrationality; values and benefits; complexity; multiple levels of change	Attention to macro context; norms and their power; irrationality; fields and complexity of forces.

Modified from *The organization of higher education: Managing colleges for a new era*, edited by M. N. Bastedo, 2012. Copyright 2012 by Johns Hopkins University Press; and *How colleges change: Understanding, leading, and enacting change* (2nd ed.), by A. J. Kezar, 2018. Copyright 2018 by Routledge.

## **Innovation, Adaptation, and Strategic Change**

Innovation, adaptation, and strategic change are all aspects of change but not as comprehensive as transformation. Transformation and innovation are related concepts, but each has distinct characteristics. Diffusion of innovations theory, as introduced by Rogers (1962), outlines the process by which an innovation is communicated and adopted over time among the participants in a social system. This theory identifies five key factors that “influence the rate of adoption: relative advantage, compatibility, complexity, trialability, and observability” (Rogers, 1962, pg. 54).

In the context of higher education, the diffusion innovation theory has significant applicability (Christo-Baker, 2004). Innovations such as distance learning technologies, new teaching methods, or institutional policies are diffused through the university ecosystem. Their adoption is shaped by perceived benefits (relative advantage), alignment with existing values or needs (compatibility), ease of understanding and use (complexity), opportunities for experimentation (trialability), and visible results (observability) (Buc & Divjac, 2016; Smith, 2012). Understanding the breadth of innovation can help educators and administrators better implement and manage change within their institutions (Rogers, 2003).

Before an innovation is fully integrated into an organization, it must first be recognized and acknowledged by the leaders for its potential contributions (Rogers, 2003) in the adoption phase (Damanpour & Schneider, 2006). After adoption, the innovation is implemented by employees who commit to its use. An illustration at ASU is the adoption of Slack, a communication and project management software. Decision

makers first assessed its suitability for the institution and approved its use. Once approved, the technology was implemented following the above principles of diffusion of innovation theory for scaled adoption across the university. This adoption resulted in dramatic innovations in communication efficiency. EdPlus was the organizational unit that brought Slack to ASU, tested it in context, and then worked with the central IT organization to adopt Slack at the enterprise level.

Adaptation is another useful concept for understanding organizational change and refers to incremental and reactive changes that an organization makes in response to alterations in its external environment (Clark, 1998). These changes are typically less disruptive than other, more all-encompassing changes. Adaptive changes involve adjustments to existing processes, structures, or strategies without alteration of the core of the organization (Wright & McMahan, 1992). Adaptation allows an organization to improve its fit with the environment, helping to ensure institutional survival and success (Levinthal & March, 1993). For instance, a company may adapt its marketing strategy in response to changes in consumer behavior. Unlike adaptation, transformational change alters the very essence of the organization, often requiring a fundamental shift in the organization's identity, values, and modes of action (Kotter, 1996).

Strategic change is a type of organizational change that involves altering the direction or approach of an organization to meet its objectives specific to its competitive market or environment (Boeker, 1997). Strategic change impacts activity patterns within institutions, altering to some degree the programs and services provided, the student

demographic targeted, and the degrees conferred, as well as the research conducted and its dissemination or application. However, strategic change seldom involves a total shift from one set of strategies to another; universities and colleges play crucial social roles in which maintaining continuity is key (Salipante & Golden-Biddle, 1995).

Strategic change is distinct from strategic planning. It does not concern primarily the alignment of activities with objectives, nor does it focus on the devising of plans and planning processes, which are typically the main concerns of most strategic planning exercises (Mintzberg, 1994). Strategic change is typically planned and incremental, making it more manageable and less disruptive than other types of change (Cameron & Green, 2015).

### **Transformational Change**

This study explores Transformational Change, examining it as the primary type of change under investigation. Institutional transformation is not innovation, adaptation, or strategic change, as generally defined within higher education (Eckel & Kezar, 2003b). Crow and Anderson (2021) compared routine and transformational change to organic and designed change: “Through organic change, a university’s structure and practices adapt in response to external pressure or environmental stimulus. Organic change tends to be incremental in scale and scope and the general direction of a university’s existing operational momentum” (p. 2). Transformation change is thus more aligned with strategic change, as described in the previous section.

However, the goal of designed change is to “devise a course of action aimed at changing existing situations to preferred ones” (Simon, 1998, p. 67, as cited in Crow &



Anderson, 2021, p. 2). If organic or routine change occurs naturally, designed change is intentional or *artificial* (Simon, 1998). However, Kezar (2018) discussed designed change as second-order change, “where the change process described is so substantial that it alters the operating system, underlying values, and culture of an organization or system” (p. 85).

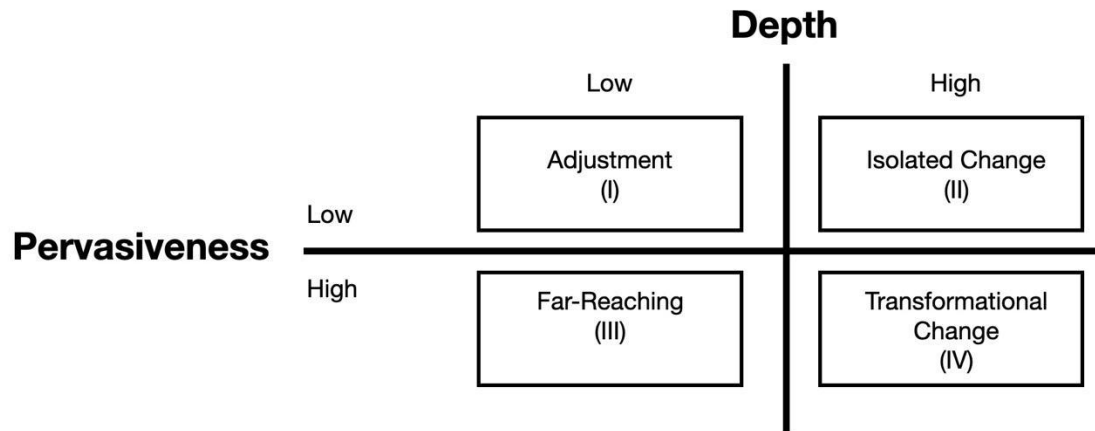
The two major indicators of designed change are attitudinal and structural evidence, and these must both be present. The first, attitudinal evidence, can be seen in how groups or individuals interact and how university officials refer to the campus and institution, the types of conversations held, and new stakeholder relationships (Kezar, 2018). The second indicator, structural elements, could include “substantial changes to the curriculum, new pedagogies, changes in student learning and assessment practices, new policies, the reallocation of funds, the creation of new department or institutional structures, and new processes or structures for decision-making” (Kezar, 2018, p. 86).

Thus, designed change is deliberate, lengthy, pervading, and intended to improve the institution. Within higher education, these transformations may be exemplified by innovative pedagogical techniques, curricular changes, policy updates, the integration of emerging technologies, or the introduction of new decision-making protocols (Kezar, 2018).

In this section, transformational change was compared and contrasted with three other types of change that have less depth and pervasiveness. The discussion also considered the ways in which change is different from innovation implementation, adaptation, and strategic change, which are common types of change within higher

education (Eckel & Kezar, 2003b). Figure 5 shows the typology of change from Eckel and Kezar (2003b).

**Figure 5:** *Typology of Change*



From *Taking the Reins: Institutional Transformation in Higher Education*, by P.D. Eckel & A. J. Kezar, 2003, p. 31. Copyright 2003 by Rowman and Littlefield.

The first quadrant, referred to as *adjustment*, involves making changes or improvements to existing methods. Adjustment includes recalibrating, refurbishing, and reconfiguring ongoing activities, processes, practices, or incorporating new elements with limited impact. These adjustments do not lead to profound transformations, and they are not widespread across an entire institution. In the context of higher education, with establishments such as colleges and universities, adjustments are continuously put into practice (Eckel & Kezar, 2003b).

The second quadrant, referred to as *isolated change*, invokes a profound but confined shift to a solitary unit or program within a specified area (Mintzberg & Westly, 1992). Due to its depth, isolated change involves a transition in the fundamental values and assumptions that govern the current operational approach. “The influence of this

change on other units or domains remains negligible or nonexistent” (Mintzberg & Westley, p. 4). A representative example might involve a unique human resource or technological solution adopted by a single department; such a solution would fail to exert any discernible impact on other departments.

The third quadrant encompasses *far-reaching change*, characterized by pervasiveness without substantial depth. Pervasiveness in this context implies “the degree to which a change is disseminated within an institution” (Mintzberg & Westly, 1992, p. 31). As the scope of the change widens, it surpasses unit boundaries and exerts an impact on numerous units and programs. However, such far-reaching change “lacks depth and exerts minimal influence on prevailing values, beliefs, and practices” (Mintzberg & Westly, 1992, p. 33). An illustrative case could be a newly introduced incentive policy for online teaching that affects faculty and support staff across numerous units. Although this new policy encompasses various courses and faculty members, it does not necessitate alterations in their pedagogical approaches or inherent values and beliefs.

The fourth quadrant is *transformational change* and is both deep and pervasive. This change impacts the entire institution, influencing most if not all units, departments, and programs. As Mintzberg and Westly (1992) observed,

Transformation is not about fixing discrete problems or adjusting current activities. Rather, the depth of the change affects underlying assumptions and values that underscore for an institution what is important; what do, why, how, and what to produce. This pervasiveness suggests that transformation is a collective, institution-wide phenomenon, although it may occur within one unit (or one person) at a time. (p. 33)

In sum, transformational change differs from innovation, adaptation, and strategic change in its breadth, depth, and implications. Although innovation often involves the introduction of new processes, products, or ideas within the existing organizational framework (Tidd et al., 2005), transformational change involves a profound overhaul of the organization's foundational elements, including its identity, values, culture, and structures (Nadler & Tushman, 1989).

Adaptation, on the other hand, is typically a reactive, incremental response to environmental changes that adjusts existing structures or processes without changing the organization's core (Wright & McMahan, 1992). Strategic change, although it may involve substantial shifts, is generally more planned and predictable and less disruptive than transformational change, focusing on improving effectiveness rather than fundamentally altering the organization's essence (Mintzberg, 1987).

An understanding of these approaches and theories aids in understanding of the evolution of ASU and EdPlus and the theoretical model for this study. With these paradigms, theories, and types of change in mind, the researcher arrived at and studied another framework that incorporates many of the principles of these six theoretical schools. This is the Mobile Model for Transformational Change (Eckel & Kezar, 2003b).

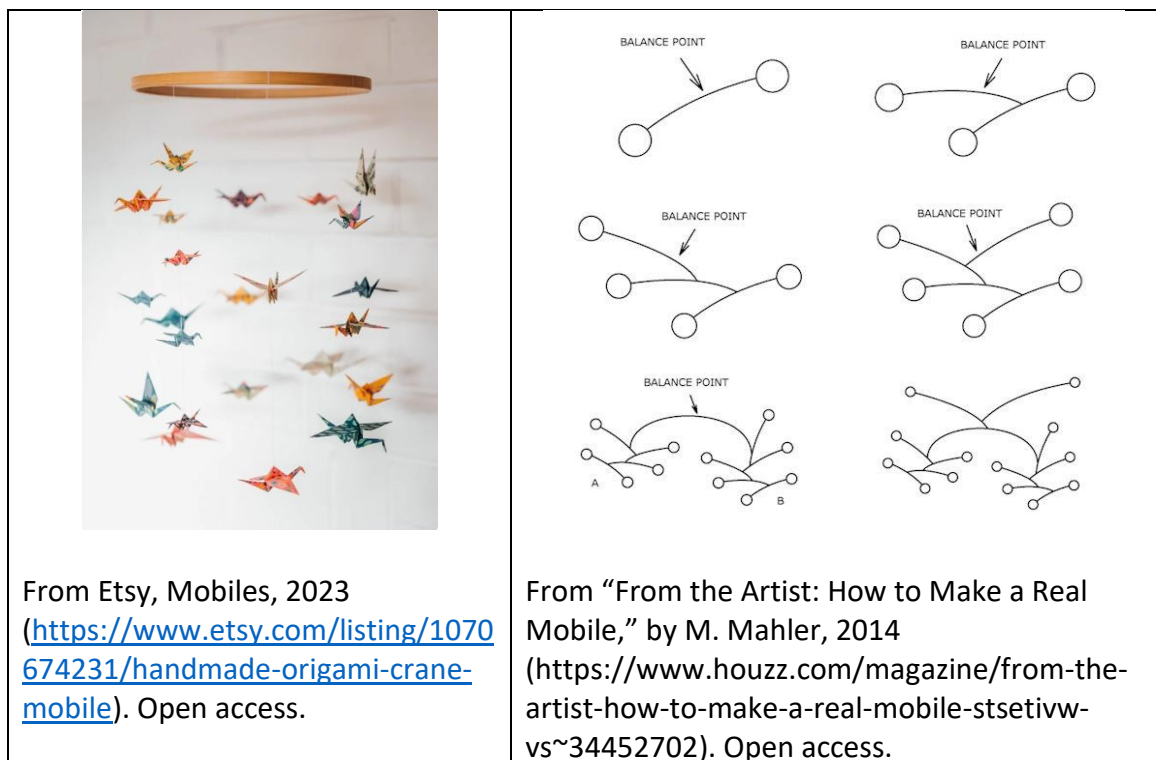
### **Theoretical Framework: Mobile Model for Transformational Change**

In this chapter, design and organizational change and their relevance in the context of higher education and distance learning have been discussed. Before an exploration of the LID and its characteristics, the framework chosen for this case study is reviewed, as mentioned in Chapter 1, and reiterated earlier: the Mobile Model for

Transformational Change (Eckel & Kezar, 2003b). The model draws from Bergquist's (1992) cultural archetypes and Tierney's (1991) concepts of individual institutional change, forming the core strategies of the model.

This model amalgamates elements of traditional organizational change with a transformative approach within the evolving culture of the institution. The metaphor of a mobile was chosen and represents a core argument for why it is the right model for this study (Figure 6). A mobile is never stagnant and is always changing as a result of its external and internal environments. But to work, it must always remain in *balance*. Like the mobile, the LID has the ability to deal with change within the complex system of higher education.

**Figure 6:** *A Mobile*



In his 1992 book *The Four Cultures of the Academy*, Bergquist presented a deep examination of the academy's unique culture. He identified four separate cultures that exist within academic institutions: the collegial culture, based on tradition and the pursuit of knowledge; the managerial culture, which is oriented towards efficiency and effectiveness; the developmental culture, focused on growth and future potential; and the negotiating culture, which emphasizes conflict resolution and compromise. Bergquist's perspective provides a comprehensive framework for understanding the dynamics and intricacies of the academic environment. Sixteen years after the MM was published, Bergquist (2008) introduced two additional cultures—The Virtual Culture and the Tangible Culture—to reflect advancements in 21st-century technology-enabled universities (Manning, 2009).

Tierney's (1988, 1991, 2016) work on individual institutional culture offers a robust lens through which to understand how culture influences behavior within educational institutions. His model recognizes the dynamic, complex nature of institutional culture, emphasizing that it is constructed by individuals' shared norms, values, beliefs, and assumptions; the model too is constantly changing (Tierney, 1988). According to Tierney, “understanding this culture is critical to successfully implement change in an institution” (Tierney, 1991, p. 21).

Cultural concepts aim to enable clear comprehension of institutional culture and its impact on transformation processes. Combining these frameworks offers a more effective understanding of culture and transformation than employment of only one framework (Eckel & Kezar, 2003b, p. 133). Bergquist's archetypes provide a foundational

structure for institutions unversed with cultural analysis by presenting identifiable patterns. Tierney's lens, on the other hand, offers a sophisticated instrument for comprehension of the intricacies of unique institutions (Eckel & Kezar, 2003b, p. 133).

By utilizing this dual-lens approach, Eckel and Kezar examined how the five core strategies of the Mobile Model differ across various institutional cultures. Table 12 demonstrates the application of Bergquist and Tierney's concepts to the analysis of culture and transformation.

**Table 12:** *Mobile Model Core Change Strategies Background*

<b>Bergquist's Cultural Archetypes</b>	<b>+</b>	<b>Tierney's Individual Institutional Culture</b>	<b>➔</b>	<b>5 Core Change Strategies</b>
Collegial culture		Environment		Senior administrative support
Managerial culture		Mission		Collaborative leadership
Developmental culture		Socialization		Flexible vision
Negotiating culture		Information		Staff development
		Strategy		Visible action
		Leadership		

Adapted from *Taking the Reins: Institutional Transformation in Higher Education*, by P. D. Eckel and A. J. Kezar, 2003, p. 23. Copyright 2003 by Rowman & Littlefield.

The Mobile Model captures the complexity of the transformation process, with interdependent components that may function both independently and in connection with each other (Eckel & Kezar, 2003b). Eckel and Kezar chose the metaphor of a mobile because they “discovered the change process, like a mobile, is made up of various interdependent components (or strategies), which, although they may move somewhat independently, are ultimately connected directly or indirectly with one another” (Eckel

& Kezar, 2003b, p. 147). Therefore, the Mobile Model does not fit well within more structured and linear change theories. Eckel and Kezar (2003b) explained:

We found that what holds together the transformation process is the collective making of meaning, and institutions that are undergoing transformation also are affected by shifts in their outside environments, which may alter some elements, but rarely affect its core processes. (p. 149)

Throughout this section, the Mobile Model will be elaborated on, and connections established with the previously discussed theoretical categories of design studies, digital education, and organization change paradigms. This model is highly appropriate for examination of the complexity of the transformation process at universities. However, until the present study, scholars have not applied the Mobile Model to the design of organizations responsible for learning innovation at a public research university.

Smith (2011) considered restructuring in a college of education. Evans (2016) used a single case study to analyze a student affairs division. Gillespie (2020) examined an entire university postimplementation of strategic change. McCann (2007) investigated the adoption of one specific innovation on campus. Bianco (2020) explored the impact of a campus museum to the educational institution's culture and leadership. Julian (2018) studied the successful integration of healthcare informatics into an undergraduate nursing curriculum. Dixon (2018) looked at the culture of assessment in student affairs at one HBCU. Fallon (2020) investigated the role of institutional agents in transforming one institution to better serve minority students. Cornell (2009) compared



the transformational change in the implementation of healthcare informatics of three schools of nursing.

### ***Suitability of the Model***

Among the various organizational change, design, and innovation models explored, the Mobile Model stands out as particularly fitting for this research. One key reason is that it was specifically designed and developed within the higher education context. The model demonstrates the authors' (Eckel & Kezar, 2003b) deep understanding of the distinctive complexities associated with this organizational category.

Additionally, the Mobile Model possesses two more meaningful attributes that make it suitable for this research. First, it is designed to be adaptive and flexible, aligning well with the organizational design and nature of work typically undertaken by an LID and the unique organizational characteristics of the university. Second, the Model's emphasis on *culture* and *think differently* (see Figure 1) aligns with what insider researchers consider crucial characteristics and outcomes of the LID, which are further discussed in the sections on Design and Culture. These are also important characteristics of ASU's change and brand over the past 21 years. Last, the Mobile Model centers around transformational change, which is a defining characteristic of an LID and its research and development activities and unique to other types of change.

The model provides a framework for many interconnecting processes that are part of transformational change initiatives within units such as EdPlus (White, 2016). Stakeholders should adapt and change with changed mindsets (White, 2016). As Eckel

and Kezar (2003b) concluded, a different mode of thinking is more important than any other factor in change. This process of “getting people to adopt new mindsets is a cognitive and intellectual process spurred by a set of activities that can be intentionally designed to leave behind old ideas, assumptions, and mental models” (Eckel & Kezar, 2003b, pp. 72-73).

An important component of the Mobile Model is that many strategies are interconnected, nonlinear, and *balanced*. The secondary supporting strategies do not occur as frequently as five core ones. Nevertheless, the more minor strategies play critical roles in effecting transformation. For example, “incentives” and “communication” are crucial for the success of any individual project. Within EdPlus at ASU, and its largest project ASU Online, the leaders are consistently developing and modeling incentive structures with academic units, individual faculty, and partners. If the supporting strategies are not considered, the effort could become imbalanced or enter “into a state of misfit” (Burton & Obel, 2004, p. 1). Figure 1 (pg. 61) shows the core and supporting strategies and their interrelationships.

### ***Core and Supporting Strategies***

The Mobile Model is based on five major independent “core strategies” and 15 “supporting strategies that play a smaller but still important role in facilitating transformation” (Eckel & Kezar, 2003b, p. 10). The core strategies are (a) senior administrative support, (b) collaborative leadership, (c) robust design, (d) staff development, and (e) visible action. As Eckel and Kezar (2003b) pointed out, “the core strategies encompass deliberate mechanisms, processes, and tools at the disposal of

campus leaders to bring about significant, profound, and widespread cultural changes”

(p. 74). Table 13 provides short definitions for each core strategy.

**Table 13:** *Definitions of the Mobile Model Core Strategies*

Strategy	Definition
Senior administrative support	Refers to individuals in positional leadership providing support in value statements, resources, or new administrative structures.
Collaborative leadership	Defined as a process where the positional and non-positional individuals throughout the campus are involved in the change initiative from conception to implementation.
Flexible vision	More complex than vision, leaders develop a desirable and flexible picture of the future that is clear and understandable and includes setting goals and objectives related to the implementation of that picture.
Staff development	Programmatic efforts offer individuals opportunities to learn specific skills and knowledge.
Visible action	Advances in the change process that are noticeable and measurable. Activities must be visible and promoted so that individuals can see that the change is still essential and is continuing.

Adapted from *Taking the Reins: Institutional Transformation in Higher Education*, by P. D. Eckel and A. J. Kezar, 2003, p. 23. Copyright 2003 by Rowman & Littlefield.

The Mobile Model identifies an additional fifteen supportive strategies that are used less frequently, but that still play important roles in facilitating transformational change:

1. Placing issues in a broader context;
2. Setting expectations and holding people accountable;
3. Persuasive and effective communication plans;
4. Invited participation in the change process;
5. Opportunities for stakeholders to influence results;
6. New interactions among campus subgroups and individuals;
7. Changes in administrative and governance processes in support of the change process;
8. Moderation of the pace of change;
9. The creation of new supportive administrative structures;
10. Financial resources to support the transformation agenda;
11. Monetary and non-monetary incentives to motivate key individuals;
12. A long-term orientation to hold the institution's attention over years;
13. Connections and synergy among various activities on and off campus;
14. The use of external factors to promote change internally; and
15. Seeking outside perspectives that can advance change on campus.

Three other important aspects of the model are the *institutional culture*, *balance*, and prompting people to *think differently* (Kezar & Eckel, 2002a). In building the model, Kezar and Eckel (2002a) found that the individual culture of each institution

was a critical factor in selection of the appropriate change strategies for that institution. Another important consideration, as discussed earlier, is the measuring apparatus used to determine if transformational change has taken place. Furthermore, higher education institutions share a common academic culture and yet incorporate their own cultures in which they behave in unique ways (Eckel & Kezar, 2003b). Because of these considerations, all strategies and decision-making around the change activities should be respectful and inclusive of the culture in which the change occurs. The double circle band in Figure 1 (pg. 61) represents the inclusiveness of culture.

### ***Culture and Change***

Culture embodies the dominant trends of shared beliefs, values, assumptions, ideologies, and perceptions that individuals associate with their organizations (Tierney, 1991). Culture profoundly shapes individual actions and modes of thinking (Peterson & Spencer, 1991). Cultural theories are inherently associated with substantial or transformative changes, as the theories underscore the understanding of cultures through their core value and symbol systems (Tierney, 1988). Shein (1992) offered a three-layer approach to thinking about cultural change.

The top layer is the most visible artifacts of the organization, such as insider language, stories, mission statements, strategic plans, organizational structures, rituals, and ceremonies (first-year orientations and graduation ceremonies), and incentive structures. The middle layer is the “espoused values, which are the articulated beliefs about what is good, what works, and what is right” (p. 23). These are the underlying values and assumptions that guide and shape the organization. Eckel and Kezar (2003b)

argued that “transformational change involves surfacing and changing those underlying assumptions—as well as changing corresponding espoused values and artifacts that are incongruent with the intended new direction of the institutions” (p. 29).

The third layer is understanding that transformation is *intentional*. It is taken on to generate a purposeful and desired outcome with the acknowledgment that it can also generate unintended consequences (Eckel & Kezar, 2003b, p. 30). The second part of the third layer is recognition that transformational change occurs *over time*. In this regard, transformational change is different from *revolutionary change* which takes place quickly yet often fails (Johnson, 1982).

Transformational change takes time and is likely the “cumulative effect of a multitude of changes in the curriculum and co-curriculum, and across a numerous departments and units, some of which are more strongly linked than other changes” (Eckel & Kezar, 2003b, p. 30). The gradual transformation of culture can also be perceived as a “barrier,” according to Gilmore et al. (1999, p. 12).

### ***Balance***

Another element that is critical to the Mobile Model transformation process is *balance*. In their study of transformation projects, Eckel and Kezar (2003b) found that, “with twenty interrelated strategies and a long-term effort to effect transformation that is both deep and pervasive, transforming institutions discovered the importance of striking numerous *balances* in their change efforts” (p. 126).

Some examples in Eckel and Kezar (2003b) include leaders having to harmoniously blend urgency with patience, to maintain an inclusive environment

involving a diverse group of faculty, and to deal with critical staff. Achieving equilibrium between internal and external perspectives was also necessary; too many internally driven ideas could lead to a challenging level of insularity. There was also the necessity to strike a *balance* between immediate accomplishments and the establishment of long-term objectives.

Ultimately, the challenge lay in managing the old and the new together. For several institutions undertaking major transformations, the concept of change may be overwhelming. To address these challenges, leaders of these institutions must find ways to uphold and, in many instances, applaud the established beliefs or programs while simultaneously urging the institution to embrace innovation (p. 27).

### ***Think Differently***

Kezar and Eckel (2003b) recognized that a foundational and cross-cutting element of the success of the Mobile Model is helping people *think differently* so that the transformation change process may take place. Thinking differently is represented in the Mobile Model in Figure 1 by the double vertical line down the center and the recurring legend "*think differently.*"

Weick (1995, as cited in Eckel & Kezar, 2003b) observed, "Thinking differently helps people collectively make sense out of uncertain and ambiguous or changing organizational situations and understand what the change means for them" (p. 162). Altering mindsets can lead to modifications in behaviors, values, dedications, and priorities. Without reshaping of the beliefs and assumptions related to crucial elements,

priorities, and processes, the change that occurs will not be truly transformational (Gioia & Thomas, 1996).

The process of thinking differently manifests in two ways. First, educational institutions such as colleges and universities ascribe new interpretations to existing concepts and ideas. Subsequently, the institutions undergoing transformation create new terminologies and embrace new ideas to articulate the changes within the institution (Kennedy, 1994). People must work to understand not only what these new concepts and events mean but also to understand what problems should command their attention (Chittipeddi, 1991). Weick (1995) argued that change of this magnitude and uncertainty require three questions to help shape understanding: “‘what is out there,’ ‘what is in here,’ and ‘who must we be in order to deal with those questions?’” (p. 70, as cited in Eckel and Kezar, 2003b, p. 53).

Although Eckel and Kezar’s (2003b) study is seminal, their investigation centers around projects or change initiatives rather than the organizational structure or design of LIDs. Extensive literature searches revealed that no study to date has explored an LID: its organization design, its characteristics as a design thinking organization, or the application of the Mobile Model to an LID. These elements are considered in the current study, with the emphasis on LIDs as transformational change agents for higher education. The characteristics of the LID will be presented in Chapter 4 and explained through the literature presented in this chapter.



**Summary**

This chapter reviewed the literature relevant to the overarching research question introduced in Chapter 1: How do university leaders designing the learning innovation department at Arizona State University approach transformational change initiatives that help the university serve its public charter? The pertinent topics and summaries of the literature and related facts included the design movement, such as design thinking and organizational design; organizational change, change paradigms, and change theories within the higher education context; and the conceptual framework and rationale of the Mobile Model for Transformational Change. With these considerations, Chapter 3 presents the methodology of the data collected and analyzed for this study.

## CHAPTER 3: METHODOLOGY

*“Do not repeat the tactics which have gained you one victory, but let your methods be regulated by the infinite variety of circumstances.” – Sun Tzu*

This chapter describes the methodological design and qualitative methods used for this study. Set against a number of disruptive change forces outlined in Chapter 1 and discussed in the context of the literature presented in Chapter 2, the chapter explains the study methodology. The study investigates how leaders in the learning innovation department, EdPlus at Arizona State University (ASU), approach transformational change initiatives to further the university’s strategic public charter. The purposive nature of the research sample is described and justified based on the strong reputations of ASU as an innovative institution, and the researchers’ inside knowledge of EdPlus at ASU.

The researcher’s unique insider role is explained with the underlying epistemological approach and methodological assumptions. Also discussed are the data collection and analysis methods, research rigor and trustworthiness, and ethical considerations. In this study, the researcher aimed to understand how leaders are increasingly called upon and respond to drive broader change through design and learning innovation.

### **Summary of the Analysis**

The analysis that is presented in answer to the research questions is extracted from semi-structured interviews with 28 individuals, totaling 1,247 minutes and 168,534

words. The purposive interview sample consisted of faculty, administrators, staff, and external advisors with a wide range of working roles and disciplines at ASU. All participants had one or more connections with ASU, and they all interacted with EdPlus in their roles. Relevant quotes are included throughout the remaining chapters to illustrate their thoughts, perspectives, and opinions. A full overview of the participants, with pseudonyms and backgrounds, can be found in Appendix B, Table 26.

Additionally, as part of the document analysis procedure, 48 primary source documents were analyzed to complement the interviews, as well as the researcher's insider knowledge. The primary documents consisted of seven years' worth of executive reports that summarized EdPlus' progress and critical decisions to the EdPlus Management Committee (EMC). The EMC is explained in detail within the Leadership and Governance section of this chapter. Additional strategic plans, campus master plans, annual reports, website assets, promotional materials, and press releases were also analyzed.

These document types were selected because they help tell a sequential story of progress at EdPlus at ASU and provide insight into ongoing and future projects, information which is critical to answer the RQs. A complete data source table can be found in Appendix C.

### ***Data Analysis and Findings***

Before presentation of the findings and results of this study as seen from the participants, the analysis process is recapped. After conducting the interviews and analyzing the documents, the researcher transcribed the data. The transcripts and

documents were uploaded to the Atlas.ti (<http://atlasti.com>) software for coding and thematic analysis to generate categories and themes for organization of the findings. When transcription was completed, the researcher began the coding process, paying special attention to keywords, phrases, sentences, and paragraphs.

The interviews as well as the documents were transcribed and coded three times. First, open coding assisted the researcher in identifying themes, insights, critical events, and useful quotations. Second, the interview questions were coded and mapped to the research questions with each sub interview question as a guide. Lastly, the researcher coded against Eckel and Kezar's (2003b) Mobile Model, the "Theoretical Framework" (see Chapter 2). Specifically, elements of the Mobile Model were the Core and Supporting Strategies and occurrences that aligned with *Culture, Thinking Differently*, and *Balance*, which are all crosscutting components of the model. The Mobile Model proved to be a very helpful framework for organization of the coding structure and presentation of the findings. Additional themes from the organizations literature also emerged which were helpful in describing the unique aspects of the LID in Chapters 5 and 6.

The researcher also kept a diary of memos throughout the coding process to track ideas, inquiries, insights, and especially relevant quotations. The diary was then referenced throughout to guide the inquiry and analysis of the data. By constant comparison, the researcher organized the emerging patterns into themes that described main aspects of the phenomenon under study (Miles & Huberman, 2006). The

researcher also constantly referred back to the literature base to help validate the coding process.

During data analysis, specific insights, views, and perspectives of each participant, and those from the lens of the researcher, were noted. After comparison of themes from each participant, cross-participant analysis was performed to identify common categories and themes. An overlay of documents was applied to the interview codes to support and in some cases expand the categories. A coding category labelled “insights” was used for findings that were new knowledge for this insider researcher and are incorporated throughout this section, and within Chapter 5, Discussion. A category called “quotations” was also created for reference and inclusion in the findings and discussion chapters. After completing this comparison, and finalizing the themes, the researcher drew conclusions for presentation as part of the final analysis. Table 14 displays the results of the coding process organized as six main themes with nested categories.

**Table 14:** *Findings by Themes with Embedded Categories*

Theme	Category
Service	Faculty Designers Innovation Work Students
Design	Change Scale Skunkworks Take Risks
Enterprise	Revenue generation Incentives Marketing Global Business Orientation Spinoff
Digital	Education Technology Platform and Product Orientation Digital services
Learning	Leadership Student success Action research Adaptive organization Teaching and Learning
Partnerships	Partnerships Starbucks InStride Uber Pearson

## Research Questions

The objective of this study was to investigate how administrators, faculty, and staff involved with change efforts in an LID, EdPlus at ASU, responded to driving transformational change through organizational design and learning innovations. The central research question was this: **How do leaders designing the learning innovation department at Arizona State University approach transformational change initiatives that help the university advance its strategic public charter?**

To answer this question, as the interview protocol indicates, the following sub-questions were addressed:

1. How does the Mobile Model for Transformational Change explain the case of learning innovation departments at ASU and within the literature?
2. How do institutional leaders categorize EdPlus in terms of transformational change?
3. What role does EdPlus play in changing the culture of the university?
4. What strategies and processes were used in the planning, development, and implementation of the transformation initiatives?
5. How has the organization changed over time to support transformation initiatives?
6. What are the critical incidents that have shaped and evolved the design and role of EdPlus? (Appendix B)

## Research Design

A qualitative, instrumental, phenomenological single case-study design (Stake, 1995; Yin, 2018; Merriam, 1988) was chosen for this study. The epistemological approach of the study was constructivist—that is, the nature of knowledge cannot be separated from individuals and their experiences. This was the most appropriate approach to explore the phenomenon in its natural environment (Denzin & Lincoln, 2011; Tuli, 2010).

The constructivist paradigm holds that there is no single objective reality. Rather, understanding of a phenomenon is sought from the experiences or constructions of the participants. In constructivism, reality is constructed, interpreted, and experienced by individuals and their interactions (Tuli, 2010). This view assumes that meanings are the product of participants' experiences. Moreover, participants' meanings of the phenomenon under study are also mediated through the researcher's perceptions (Merriman, 2018) and interpretations of her constructions.

A phenomenological study “describes the common meaning for several individuals of their lived experiences of a concept or phenomenon” (Creswell & Poth, 2018, p. 75). The focus is on what they experienced and how they experienced it (Moustakas, 1994). Exploration of the lived experiences of participants within their local contexts allows for understanding of how they experience the phenomenon in terms of clusters of meaning and then themes. These distill the “essence” of the phenomenon (Moustakas, 1994, p. 100).



Case studies are preferred when “the relevant behaviors cannot be manipulated and when the desire is to study some contemporary event or set of events” (Yin, 2018, p. 12). According to Stake (1995), similarly in case study research, an empirical investigation is conducted of a phenomenon that is timely and contemporary. The phenomenon is explored in its natural environment with multiple sources of evidence. For the present case study, the findings from in-depth interviews are described with a narrative approach of thematic analysis (Langley & Tsoukas, 2017). Generalizations from the findings about the phenomenon may be made for theoretical concepts but “not to populations or universes not from the research findings” (Yin, 2018, p. 20).

A case study explores a bounded system, and an instrumental case study is undertaken for understanding of a specific phenomenon with the investigation of a particular case in its real-world context (Yin, 2018). Yin (2018) and Stake (1995) each offer unique perspectives on qualitative case study methodology. Yin's postpositivist approach emphasizes the importance of a clear research question and the use of multiple sources of evidence to find the facts of a case (Boblin, 2013). Stake's constructivist approach, on the other hand, emphasizes the importance of the researcher's role in co-constructing knowledge with the participants (Brown, 2008) and was the predominant approach used for this study. Despite these differences, both scholars contribute to the ongoing debate on the value and rigor of case study research (Daugherty, 2009; Baskarada, 2014; Yazan, 2015).

For this study, the instrumental constructivist approach (Stake, 1995) was appropriate to describe the LID leaders' organizational designs and innovative responses

to current and past higher educational challenges at Arizona State University during the study period between 2010 and 2022. Stake (1995), in contrast to Yin holds an epistemological view that “the qualitative case study researcher hold that knowledge is constructed rather than discovered” (p. 99), a perspective central to the Yin approach (2018). Furthermore, the “Stakian Perspective” posits that the case study researchers are both interpreters, and collectors of interpretations, which requires them to report their “rendition or construction of the constructed reality or knowledge” through their investigations (Yazan, p. 137). A single case study was chosen to allow the researcher to develop constructions and interpretations from one case in depth.

ASU as a public research institution was chosen based on its foundational mission to create an educated citizenry, knowledge creation, and innovation to support the U.S. international competitiveness (American Academy of Arts and Sciences, 2015). EdPlus was founded in 2010 and is embedded within Arizona State University. EdPlus is largely responsible for ASU’s growth in online education (Crow & Debars, 2020) and an engine for innovation that has helped ASU earn recognition as the “Most Innovative University in the Country” for 9 consecutive years, from 2014 to 2023 (Faller, 2023, ASU News). Its LID, EdPlus, has been an important organization in helping ASU grow and support an innovative agenda (Arizona State University, Mission, and Goals, 2020).

A relevant method to gain a better understanding of EdPlus is through the Critical Incident Technique (CIT). CIT has become a widely used qualitative research method and is recognized as an effective exploratory and investigative tool (Butterfield, et al., 2005; Chell, 1998; Woolsey, 1986). In CIT, data are gathered from participants by

direct inquiry regarding specific incidents that may have affected the phenomenon under study. Often these incidents contribute to improvement of performance in various settings. For example, the evolution of LIDs can be traced to critical incidents—a change in leadership, ability to meet a student or faculty need, or an external event such as a recession or a global pandemic. Once data are collected, researchers categorize the critical events and construct narratives to better understand the effects of the incidents in terms of positive or negative influences on outcomes (Simmons, 2018).

Additional and alternative qualitative research methods, including narration, ethnography, and grounded theory were also explored (Creswell & Poth, 2018). A narrative research approach focuses on the lives of individuals. This approach is best used when the research problem requires stories of individual experiences (Shkedi, 2005). Although individuals are important participants in the evolution of ASU and EdPlus, this study was equally concerned with the critical incidents, organizational designs, and artifacts to holistically answer the research questions.

Ethnographic research is used to investigate, describe, and interpret a particular culture or group (Hammersley, 2015). In ethnography, ordinary daily activities become the site for the investigation of social organizations and related phenomena. However, for this study, daily activity of a culture or group was not the primary focus. Grounded theory aims to develop a theory based on data from the field (Charmaz & Belgrave, 2015). This method is best used when a research problem requires a theory for the participants to understand the problem. In this study, however, already-developed theories were used; the goal was not to create new ones. None of these approaches

was appropriate for the present study. Rather, the researcher conducted interviews with leaders and decision makers of a specific LID in the forefront of innovative learning for their perspectives, insights, and understanding of the development of their LID. Thus, a single case study approach with narrative elements and constructions by the researcher was chosen as most appropriate for this study.

However, several limitations of this research design must be acknowledged. With only a single case, there is a small number of participants to draw from. Small sample size does not lend itself to generalizations on a broad scale.

The participants as leaders of the EdPlus may have hesitated to share fully because of the possibly sensitive nature of material or planned projects. If they requested the omission of any sensitive material, the researcher obliged. The researcher also reiterated with participants his understanding of the confidentiality of some materials.

The researcher is involved in the EdPlus organization, which may have increased researcher bias in interpretation of the findings. However, involvement can also be seen as a strength of the study. As a participant observer, the researcher was aware of the background, critical incidents, and ongoing development of EdPlus and brought this knowledge to the interviews, document analysis, and interpretation of the data (Jorgensen, 2020; see also Role of the Researcher).

Nevertheless, although some emotion, empathy and bias is acceptable in qualitative research (Maxwell, 2013; Patton, 2015), the researcher was guided by his Dublin City University research committee members. An advantage of case study

research is the flexibility to employ multiple strategies to gain understanding of the complexity of the phenomenon in a particular context (Yin, 2018). This advantage, however, can also be considered a risk because massive amounts of data are collected and must be interpreted (Stake, 1995).

### ***Population and Sample for Interviews***

The population for this study was a group of academic innovation leaders in higher education. This population, as Selingo (2018) noted, is constituted of more than 200 institutions in the United States in which the leaders have senior roles whose titles include “innovation” or “digital.” These leaders and their organizations serve many functions for universities, generally focused on online learning and related experimentation. Among the leading tasks completed are support of nontraditional (online/hybrid) students, partnerships with public and private organizations, challenging of embedded rules and processes, developing of new business models, and developing of new tools and services models for student success (Young, 2017).

The sample for this study was comprised of leaders involved in EdPlus at Arizona State University, as described below. In the researcher’s professional responsibilities, he interacts with many university leaders trying to change the university offerings and services through learning innovation. He recognizes the importance of certain criteria for comprehensive study of the innovative responses to higher education. Thus, three purposive selection criteria for the sample case were used: (a) role or roles in EdPlus, (b) length of service, and (c) contributions to the direction and strategy of EdPlus.

The individuals invited were administrators, faculty, and staff most closely connected to the design and evolution of EdPlus. With snowball sampling, other top members of the leadership team and affiliated individuals were identified. The final number of participants was 28. Short biographical sketches are provided in Appendix B.

### ***Setting***

At the time of this research, in-person meetings were not feasible due to the COVID-19 pandemic. The setting for semi-structured, in-depth interviews based on the research questions were conducted online through the online video conferencing software Zoom (<http://zoom.com>). The researcher recorded and transcribed the interviews using Otter.ai (<http://otter.ai>), a transcription software that is integrated with Zoom. This method not only met the national social distancing criteria but had the advantages of cost and time efficiency in terms of reduced costs for travel and data collection (Creswell & Poth, 2018).

The conducting of interviews this way also provided participants flexibility with time and space, providing them more time to consider and respond to the interview questions. The interviews were conducted in participants' natural settings, which may have helped create a nonthreatening and relaxing environment when they were asked to discuss topics they might consider sensitive (Nicholas, 2010). Online interviews such as those conducted with Zoom software also offer an alternative for hard-to-reach individuals due to practical constraints, disability, or language or communication barriers (James & Busher, 2009).

Further, in the interviews, the researcher employed the Critical Incident Technique framework and used a stimulated-recall interview method when called for (Shkedi, 2005). Stimulated recall is a research method which allows for the investigation of cognitive processes through inviting participants to recall their thoughts of an event when prompted by visual recall, such as a photograph (Fox-Turnbull, 2011). The interview questions were organized and chosen to help answer the research questions by the researcher soliciting descriptions from the participants and probing for details. With these methods, the researcher constructed a full picture of the events contributing to the evolution of EdPlus at ASU, described in Chapter 4 and Appendix D.

However, online interviews also present ethical and methodological challenges which needed to be addressed. Ethical safeguards for virtual interviews are the same as for in-person interviews, with full disclosure by the researcher of the study purpose, assurances of no harm for participation, and disclosure of participant time and task commitments necessary. Assurances were supplied in the recruitment letter of invitation (Appendix E) and informed consents (Appendix F), which participants signed before the interviews.

The Plain Language Statement (Appendix G) required by Dublin City University was attached to the informed consent forms. Methodological limitations, such as participants not having access to the online interviewing software and withdrawing from the interviews by the click of a button, which would decrease the number of complete interviews and necessitate recruitment of other participants, were avoided

(Gray et al., 2020; Janghorban et al., 2014). The interview protocol and schedule are further explained in the interview section below.

### **Data Collection**

Prior to data collection, permission to interview participants was secured from the Dublin City University Research Ethics Committee (Appendix H) and presented to the Institutional Review Board (IRB) at ASU. ASU determined IRB was not necessary (Appendix I).

In case study research, a key advantage is the use of multiple methods to collect data (Stake, 1995; Yin, 2018). In this study, data were collected in two ways. First, the researcher purposively collected documents from the ASU and EdPlus websites between 2002 and 2023 to provide orientation to each setting and construct useful and contextual interview questions. EMC board reports were specifically targeted as these samples reflected a broader archive of activities for that specific period. Additional strategic planning documents, presentations, and reference materials were collected and reviewed. Second, the researcher conducted 29 semi-structured interviews online with participants to answer the research questions. Appendix J details the document collection protocol and Appendix K outlines the interview protocol.

### **Recruitment**

Participants were first sent an email invitation (Appendix E) from the researcher, explaining the study, and requesting participation. If there was no response, the researcher followed up a week later, which occurred on five occasions. Upon participants' agreement to take part in the study, the researcher sent the participants



informed consent forms (Appendix F) and plain language statements (attached to informed consent form, Appendix G) for their completion.

### ***Data Sources***

***Documents.*** The first primary source of data collection was university documents, including strategic plans, website assets, yearly reports, promotional materials, and press releases (Appendix C). In qualitative research, supporting documents are important to help supplement interviews and observations and triangulate the interview material (Creswell & Poth, 2018). A systematic approach to document analysis was followed which focused on the EdPlus Management Committee reports. These reports are presented to the EdPlus governing body quarterly and are an aggregation and construction of all activities within a given time period and are comprised of many other sub documents. This approach, therefore, allowed the inclusion of a breadth of data sources from EdPlus and at all levels of operation and strategy. The documents collected provided useful history and institutional context as a potential focus of inquiry (Bryman, 2012). These document types were selected because they record a sequential story of progress of EdPlus and provide insight into ongoing and future projects. Consideration was given to the authenticity, credibility, representativeness, and meaning of the documents and potential biases of the authors (Bryman, 2012; Merriam & Merriam, 2009).

Given the researcher's insider status, documents in both the public and private domains were analyzed. As a member of the EdPlus leadership team, the researcher had access to early planning documents, organizational charts, budgets, goals, and

objectives. Sensitive materials, subject to the participants' input, were anonymized or omitted to protect confidentiality. It was understood that some documents were likely to promote specific points of view (e.g., for advertising or promotional reasons) and therefore could be regarded as providing objective accounts. Such documents were examined in the context of other sources of data, such as interviews (Bryman, 2012).

**Interviews.** The interview method is a means for the collection of in-depth, thick, rich descriptions by participants and for the researcher to understand the phenomenon under study more comprehensively (Moustakas, 1994). According to Brinkman and Kvale (as cited in Creswell & Poth, 2018), in an interview, “knowledge is constructed in the interaction between the interviewer and the interviewee” (p. 4). Conducting interviews is a widely used research practice to help understand institutional change within higher education (Eckel & Kezar, 2011; Findlow, 2008; Powell et al., 2015; Quan et al., 2019).

Informed consent was obtained before the researcher proceeded with each interview. The interviews with each participant took place online at scheduled times. Each interview lasted for no longer than 1 hour, with a second interview of 1 hour possible for continuation of the discussion when necessary. This occurred on one occasion. The interviews were semi-structured and conducted individually with computer video recording methods. The interview protocol is reproduced in Appendix K. The protocol is based on the six research questions of the study, as outlined above. During the interviews, as is often the case in qualitative research, the researcher asked

follow-up questions, provided prompts, and generated new questions for additional insights into the phenomenon (Kvale & Brinkmann, 2015).

On completion of the interviews, the researcher transcribed each one, with the aid of Otter.ai (<http://otter.ai.com>) transcription software. Additionally, a professional peer reviewed the transcripts and interpretations for the first two interviews. These methods are discussed further below.

An overview of the research design, including the major paradigm, techniques, and methodological tools used and aligned to the RQs, below in Tables 15 and 16. An iterative timeline of activities from 2020 to 2024 appear in Appendix L.

**Table 15: Overview of Research Design**

<b>Element</b>	<b>Components</b>
Paradigm / Worldview	Constructivist
Research Design	Qualitative Single case study Narrative Critical incident technique
Methodological techniques and tools	Interviews Document collection Purposive sampling Snowball sampling Stimulated recall Triangulation through comparison of documents with participant interviews Member checking Peer debriefing
Data analysis tools and techniques	Researcher memoing Open coding

Deductive coding  
Inductive coding  
Thematic analysis  
Peer debriefing  
Member checking  
Pattern matching  
Time series analysis

---

## Data Analysis

In case study research, data are typically analyzed as they are gathered (Grosshans & Chelimsky, 1990). Yin (2018) warned that data analysis can be a stumbling block for many case study researchers because of the volume of data.

Given the large amount of data collected, a case study database was created (Yin, 2018). This was a systematic archive of all the data (documents, transcripts, field notes) assembled during the research for later retrieval and review by an outside reader, if desired. Atlas.ti software was used. The development of a systematic method for collecting and storing the data helped ensure the reliability and validity of the research and allowed for automation and streamlining several aspects of the analysis. All data were stored in password-protected folders with access only by the researcher.

Drawing on case study methodologies outlined by Yin (2018), the researcher included a variety of analysis techniques. Within the qualitative single case study and constructivist foundation, in the individual interviews the researcher used the Critical Incident Technique approach (Butterfield et al., 2005; Woolsey, 1986). This approach involved deep iterative review of the data, especially the interview data, with searches for patterns and concepts focused on the critical incidents occurring in the evolution of

each LID department and the transformative roles the inciting incidents played within the larger institutional context and mission. The researcher assigned codes to the data, with each code representing an idea or for inquiry.

In addition to the overall analysis strategy, the researcher used several analytic techniques to strengthen the rigor of the design. He used pattern matching for process and outcomes, comparing empirically based patterns that emerged from collection of the data (Yin, 2018). This matching proved useful in discovering the “how’s” and “whys” of the phenomenon and assisted the researcher in drawing conclusions about the research questions.

Employment of simple time-series analysis helped trace the progress and innovations over a period of time and is a major strength of case studies (Yin, 2018), especially in consideration of critical incidents. By examining events over time within EdPlus, the researcher identified patterns of change and innovation within and across the institution. A figure representing the timelines of EdPlus is provided in detail in Appendix D.

### ***Document Analysis***

The researcher also gathered documents from the participants related to the research questions. Types of documents requested included private strategy documents (presentations, strategic reports, organizational charts) and public promotional materials (current and archived website assets, press releases and marketing materials). Strategy documents requested and public documents were gathered through internet searches. The researcher ensured the authenticity of the documents by requesting

information on their history and integrity, the individuals who created them, and the purpose. These inquiries were important for study validity (Hancock & Algozzine, 2017).

Three questions were applied for document analysis from several sources (Appendix J):

Question 1: What organizational designs have EdPlus leaders adopted, and why?

Document type: Organizational chart.

Question 2: What key strategies and initiatives have EdPlus leaders implemented, and why?

Document types: Press releases, strategic plans, project documents.

Question 3: How do LID leaders measure and evaluate success?

Document types: Monthly board reports and progress updates to leadership.

Documents were coded similarly to the interview transcripts using the Atlas.TI software. This included open coding to identify various themes, insights and ideas. A second round of coding was performed against the research questions, and then a final round against the mobile models core, supporting and interrelated themes.

### ***Interview Analysis***

The researcher recorded the interviews using Zoom and transcribed each interview with the aid of transcription software Otter.AI (integrated within Zoom). Then the researcher studied each transcript and compared it with the video recordings for accuracy and increasing familiarity. Repeated comparisons were made to facilitate accuracy.

The researcher used a combination of electronic and manual means to handle and analyze the data. Atlas.ti software was used to code the data, specifically to enhance the speed and accuracy of the analysis, and to help distill the units of meaning into categories. From these, after repeated reviews, themes were generated (Miles et al., 2014). The computer software was supplemented by manual analytic methods because the researcher is highly familiar with the phenomenon studied. Moreover, manual analysis can be more intuitive than electronic (Creswell & Poth, 2018) to reveal new insights. The manual analysis was carried out by the researcher printing copies of each interview and marking them with questions, insights, and useful quotations.

Following qualitative analysis, the researcher also marked each transcript for similarities and repetitions of words, phrases, and ideas. The first stage of analysis was open coding (deductive coding), the generating of codes for units of meaning toward themes (James & Busher, 2009; Miles et al., 2014; Strauss, 1998). Deductive codes were compared with the study theoretical framework, the Mobile Model, and the five core strategies for transformational change (flexible vision, visible action, staff development, and senior administrative support, collaborative leadership, flexible vision, and staff development (Table 12). Inductive or axial coding, the search for relationships among codes, was used to generate new themes not previously included in the conceptual framework. “With the completion of open coding and transition to axial coding, collected data [were] sifted, refined, and categorized with the goal of creating distinct thematic categories” (Williams & Moser, 2019, p. 50).

Throughout the coding process, the researcher used constant comparison analysis (Creswell & Poth, 2018) to compare the interview transcripts and overlap of material to the theoretical framework. Additionally, based on participants' input and the document analyses, a chronological timeline of critical events was created. For intercoder reliability, an independent functioning researcher was requested and agreed to analyze the first two interviews to achieve reliability in the coding definitions and structure (Harris, 2006).

### **Trustworthiness**

Unlike experimental research in which analysis is limited to the recording of actual behavior, qualitative case study research requires multiple sources of evidence (Yin, 2018). The rigor and execution require measures of credibility, transferability, dependability, and confirmability. Within these components, external validity refers to whether and how case study findings can be generalized. Reliability refers to demonstration that the design components of the study can be repeated with the same results (Denzin & Lincoln, 2011; Patton, 1999; Stake, 1995; Yin, 2018). The involvement of the research committee members was instrumental in enhancing the overall trustworthiness of the research process. The researcher first reviewed the interview protocol with the committee before starting and provided updates on progress through monthly virtual Zoom meetings.

### ***Triangulation***

Triangulation helps ensure trustworthiness and validity, and data from multiple sources help to reduce the likelihood of bias caused by a single data source (Denzin,



1978; Shenton, 2004; Yin, 2018). This method of increasing trustworthiness involves comparison of different types of data collection to enhance the “fit” and credibility of the research findings and interpretations (Nowell et al., 2017). For this study, triangulation methods included comparison of documents with participant interviews, as well as member checking and peer debriefing, described previously. Denzin (1984) categorized this approach as data source and methodological triangulation.

### ***Credibility***

Another way of ensuring trustworthiness is credibility. Credibility determines whether the finding of the research make sense to the participants in the study and to other readers. As Nowell et al. (2017) noted, “Credibility addresses the ‘fit’ between respondents’ views and the researcher’s interpretation of them” (p. 3). Credibility can be established in several ways: triangulation, peer debriefing, and member checking (Lincoln & Guba, 1985; Nowell et al., 2017).

Member checking helps ensure credibility (Miles et al., 2014). Member checking is the act of sending transcripts of interviews to participants so that they can judge the accuracy or credibility of the interviews (Denzin & Lincoln, 2011; Patton, 1999; Stake, 1995; Yin, 2018).

### ***Transferability***

Transferability refers to the generalizability of the findings to other cases and sites (Nowell et al., 2017). That is, can the study be replicated and apply in other contexts? For example, would the current study findings be relevant to non-research universities? And to universities outside of the United States, with smaller budgets, and

different contexts or strategic goals? The researcher used several strategies to assess potential transferability and appropriateness to other settings, including full descriptions of the participants, settings, and processes. Another means was use of “thick descriptions” of the phenomena (Nowell et al., 2017, p. 3) so that others may more accurately judge whether the findings fit their own cases or sites.

As Stake (1995) pointed out, entirely new generalizations are rarely reached in case study research; after all, the goal is “particularization, not generalization. We take a particular case and [seek to know] what it is, what it does. There is emphasis on uniqueness” (p. 8). Nevertheless, generalizations in a case study “regularly occur all along the way” and may be called *petite generalizations* (p. 7). Chapter 5 discusses how the findings could be tested further for generalization in future research (Miles et al., 2014).

### ***Dependability***

Another method for enhancing dependability, reliability, and validity is peer briefing. This process involves selecting fellow researchers who are experienced in case study methodology and qualitative analysis and conversant with the topic. For this purpose, Drs. Joshua Kim and Eddie Maloney were chosen as peer reviewers. Dr. Kim is the Director for Online Programs and Strategy at Dartmouth University. He is also a regular contributor to the online publication *Inside Higher Ed*, for which he writes about the future of education. Dr. Maloney is the Executive Director of the Center for New Designs and Learning and Scholarship at Georgetown University. Both are members of

the Harvesting Academic Innovation for Learning (HAIL) community and coauthors of the foundational manuscript, *Learning Innovation, and the Future of Higher Education*.

The peer debriefers were asked to critique the findings and conclusions, provide additional feedback to the researcher, and point out discrepancies that may have threatened the credibility of the research (Hancock & Algozzine, 2017). In addition to Drs. Kim and Maloney, the researcher's university research committee members provided constant review and advisement on the results. Based on the feedback, the manuscript was updated.

Dependability also indicates that the research process is clear, logical, and sequential (Nowell et al., 2017). To this end, the researcher kept an audit trail documenting the decisions and consequent steps in the research in a chain-of-evidence document (Nowell et al., 2017; Yin, 2018). A chain of evidence ensures linkages across all stages of the research project, connecting the research questions to the findings. The chain of evidence also ensures that no original evidence is lost and that there is a connection between early stage evidence (e.g. research questions) and the later stage areas such as findings.

### **Role of the Researcher**

A researcher can take a variety of roles in conducting qualitative research. Two primary roles are that of "an insider" who is affiliated, or a member of the group studied, or "an outsider," who is a complete stranger to the group (Adler & Adler 1994, p. 147). For this study, the researcher identified as an insider because he has worked in higher education for 20 years and is on the staff of EdPlus at ASU. Bonner and Tolhurst

(2002) identified three advantages of being an insider: (a) having a broader understanding of the culture, (b) not altering the flow of social interactions unnaturally, and (c) having established intimacy, which promotes both participant confidences and judgment of what is true from aspirations or plans. In addition, the insider also understands the politics of the institution and how the phenomenon has taken place and developed.

Additional advantages of being an insider stem primarily from increased ability to collect data because of access (Mercer, 2007). The researcher will “have a better understanding of the social setting” because he knows the context. He will “understand the subtle and diffuse links between situations and events; and . . . can assess the implications of following particular avenues of enquiry” (Griffiths, 1985, p. 211, as cited in Mercer, 2007, p. 6).

However, possible detrimental issues with insider status were also considered. For example, greater familiarity with the phenomenon can lead to the loss of objectivity (Unluer, 2012). Prior experience can be considered a bias (through development of a specific perspective based on experience) and possibly more pervasive than it is (Mercer, 2007). Additionally, “insider researchers may be confronted with role duality—having to alternate between their role as an insider and the more objective one of that of a researcher” (Mercer, 2007, pg. 14).

Role duality was especially complex, given the long associations, credibility, and rapport with the participants. Further, Mercer’s (2007) observations are relevant for the leaders at ASU: “Participants may engender a greater level of candor than would

otherwise be the case. The converse can also be argued, to the effect that people may not share certain information for fear of being judged” (p. 7). Further, with some research questions, participants may feel their privacy is invaded or their positions at the institution are threatened (Bryman, 2012).

To avoid such extremes, Chicago School sociologists Park and Burgess (as cited in Adler and Adler, 1987) offered preemptive strategies designed to deter researchers from becoming overly involved in the setting. The current researcher followed these strategies. One tactic was to continue involvement in the culture, in this case EdPlus, while privately remaining detached in loyalty to and focused on the research questions. In addition, researchers may choose to be covert in interviews, that is, not reveal their identities (Bryman, 2012). However, this choice poses additional problems, such as maintaining a consistent persona and the difficulties of masking the researcher’s identity. The current researcher decided against a covert identity as lacking transparency, especially because his ongoing relationships with participants made a covert identity unworkable.

### ***The Researcher’s Insider Role Involvement***

The researcher has worked at Arizona State University in various staff and administrative positions since 2006. As the current and inaugural Chief Design Officer within EdPlus at ASU, he has helped build the strategy, teams, and projects from the organization’s infancy to its current state of maturity. He started at ASU as an instructional designer and has developed a deep understanding of online education principles and practices as both a practitioner and strategist.

Since 2006, he has had lived experiences with LIDs in his professional roles and responsibilities. He is very familiar with the academic innovation phenomenon and understands many of the issues, challenges, and problems LID leaders face. In addition to learning design responsibilities, he has led many strategic partnerships and innovation projects with external organizations. These include Starbucks, Mayo Clinic, Uber, YouTube, and the National World War II Museum in New Orleans. In addition to the role at ASU, he is an active participant in the national and international learning innovation communities and an early member of the Harvesting Academic Innovation for Learning community. He also serves as a higher education advisor, working with several domestic and international universities on their learning innovation strategies and implementations.

Given his roles, there are biases that may result from his extensive participation in these initiatives. Biases, as Maxwell (2013) noted, may be defined as trying to fit interpretations into the chosen theory, or reflexivity—influencing interviewees with leading questions, tones, and innuendoes. Nevertheless, through careful attention to the participants' words and the reflexive journal, the researcher was able to minimize such biases.

In addition, the researcher was aware of the need for academic independence in interpretation of the findings and the possible power relations with the participants in EdPlus. In qualitative research, the aim is to reduce power differences and “encourage disclosure and authenticity between researchers and participants” (Kamieli-Miller et al., 2009, p. 279). In this study, however, the power relationships cannot be ignored.

In circumstances of power relations, Baez (2002) indicated that “trust is more likely to ensure honest discussion than any kind of promise of confidentiality” (p. 54). Conflict may arise between the researcher’s role as a professional staff member within the institution and as a researcher. To help mitigate conflicts, Trowler (2016) concluded that “clear-eyed understanding of the costs and benefits of the approach taken, combined with sensible and practical measures to ensure robustness in the approach and findings” can protect researchers from criticism (p. 243).

Nevertheless, the researcher encouraged participants’ authenticity and dedication, like his own, in the interest of rigorous scholarship. He reiterated his respect for participants’ wishes that some topics would not be discussed or that some shared information remain confidential. He also reiterated his openness to participants’ thoughts on invasion of privacy regarding any information (Bryman, 2012).

As Mitchell (2010) suggested, reciprocity was encouraged in sharing information about his own life and experiences, specifically with EdPlus. Participants were reminded of the purpose of the study: to examine the Learning Innovation Department, its organizational design, and development of initiatives as catalysts for transformational change for the University. As a fellow educator, attempts were made to appeal to the common goals of understanding and working together toward further development and improvement of EdPlus, ASU, and the education mission as a whole.

Hancock and Algozzine (2017) pointed out that a researcher’s “goal is to understand the situation under investigation primarily from the participants’ perspective, not the researcher’s perspective” (p. 8). Recognizing the phenomenon of

LIDs, the University's responses to change, and the necessity for additional transformational change, the researcher assumed the stance of an interpreter of the phenomenon. As Stake (1995) noted, a researcher "has recognized a problem, a puzzlement, and studies it, hoping to connect it better with known things. Finding new connections, the researcher finds ways to make them comprehensible to others" (p. 97).

Because of his background and experience, recognized biases were "bracketed" and noting them and refraining from judging them (Moustakas, 1994, p. 78) in interviewing and analyzing the interviews. Through "memoing," to help ensure validity, the researcher noted his reactions that may have been construed as biases (Miles et al., 2014, p. 71).

Lived experiences are valuable and were useful in design of the research questions and interview protocol, as well as adjustment of the questions during the interviews and follow-up (Rubin & Rubin, 2012). From experience in higher education, he understands how to empathize and draw out the participants. He used appropriate prompts and follow-up questions to elicit participants' most comprehensive thoughts and maximum insights.

An advocate for universal access to education, the researcher believes in the important roles technology and learning design can play in promoting digital education solutions. In addition, he believes the work that has been developed and takes place in EdPlus has an impact on the entire university. These convictions were part of the reasons for this study.



### **Ethical Considerations**

“A qualitative researcher faces many ethical issues that surface during data collection in the field and in analysis and dissemination of qualitative reports” (Creswell & Poth, 2018, p. 152). The role as an insider is certainly one such issue. Several safeguards were put in place to protect the participants’ rights during and after the study. Ethical guidelines in accordance with the Dublin City University Research Ethics Committee and review approval were followed. The data were collected only after the REC approval (Appendix H, #DCUREC/2020/260).

Before data collection began, participants were provided with informed consents and requested their signatures (Appendix F). The consent forms included information about the purpose of the study, the expected time commitment for participation, the voluntary nature of participation, the right to withdraw at any point without personal or professional harm, and possible risks of participation. The consent also included the participants’ rights to request deletion of sensitive material either in the document analysis or interviews. Once informed consent was completed, interviews were scheduled.

In this study, participants’ identities were anonymized with pseudonyms. However, guaranteed confidentiality and anonymity of their identities was difficult because their titles are public knowledge and are available on the University website. Participants were asked for permission to use their identities in this study, and this provision was noted on the informed consents. Additionally, as noted above,

participants had the opportunity to review their transcripts and were able to liaise with the researcher. However, none availed of this option.

### **Data Management**

All data collected for this study were stored on a password-protected computer and database of the researcher. The researcher alone has access to the computer, database, and password. All software used to transcribe and code the interviews adhered to the latest commercially reasonable security measures to protect data from unlawful or unauthorized access. The data will be saved for 5 years, according to DCU data management policy.

### **Methodological Limitations of the Study**

As mentioned previously, the study had several limitations. The research was restricted to one higher educational institution in a U.S. public research university. The documents were examined, and interviews conducted at a single point in time and conclusions drawn by constructions and interpretations from the researcher (Stake, 1995). Additional developments and changes after data collection were not noted. Because the research site was only one university in a specific geographic region, generalizations to other, similar institutions of higher education may not be possible.

A second limitations has to do with the insider status of the researcher. This role certainly provided unparalleled access to data but inevitably introduced a level of bias that was a challenge to remove from the analysis and presentation of the results. The dual role of insider and researcher may have affected the objectivity of the study results. Familiarity with the subject can influence the interpretation of data and the

researcher's perspective (Unluer, 2012) but also can be useful bringing emotions and feelings (Patton, 2015) into the interpretation of the constructions (Stake, 1995).

A third methodological limitation is a measurement challenge with the type of change under investigation, Transformational change sets an ambitious standard that is not easily met or measured (Eckel & Kezar 2003a). Although the MM offers guidance, participants frequently found it challenging to distinguish transformational change from other forms of change, such as strategic change, innovation, and different approaches to change that were considered outside the scope of the research.

Lastly, due to the nature of the interview sample focusing on the leaders building and shaping EdPlus at ASU, interviews with other stakeholders i.e. faculty, staff and students were not included in the sample. Therefore, it is important to contextualize this limitation to wider conclusions about the impact on institutional culture at all levels of change and implementation within the organization.

### **Summary**

This chapter described the methodology and research design for the study. The population and sample, setting for the interviews, and underlying theoretical framework were reviewed. Data collection and data analysis were also included. Data were collected from 28 participants, all with contextual understanding of EdPlus at ASU. Pertinent documents were collected and reviewed to supplement the interviews. Validity and reliability of the data were discussed, with member checking by participants taking place as a form of ensuring validity. In explanation of the role of the researcher, the researcher acknowledged his role as an “insider” who is familiar with the topic

because of his professional position was acknowledged. Ethical considerations, appropriate data security measures, and limitations of the study were outlined.

Chapter 4 reports on the findings of the study, the case of EdPlus at Arizona State University; a brief biography of its university president, Michael Crow; and a description of the LID at Arizona State University, EdPlus, grounded in the theoretical models presented in Chapter 2. With the literature base, the findings will be presented and explored, and the evolution will be described of a new organizational model for higher education, the LID.

## CHAPTER 4: FINDINGS

*“Change will not come if we wait for some other person, or if we wait for some other time. We are the ones we've been waiting for. We are the change that we seek.” – Barack Obama*

The findings of this qualitative, instrumental case study collected through semi-structured interviews and document analysis are presented here. The researcher used Eckel and Kezar's (2003b) transformational change model, the Mobile Model (MM) (Figures 1, 6, and Table 12) to analyze EdPlus at Arizona State University (ASU). For transformational change to occur, it must affect culture through deep and pervasive change over a long period. The MM can guide a new change process and as well help the researcher evaluate an already completed change process. This change model was discussed in detail in Chapter 2. The present chapter presents the findings - using the MM as an organizing framework and alignment tool - with a descriptive narrative approach (Langley & Tsoukas, 2017).

The central research question was this: **“How do leaders in the learning innovation department at ASU approach transformational change initiatives to further the university's strategic public charter?”** The six sub-questions, the MM core strategies, and interlinking themes are presented in Table 16 and will be used throughout this chapter as a guiding framework for the case presentation.

**Table 16:** *Research Questions, MM Strategies, and Interlinking Themes*

Research Questions	MM Core Strategies	MM Interlinking Themes
1. How does the MM for Transformational Change explain the case of Learning Innovation Departments at ASU and within the literature?	<b>1. Senior Administrative Support:</b> Individuals in positional leadership provide support in value statements, resources, or new administrative structures.	<b>Think Differently</b> helps people collectively make sense of uncertain, ambiguous, or changing organizational situations and understand what the changes mean for them (March, 1994; Weick, 1995).
2. How do institutional leaders categorize EdPlus in terms of Transformational Change?	<b>2. Collaborative Leadership:</b> Process in which positional and nonpositional individuals throughout the campus are involved in the change initiative from conception to implementation.	<b>Balance</b> across several factors is typically required for deep and pervasive change over a long time. Leaders need to strike balances across several areas, including planning (short- vs. long-term), people (experience level and tenure at institution), and new and old traditions.
3. What role does EdPlus play in changing the culture of the university?	<b>3. Flexible Vision:</b> More complex than vision, here leaders develop a desirable and flexible picture of the future that is clear and understandable and includes setting goals and objectives related to the implementation of that picture.	
4. What strategies and processes were used in the planning, development, and implementation of the transformation initiatives?	<b>4. Staff Development:</b> Offers individuals' opportunities to learn specific skills and knowledge.	
5. How has the organization changed over time to support transformation initiatives?	<b>5. Visible Action:</b> Advances in the change process that are noticeable and measurable. Activities must be visible and promoted so that individuals can see that the change is still essential and is continuing.	
6. What are the critical incidents that have shaped and evolved the design and role of EdPlus?		

*Note.* Researcher-created.

This chapter is organized as follows: introduction to the case, a review of its context and history, findings through the core and supporting MM strategies, the MM interrelated themes of *balance* and *think differently*, a report on *affected culture* as the primary measurement for transformational change, and lastly, negative impacts of EdPlus' change efforts. The research questions are repeated as appropriate within these topics to guide the reader, although not in the order presented to participants. A summary concludes the chapter.

### **The Case: EdPlus at Arizona State University**

This section provides a detailed narrative of the central organization studied here, EdPlus at ASU, an R1 doctoral-granting public research university in the southwest region of the United States. Two research questions addressed the case of EdPlus.

RQ 5: How has the organization changed over time to support transformation initiatives?

RQ 6: What are the critical incidents that have shaped and evolved the design and role of EdPlus? (Appendix D)

A critical component of the ASU charter, which includes EdPlus, is that ASU will measure its success “not by whom it excludes, but by whom it includes and how they succeed”; moreover, it “assume[es] fundamental responsibility for the economic, social, cultural and overall health of the communities it serves” (Arizona State University, 2020c). Provision of digital content, courses, and degrees to students and learners who cannot attend the university in person is foundational to ASU's charter. This provision has been a vision of ASU's President Michael Crow over several decades (Crow, 2002).

***A New American University Design***

The transformation of ASU under Dr. Crow and his leadership team over the past 22 years has resulted in the establishment of a research university of quality, scale, financial strength and independence, and continuous innovation across all aspects of the organization (Faller, 2022). At Dr. Crow's ASU presidential inauguration in 2002, he outlined his vision for a new American university with a series of design principles that later became the ASU Charter and guiding strategy (Crow, 2002). The three main ideas within the ASU charter are access and inclusion, research with a social purpose, and taking responsibility for the overall health of the community.

These principles can be traced back to Dr. Crow's youth and how he was shaped as a person, scholar, and leader. As a 13-year-old, Dr. Crow took on a Boy Scout project to provide food for a needy family for an entire year. During this project, he was first exposed to the stark realities of the inequalities between what he was observing on television—someone landing on the moon—and the family he was helping, who had barely any food and water to survive. He later stated, "From that very moment, on December 24<sup>th</sup>, 1968, I began thinking about what later manifested itself in me, this radical architect and designer. I do not mean physical design; I mean institutional design" (The Blue Collar Leader, 2022, n.p.).

Moreover, because of Dr. Crow's background, he does not look down on people because of their circumstances. This perspective helped shape his views on access and privilege:



I hate academic elitism! I think my background allows me to understand what it's like to feel that you want a little help. Just let me have access to that class at a time when I can take it. And also being flexible, adaptable, and engaging. I mean, I think that's what my background helps me to see. (The Blue Collar Leader, 2022, n.p.)

Dr. Crow was the first in his family to be admitted to college (Crow, 2018). His father wanted him to attend the Air Force Academy on an offered scholarship, but he had something else in mind. Attending Iowa State University on a partial athletic and Reserve Officers Training Corps (ROTC) scholarship, he had never met anyone who had gone to college except his schoolteachers. He credits a sophomore year project on simulating the Apollo 13 space mission as instrumental in his realization that “college was the way to get the tools necessary to design things that do not exist—not just objects, but also structures, systems, and organizations” (Crow, 2018, para. 17). He began studying political science and science policy.

An early professor taught him that “Science was not just about learning for the sake of knowledge, it was about solving problems” (Crow, 2018, para. 17). He recognized:

College created this incredible environment for me to learn in the broadest possible way. It allowed me to give concrete shape to my high-school-age notion that a place of learning can fuel the design of the future; enable multiple ways of thinking, pathways, and subjects; and then apply that knowledge to drive change and make something new. (para. 20)

An essential aspect of the ASU Charter is to expand educational opportunities for underrepresented segments of the American population, for both college students and graduates. The ASU administration has sought to move aggressively into new markets

and education modalities, such as online learning, to expand the university's resource base and stature (Dusst & Winthrop, 2019; Faller, 2022).

According to interview participants who have worked at ASU for more than 20 years, in 2002, ASU began a transformation to improve success and increase access to higher education for a broader base of students. The mission was also to increase enrollment and expand the research portfolio simultaneously. To underscore the commitment to these multiple missions, the complete ASU charter is etched in stone at the entryway to each campus and hangs on the walls of each department. The full charter reads:

ASU is a comprehensive public research university, measured not by whom it excludes but by whom it includes and how they succeed; advancing research and public discovery of public value; and assuming the fundamental responsibility for the economic, social, cultural, and overall health of the communities it serves. (Arizona State University, Office of the President, 2020c, para. 1)

One former provost, Fin, explained that although ASU is a multicampus university, it is not fragmented by the standard "system" structure with a separate president, provost, and leadership team for each campus (interviewee Fin, 2022). Instead, the university has maintained integration as a single entity to ensure consistent quality, governance, operational efficiencies, and clear communication. The evolution of ASU from a teachers' college to a research university is not unusual. Noteworthy R1 research universities, also known as doctoral universities because of their very high research activity, were originally teachers' colleges. Examples include UCLA, North Carolina at Chapel Hill, and the University of Memphis. Several U.S. higher education institutions evolved similarly from the German model of faculty engagement

encompassing the “production as well as the dissemination of knowledge” (Atkinson & Blanpied, 2008, p. 3).

However, several participants emphasized that the timeline of ASU’s transformation is unusual. The university became a research university in 1955, relatively late in development compared to other research universities. This transition has enabled ASU to avoid constriction by a previously set higher education model and to accelerate organizational innovation.

Several defining moments emerged within the data and chart the course of ASU’s transformation into a *New American University*. Foundationally, Dr. Crow joining in 2002 is the most significant event, as shown extensively throughout through the data and presented in this chapter. From the beginning of his tenure, Dr. Crow established an unwavering commitment to entrepreneurship, inclusion, and innovation that remains consistent today. The university also faced several difficult external events, including severe state funding cuts in 2008, which led to a 51% or \$250 million reduction in inflation-adjusted state appropriations per student, and these lasted until 2015 (Arizona State University, 2023). ASU then instituted a host of new revenue strategies, from tuition increases to real estate endeavors to exploring scaling enrollment, in traditional and online modalities. From FY09 to FY16, the total enrollment increased by 36%, from 67,082 to 91,357 (Arizona State University, 2023).

In discussion of these events, one participant explained that the university sought ways to increase enrollment of high-margin students, primarily from international and out-of-state locations, to help subsidize access for in-state students

who received needs-based grants. International and out-of-state enrollment grew from 18,027 (27%) in FY09 to 41,017 (45%) in FY16 (Arizona State University, 2023). ASU's financial aid scaled from \$138 million in FY09 to more than \$500 million in FY24. This increase reflected the commitment to meet and consistently exceed the mandate by the Arizona Board of Regents, ASU's governing body at the state level, for 14% of revenue to go toward financial aid for needs-based in-state students (Faller, 2022). Much of this financial stability can be connected to the growth of ASU Online. Interviewee George (2021) recalled of the financial position at the time:

So that's where ASU Online starts to come in. Can we figure out a way to create online programs that serve the right kind of people, have the right level of quality, but also generate some additional resources towards that? So that combined with the increased tuition starts to fill the state hole and then provide a new source of resources going forward into the early teens. At that same time, the university is starting to get a reputation sufficient to attract more international and nonresident students. It now is attracting students because it's a pretty good school to go to and pretty good place to get a degree from. That's a significant bump in revenue as well. (interviewee George, 2021)

In addition to setting ambitious goals to grow enrollment and improve student outcomes, ASU has established goals for growth and excellence in faculty research “for a public purpose.” The university is currently ranked fifth in research expenditures for U.S. institutions without a medical school. ASU is on track for over \$800 million in research expenditure in 2024 (up from \$177 million in 2005), making it one of the top research institutions globally (Arizona State University, 2023).

While these systemic changes initially met strong resistance from the incumbent culture, according to several participants over time the faculty began to support the

transformation. In the current study, Barry, who has been at ASU for more than 30 years recalled the change in faculty mindset:

I'll tell you the one thing I hear more and more. And this was not true in the beginning. I hear more and more about faculty who come here because they believe in what we're doing. They believe in the mission and want to be part of it. They also want to be successful in all the traditional ways that faculty are expected to be exceptional. But what draws them to ASU instead of somewhere else may be the mission that ASU is on, and the ability to be nontraditional in the way [the university goes] about things. (interviewee Barry, 2021)

As a core strategy for change, ASU also anticipates incorporating technology across all institution aspects, which is not surprising given Dr. Crow's background (The Blue Collar Leader, 2022, n.p.). In response to a request for his analysis of ASU's transformation, Dr. Crow noted:

I think that any time you introduce technology into the mainstream of an organization, you vary their routine capacity by creating new routines, enabling older routines, and replacing some routines. And so when you do that, you change the institution's adaptability to the environment, including the financial environment. So we found ways [of] using technologies to enhance learning outcomes and lower costs—a fantastic outcome. We became technologically empowered, in ways that allowed us to change our financial model, change our structure, change how we operate, change our revenue opportunities, change our revenue functionality, change our speed of engagement, change the efficient use of our faculty, change the means by which we generated revenue for the faculty, change the creativity index of our faculty. (Blue Collar Leader, 2022, n.p.)

Unlike many universities that view technology-enhanced learning as an inferior experience to the more traditional on-campus lecture-based model, several participants explained that ASU applies technology and design to help the university change to focus on students' needs, regardless of the modality (in-person or online) in which they connect to the institution. Given the wide-ranging scope and central role of distance education in this study, the university's embrace of online or distance education as an

important strategic investment to fulfill its public access charter required a thorough analysis and emerged often throughout the data collection.

### ***Distance Education***

The data show that the primary assignment for EdPlus at ASU is the design, development, deployment, and ongoing support of ASU Online, the university's degree-granting distance education offering. As Dr. Crow stated, "If you do not change the design, you cannot change anything. The machine will only do what the machine is designed to do" (The Blue Collar Leader, 2022, n.p.). Distance education permeates all forms of formal (classroom), nonformal (not in classroom but structured), and informal (unstructured) learning (Cameron & Harris, 2013). Today, most universities are invested in distance learning in some form, and dozens of MOOC providers have tens of thousands of online courses available. Approximately 220 million students have signed up for at least one course on a MOOC platform (Shah, 2022). More than 2 billion users on YouTube watch videos on the platform, with more than 90% saying they go there to learn something new (Galloway, 2021).

One participant emphasized that today's widespread prevalence of online learning at ASU and other institutions marks a noteworthy change from the pre-internet past. It was explained that distance education at ASU dates back to broadcast television delivery in the 1950s and 1960s. In the 1980s, the primary focus for distance education was Instructional Television Fixed Service, and the primary students it served were engineering students working at various companies across Phoenix, such as Motorola and Intel corporations (interviewee Gary, 2021). To accommodate engineering students

who found it difficult to attend campus for their master's programs due to competing work priorities, ASU implemented synchronous broadcasts of lectures to various campuses and regional corporate locations.

In a related set of activities, Floyd, a leader working in the ASU Center for Teaching and Learning (CTL) in the 1980s described how the Faculty Senate established the CTL to complement the activities in the College of Extended Education. The Center was dedicated primarily to providing faculty with pedagogical support for teaching and learning. Floyd explained the mission of the center in the following way:

So [in] almost every university, relatively few people have any formal training in teaching and learning. We need places like Centers for Learning and Teaching Excellence to help people understand the most effective ways to engage learners in the learning, engage with the teacher, engage with classmates, engage with the course material, and a lot of faculty are not very good at that. (interviewee Floyd, 2023)

Two early leaders of the distance education department explained how it was still situated in the College of Extended Education at ASU, located in downtown Phoenix, and offered several programs on public television and cable television. Some correspondence courses were offered by digital tapes or CDs. Most of these efforts were considered experimental, and any fully online asynchronous courses were not culturally accepted until the late 1990s (interviewees Gary, 2021; interviewee Floyd, 2023).

At the time, significant limitations still existed around online learning, including low bandwidth for streaming video and the running of sophisticated websites. Furthermore, several participants emphasized that the administration at the time was

not interested in growing online offerings in any integrated or substantial way representing a much bigger obstacle to change. Other administrators of colleges, schools and departments saw the potential to grow online education. However, the ASU administration at the time was protective and emphatic in investment and growth of the traditional college residential experience (interviewee Gary, 2021).

The first online course at the university was a dance history course filmed in a studio environment and broadcast over local television stations across Phoenix. Gary (2001) recalled of the time saying, “Online was seen as for lesser institutions like University of Phoenix.” The University of Phoenix is a large for-profit online school headquartered in Arizona, with students nationwide. A former provost, Fin, confirmed this perception from the administration at the time. He recalled:

We are not competing with the University of Phoenix. And we do not want to. We are, you know, an in-person experience. We are an on-campus experience, and we always will be. So that online stuff will remain forever over here on the fringes. And that permeated the university. (interviewee Fin, 2022)

As with most things at ASU, this perspective changed in 2002 when Dr. Crow took office. Even before he officially became President, Gary (2021), described how a group of leaders managing the College of Extended Education flew to New York to meet with him to discuss online learning. Upon their return, a leader of that unit reported back to the Gary and the distance education group as a preview of what was to come, “Everything is going to change, and she was right” (2021). Another leader, George, responsible for university planning at the time explained:

It was determined that ASU could not serve the entire student body that it wanted to be able to serve with this access mission, simply by offering programs



on campus. Some students were not going to be able to either afford, from a financial standpoint or from a career standpoint, to be able to just simply show up and hang out for four years at a traditional campus. And in addition to that, there was also financial pressure on the institution. There were so many different things that President Crow was trying to do with the institution, and there was only so much revenue that could be derived from on-campus programs, and only so much—minimal amount of revenue that can be derived from state resources. (interviewee George, 2021)

The appointment of Betty Phillips (“Betty”) as Provost at ASU marked a pivotal moment and catalyst for change. Recruited by Dr. Crow for her ability to expedite the realization of the ASU vision, Dr. Phillips played a crucial role in transforming ASU Online and EdPlus from a college primarily focused on continuing and professional education into its current form. Dr. Crow (2022) described Betty as follows:

Our Marine Corps General, Two-Star General, also Provost of the University, and so she was courageous, got things done, and a make-things-happen person who helped us overcome the initial resistance to technological evolution. She believed in college completion. She believed in kids being able to get through the university, and [she] supported innovation. She wanted to make things happen. And so, she’s a significant factor in our success. A major factor!

Another early leader, Fabio, who worked in the university’s technology organization described Dr. Phillips as the one person who was indispensable in the success of ASU Online and EdPlus:

Betty was the most gifted administrator I ever met. She's the one who made ASU shift from first gear to sixth gear. And she shifted every one of those gears. And it's this combination of understanding how the existing institution works, what people's incentives are, and then restructuring those incentives so that people will grow toward the light you're trying to get them to grow toward. And she was amazingly good at that. And so, you know, the university calendar changed because Betty changed it. The fundamental changes, like if EdPlus identified the key things in their growth, Betty was the administrator who could cause that to happen without breaking the whole place. (interviewee Fabio, 2022)

During this period, the teams responsible for online learning and the CTL were jointly situated at the Computing Commons, centrally located on the main Tempe campus, which cultivated frequent collaboration between the two departments. Floyd, the CTL director at that time spoke about the nature of these collaborative efforts:

The Center was in Computer Commons, and so we interacted very closely with the distance education group, and we did some things together. But we talked pretty much every day because we were located in the same place. I felt that I learned a lot from that group, and I can't speak for them, but I hope that they felt the same way about it us. It was great. I think about if I had stayed there, and if the Center had continued to go on, how would the collaboration have been between the folks who were focusing on online learning and what we were doing in the Center? (interviewee Floyd, 2023)

In 2009, Dr. Phillips appointed Dr. Philip Regier as the Dean of ASU Online and Extended Campus, a role he continues to hold, now also serving as CEO. As Dean, Dr. Regier has been a central figure in the transformation of what was formerly the Continuing and Professional Education group into the current EdPlus initiative. In his previous role, he had been Executive Dean of the Business School, where he ran and successfully scaled the Online MBA program, among other responsibilities. This program was considered a very successful initiative for the university by measures of revenue and reputation (interviewee Edward, 2022).

Dr. Regier (2022) explained his three roles at the university, each with its own reporting line, a distinction that is both unique and meaningful. As a professor of accounting with a focus on leadership and entrepreneurship, he reports to the Business School's department chair of accounting and the Dean of the business school. In his capacity as the University Dean for Educational Initiatives, he answers to the University

Provost. Additionally, as CEO of EdPlus, his reporting line is to the EdPlus Management Team (EMC) which is chaired by the Dr. Crow as the University President. The interplay of these roles and the dual reporting structure is a critical and deliberately designed aspect of EdPlus, representing a complex *balance* of governance (interviewee Edward, 2022).

Dr. Regier's background as an academic from the Business School emerged as an important distinction by Andrew, a senior advisor of Dr. Crow: "Well, EdPlus, or certainly Phil, reports to the Provost and the Deans report to the Provost. In all the Dean's meetings, EdPlus has a presence in the Dean's meetings. They are a full partner in the Academic Enterprise" (interviewee Andrew, 2021). Andrew further explained:

EdPlus is led by a professor who has the title of University Dean and CEO, and I think that that speaks to the interest that the university has in . . . well, in the first place creating a unit that sits on top of ASU Online. But I think that that also represents a decision that making Phil Regier a university Dean allows him to have accountability to the Provost, and then having him as a CEO creates accountability to the President. I think that that's worth appreciating. (interviewee Andrew, 2021)

Dean Regier (2022) explained how in 2009 he one very simple goal: Grow the number of online students. He explained that one of his first strategic moves as Dean was reorganizing the Extended Campus team to focus almost exclusively on building online programs for quality and scale. Much of the work in the extended campus portfolio had been focused on developing and delivering weekend and evening offerings, although they were still residential. At the same time, his slogan was "We have to get good before we get big," referring to the quality of the online courses and degrees.

The second strategy he explained (2022), which proved to be the most critical strategic decision for growth, was locating an outside partner to assist the university in managing aspects of its online programs. After a lengthy request-for-proposal process and study of many proposals, the university chose the Pearson publishing company as its partner for technologies, student enrollment services, and marketing. Dr. Regier (2022) recalled that the university maintained its ownership and control of content development and instructional design. However, all other activities for the online delivery were developed with Pearson in return for a revenue share of the online student tuition. What later became known as the Online Program Management (OPM) industry and market. At that point, ASU Online started to grow and showed a 25% year-over-year growth for the next 10 years (Arizona State University, 2023).

Before this programmatic shift, ASUOnline.asu.edu was the internally focused website managed by the instructional design and media teams built to support faculty in course level design efforts (interviewee Edward, 2022). Gary, an early leader of the instructional design team recalled how initially the group was a coalition of the “willing” among the faculty who experimented with the new technologies and delivery mechanisms. Online course design and development efforts were focused on providing optionality and flexibility to ASU’s traditional residential students and faculty. Very little consideration was given yet to how these technologies and methods could serve incrementally new students who otherwise could not attend the university (interviewee Gary, 2021).

During this period, as recalled by Floyd (2023) the director of the CTL group at the time, the dynamic between the CTL and ASU Online teams started to shift. The director of the CTL was transferred to lead a new initiative at the Polytechnic Campus, the team was moved into a new office, and by the end of 2010, the CTE had been dissolved. The rationale behind its closure remains debated; however, Floyd highlighted two principal reasons.

The first was that “the people who most needed the services of the Center didn't participate in the services of the center, and that is a real problem. I do not know how to solve that problem” (2023). The second reason concerned the center's inability to secure external funding, which the director believed likely influenced its eventual dissolution. Consequently, some of the Center’s functions were absorbed by the colleges, and others, including certain staff members specializing in instructional design services, training, and workshops for faculty, were moved into ASU Online (interviewee Floyd, 2023).

One insight the researcher recognized is that for ASU Online to achieve its enrollment and growth objectives, the ASU Online and Extended Campus organization members were required to “*think differently.*” In that respect, ASU Online was organized like a startup, exploring various technologies and partnerships to grow at quality and scale. At any given time and including the present, EdPlus evaluates and partners with dozens of educational technology startups to solve any number of learning challenges for growth at quality and scale (Figure 8).



described in greater detail below) (interviewee Edward, 2022; interviewee Chloe, 2022; interviewee Gary, 2022; interviewee Fin, 2022). Dr. Crow (2022) described this important connection during his interview for this study:

Instructional Designers are the knowledge navigators, [are] the people that are helping to take content and turn it into a new form of a learning environment. They are a form of faculty themselves. And so, one of the powerful things we have done is we've found this specialty form of faculty, the knowledge navigators, the IDs working with our subject faculty and have then greatly enhanced knowledge outcomes. And when you bring all these people together, you get tremendous enhancements and outcomes.

At the time of this writing, investment in distance education continues to grow in the U.S. at public research universities such as ASU. Many institutions use federal aid to invest in infrastructure, including faculty professional development, collaborative partnerships, digital learning services for learners, marketing, and student retention (Online Learning at Public Universities, 2022). Others partner with OPM's, and some have grown through for-profit acquisitions most notably Purdue Global (acquiring Kaplan) and University of Arizona Global Campus (acquiring Ashford). As a result of these developments over the last decade, and with the increasing popularity of online courses and distance education, many education institutions have developed new organizational structures or have evolved existing ones (Keehn & Bishop, 2018).

### ***From ASU Online to EdPlus at ASU***

This section presents the findings in relation to RQ 2:

RQ 2: How do institutional leaders categorize EdPlus in terms of transformational change?

In 2014, to further the university charter, EdPlus was envisioned to extend further than support of ASU Online, encompassing a broad portfolio of innovative educational activities. In his introductory video for EdPlus, Dr. Crow characterized the initiative:

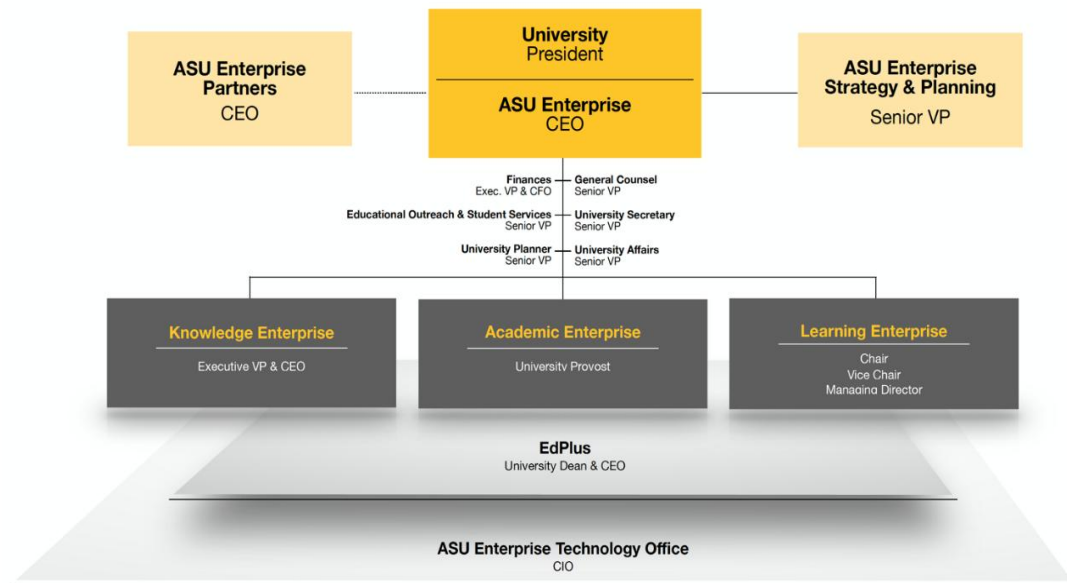
Bringing together technology development groups, private sector partnerships, present ASU Online activities, partnerships with other knowledge and content providers, to find ways to continue to bring this all together so that we can continue to be fantastically successful with our face-to-face and online students. (ASU EdPlus: Arizona State University, 2014, n.p.).

Dr. Crow additionally explained:

EdPlus at ASU [is] the enabler for the projection of our teaching, learning, and discovery environment for the broadest audience possible using the most sophisticated learning tools human beings can build (ASU EdPlus: Arizona State University, 2014, n.p.).

The first enterprise-wide depiction of EdPlus’ role within the university is illustrated in Figure 9.

**Figure 9: The Placement of EdPlus within the ASU Enterprise**





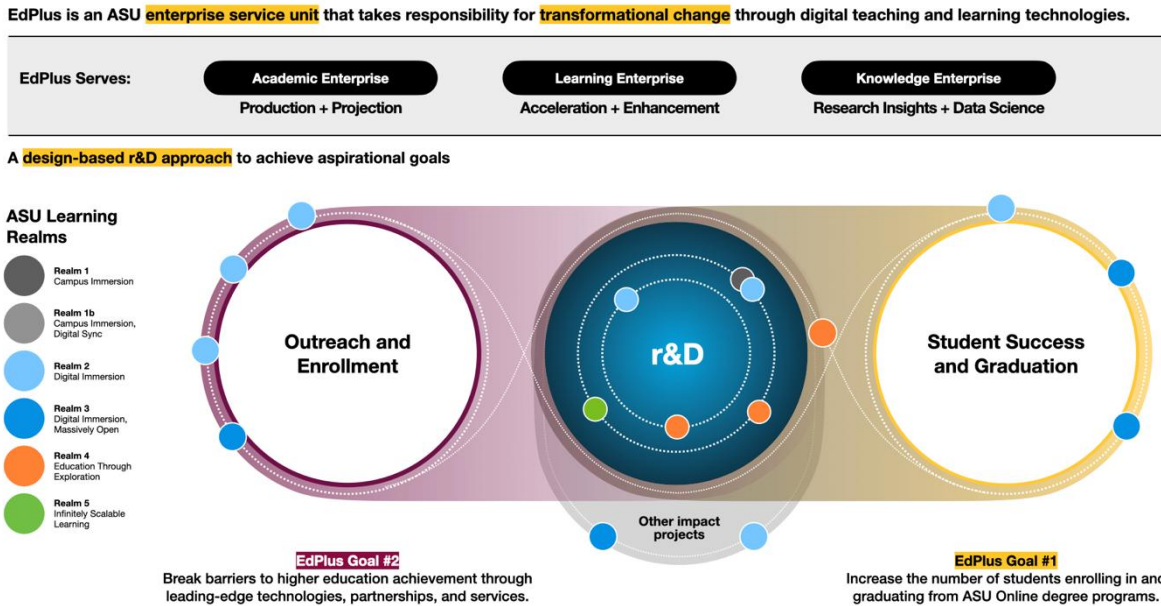
From: ASU internal presentation (2022). Permission given by Dr. P. Regier, CEO and Dean of EdPlus.

EdPlus is presented in this graphic and described by several participants in the ASU language as an “Enterprise Support Unit” that is organizationally situated under, and a service to each of the three ASU Enterprises (Academic, Knowledge and Learning) (Figure 9, 2022) (interviewee Andrew, 2022; interviewee Brad; 2022). EdPlus is organized across two core goal activities, Student Outreach and Enrollment and Student Success (Figure 10). This *balance* of roles and assignments is one area that makes EdPlus unique; however, participants explained how the multiple roles can also cause tensions around prioritization and, at times, with the roles and responsibilities (interviewee Erick, 2022; interviewee Fabio, 2022; interviewee Greg, 2022). *Balance* is discussed later in the *balance* section of this chapter as an interrelated theme of the Mobile Model.

Supporting the many activities are cross functional design, technology, research, and operations units (Figure 9, 2022). All activities are led by the Dean and CEO, Dr. Regier, and his executive team. Dr. Regier explained (2022) that at the core of EdPlus activities are a set of innovation or Research and Development (R&D) projects to help the university identify and advance new initiatives relative to either Student Outreach and Enrollment or Student Success and Persistence. Examples of R&D projects include the Starbucks College Achievement Plan, the P+L+U Alliance, the master’s degree in WWII History with the National WWII Museum, and educational technology partnerships with Google, YouTube, and others (Arizona State University, EdPlus at Arizona State University, 2020b). Once an R&D project has been sufficiently developed, it transitions

into operational status within one of two designated areas. Throughout this chapter, several of these cases are referenced, as illustrated by the smaller circles in Figure 10.

**Figure 10:** Current Structure of EdPlus with Goals, R&D Projects, and Support Areas



17

From: ASU internal presentation (2024). Permission given by Dr. P. Regier, CEO and Dean of EdPlus.

One member of the EMC, Dorothy, described the multiple roles of EdPlus in the following way:

It's kind of the official Skunkworks, the place where unusual things get studied and explored and prototyped and designed and then depending on how that all goes, then gets pushed out into the world. A second role is the home of innovation in academic terms; that is, what does the university in a digital age look like? And the working theory there is that EdPlus would be a part of the institution that would help define what that mission for the university should be in the future.

A third role is to think about the business model of the university, how we provide value to students and provide value back to the university so that it can do more of what it was doing before. And another, I think, is to think about student success in a 21st-century way, to think about how being a student has

changed. What new ways [do] we need to serve students, and then what are the academic services, but also, career wise and thinking very broadly about credentials? What does all that look like? (interviewee Dorothy, 2022)

Specifically on the assignment of EdPlus in online education, one administrator, Chloe put it this way:

It is a very critical function of the university that sits aside, that is not part of the colleges, but provides services for the colleges, to enable them to move into this new online transformational way of delivering education in a way that would not have been possible. It would not have been possible for us to have achieved what we have, in terms of the quality. It enabled us to have a dedicated staff of innovators, and IDs and a whole team around what online education means. So it enabled us to do things that wouldn't have been possible if you'd left it to the units, because they're so focused on the delivering of the education. And, you know, it allowed us to have somebody take care of the technical and the business side of things, so that our faculty could still be the principal designers of the courses. (interviewee Chloe, 2021)

This organizational design framework served as the foundation for application of the Mobile Model for Transformational Change in this project. The MM underpins the presentation of the findings in this dissertation.

### **Findings and the Mobile Model Strategies**

Two research questions guide the discussion of the findings and their relationship to the Mobile Model strategies:

RQ 1: How does the MM for Transformational Change explain the case of Learning Innovation Departments at ASU and in the literature?

RQ 4: What strategies and processes were used in the planning, development, and implementation of the transformation initiatives?

Although the research findings align with the primary and secondary strategies identified by Eckel and Kezar (2003a), the findings also revealed unique themes that

deviate from these strategies and provide new and valuable insights from the data collected. Detailed constructions by the participants shed light on how EdPlus is viewed by the University's leaders and its significance in leading transformational change at ASU. The participants' responses help to elucidate the relationship between the university leadership's perceptions and the strategies employed for organizational change and were used as interpretive constructions for the following sections.

### ***Senior Administrative Support***

Eckel and Kezar define the core strategy of senior administrative support (2003b) as “the actions that individuals in top leadership positions contribute to transformation, including such elements as focusing attention on related issues, providing resources, guiding the process, and creating new administrative structures to support the efforts” (p. 78).

***Support structures and changes in governance and administration.*** These are two connected secondary strategies for Senior Administrative Support (Eckel & Kezar, 2003b). As previously highlighted, Dr. Crow's interest in and support of distance education dated to his time at Columbia University, when as vice-president of research he ran a project called Fathom.com. The idea behind Fathom.com was to connect a series of learning institutions (universities, museums) to offer access to the best digital content for anyone, anywhere (Carlson, 2003).

This concept is currently represented in the for-profit online education market as Coursera.com and EdX.com, which are consortia of university and nonprofit institutions offering discreet courses and certificates through an online delivery mechanism.

However, Fathom.com ran out of funding and was described as an innovation that was too early for its time (Carlson, 2003). But it became evident from one of the early documents analyzed for this project, that Dr. Crow's interest in using technologies to advance equitable access to education never waned, and when he arrived at ASU one of his first goals was to reach 10,000 new online students through the use of technology. According to Gary, a leader of distance education team at the time, Dr. Crow had a vision for online from the very beginning:

He didn't seem to have the prejudice, you know, that there was something lesser about it [online education]. He didn't get hung up on the delivery mechanism, the mechanics of it. This change in vision and leadership quickly enabled the organization to move online into a central role in the strategy and growth of the institution. Even then, the new leadership experienced several starts and stops to enable the online unit to achieve its first goal. (interviewee Gary, 2021)

Dr. Crow's visionary leadership was essential; however, as previously discussed by Edward (2022), the strategic alignment among the President, the Provost, and the Dean/CEO of EdPlus is equally vital, providing the necessary support, drive, and commitment to drive change.

In addition to strong support from the university President and Charter, the document analysis and interviews revealed that EdPlus is governed by the EdPlus Management Team (EMC), which since 2014 has met once a month for ninety minutes and quarterly for three hours. By the researcher's analysis of the EMC reports, he found that the committee, chaired by the University President, consists of key stakeholders including the Provost, University Planner, Chief Marketing Officer, Chief of Staff, Executive Vice President of University Affairs, COO of the Public Enterprise and EVP of

the Learning Enterprise, and the leader of ASU Enterprise Partners. External advisors also contribute their expertise. The Dean/CEO of EdPlus and executive team members are responsible for setting the agenda (personal knowledge).

When asked about the purpose of these meetings, Dr. Regier (2022) explained that they are pivotal in assessing EdPlus' progress towards its financial objectives and goals for student success and R&D or Skunkworks projects. Additionally, the committee plays a critical role in identifying and addressing any obstacles to progress. The logic for setting up EdPlus in this way was described by Dr. Crow (2022) in his interview:

First, it needs to be of service to all the university, the Knowledge Enterprise, the Learning Enterprise, the Academic Enterprise. Second, I didn't want it to be subject to the control of the academic structure, Dean's [Office], and so forth. I wanted it to be driven by academic creativity, which is different. So it needed to be out of the mainstream. It is an enterprise-level strategic asset of the entire institution. And it needs to be able to be responsive in a different way than an academic unit.

Erick (2022) described the management committee structure as a unique way for the President to offer important challenges and understand what is going on in the moment, what is going right, and what is going wrong. This structure is a mechanism to forecast what lies ahead, not only for EdPlus, but for the university at large. In this regard, EdPlus is governed more like a private enterprise than a public institution, with a governing board, although the EMC does not have fiduciary responsibilities (interviewee Dorothy, 2022; interviewee Erick, 2022).

***Financial resources and incentives.*** Two of the secondary strategies associated with senior administrative support are financial resources and incentives, which emerged as important strategic elements of EdPlus from the beginning. EdPlus has an

annual budget from the central university and provides services to the colleges and academic units without a chargeback (interviewee Alice, 2022). Services are primarily for the support of ASU Online and include instructional design support, faculty and staff training, project management support, degree program onboarding and marketing, video and multimedia design and production, and educational technology incubation and support (interviewee Edward, 2022). A small amount of funding comes from research grants and sponsored projects (personal knowledge). One senior administrator, Fabio, recalled of the unique funding model for EdPlus:

One of the university's geniuses is not letting EdPlus keep the revenue. If EdPlus had been able to keep the revenue, we would have crested over 50,000 students, and [it] would have been the wealthiest organization in the university. And then they would have done a million side projects and stayed on their laurels until it started to decline. Because it produced so much revenue. But the university really keeps EdPlus on a lean carburetor, so it stays operating like a startup organization. (interviewee Fabio, 2022)

Another leader, George, who worked on the university planning and budgets shared this:

Nobody created EdPlus and said, you're going to have to live off the revenue you generate. That could have been a decision in the beginning . . . to the extent that online is successful, then EdPlus can expand. We made a very different decision and said, EdPlus doesn't get a penny of what you're generating; you're going to get a budget. And you're going to provide those services for that budget. And all the revenue is going to come to the institution. And we'll tell you how much of that we're going to give back to you, or not to give back to you. But in the beginning, that meant that there was a sufficient budget to do the kinds of things that EdPlus wanted to do and not have to wait to generate the resources to do it. And I think that was probably a critical decision in the ability of EdPlus to expand. (interviewee George, 2021)

However, a mutual understanding does not always exist between the university community and leadership regarding the operation and distribution of resources. This

lack of clarity underscores the importance of effective communication about the role and structure of a unit tasked with transformation. One finance leader, Alice, in the provost's office explained this communication challenge:

I think there was an assumption that EdPlus is this cash cow, like we were holding all this money. But in reality, EdPlus had a very thin, tightly managed budget, that for each new thing we kind of had to ask for new funding to the budget. (interviewee Alice, 2022)

Addressing this allocation of funding calls for a specific leadership style and a dedication to serving the organization's broader goals. Andrew, a social sciences professor articulated this perspective as follows:

What EdPlus has been asked to [do] is to be so highly aggressive, and that requires partnership, and humility is not abundant in higher education, especially amongst professors. I'm not aware of a professor who was ever taught that there is value in being humble, you know, like, we were not taught that in our PhD programs, especially at research universities. You know if you aspire to be a professor at a research university, you're taught to be aggressive and to have an ego. But, you know, EdPlus says, "Hey, listen, we got to do this here, we have the ability, we have the resources here, so we got to find partnerships to get us to here." And so EdPlus has been good at managing relationships. (interviewee Andrew, 2021)

The emphasis on relationships will be elaborated in the following section, which focuses on Collaborative Leadership. Another fundamental decision made early on concerned the allocation of funds to enable faculty, departments, schools, and colleges to collaborate with EdPlus on ASU Online and R&D Skunkworks initiatives. Reflecting on this period, Brian, a school director shared this insight:

EdPlus gave us the seed funding to get things going—this was even before EdPlus was EdPlus. Phil [Regier] gave us the seed funding to get the first round of courses developed and offered. They had a handful of instructional design folks. I was always a leader and director who wanted to be at the cusp of things rather



than follow, and I felt like in this case there were going to be a lot of followers in that, and I think this is ASU's model too. (interviewee Brian, 2021)

This arrangement caused some early tension among some of the deans but also allowed the entrepreneurial departments and faculty to create a new source of revenue at a time when budgets were being tightened due to the economic downturn in 2009-2010 (interviewee Edward, 2022). One administrator, Fabio, described the decision making of the provost bluntly on the strategy for driving change and participation in ASU Online:

She focused on money. And I thought, "Betty, this is crazy. You can't—no way. You're going to have to make some structure, you're going to have to describe . . ." She said, "No, no, no, this thing will grow where the water is. So all we must do is be cautious about who we let do it. And we must guide that, not just let anybody do anything." (interviewee Fabio, 2022)

Dr. Regier (2022) recalled how this strategy worked in part due to the scale of the university. There were many faculty to work with and several departments across campus with faculty in the same areas, such as Psychology, Mathematics, and English. The individuals who wanted to participate had very strong senior administrative support and financial resources to be shared. The revenue model worked for the units as well.

As Barry, a Vice Provost at the time put it:

And the deans, and particularly, the deans in areas like Humanities, and in other units, said that they couldn't be doing what they're doing on campus without the revenue that's coming from online. So it's accomplishing what it's supposed to do plus accomplishing some revenue needs of academic units to do things in other realms. (interviewee Barry, 2021)

Conversely, the data also clearly show the negative impacts of perceived insufficient support, which directly relates to the second core Mobile Model strategy: Collaborative Leadership.

### ***Collaborative Leadership***

Collaborative Leadership “refers to individuals beyond those holding formal leadership positions who are involved in the change from concept to completion” (Eckel & Kezar, 2003b, p. 78). Eckel and Kezar argued that for successful change to occur, leadership must permeate the entire organization, rather than in an exclusively top-down structure. Several participants emphasized how collaboration with internal and external partners is a critical prerequisite for success and informed how the governance of EdPlus was assembled (interviewee Andrew, 2021; interviewee Chloe, 2021). From working with faculty to building new online degree programs and pathways to starting up entire new paradigm-changing models and partnerships like the Starbucks College Achievement Plan, EdPlus is tasked with many initiatives that do not have a clear roadmap or blueprint to follow (personal knowledge). Thus, its staff is compelled to design novel solutions and *think differently* (interviewee Elle, 2022).

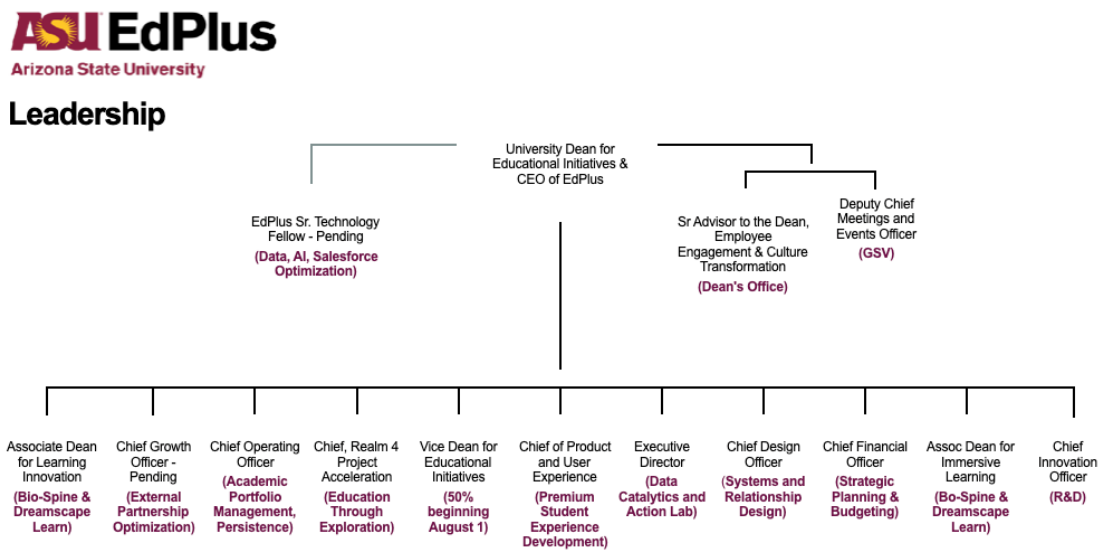
Collaborative leadership emerged frequently throughout the data as a baseline requirement for change. This leadership began at the ASU enterprise level, where the commitment to access and innovation has been built over time. One participant, Dorothy, observed of the ASU Enterprise Culture:

I think the faculty, the leadership, the senior leadership of the university know that innovation is a good word. Change is a good word, trying new things, you get rewarded for that. There's less of a fear of failure than there might be at

many other universities. So I think there has been a culture shift at ASU. (interviewee Dorothy, 2022)

At the local EdPlus level, the leadership operates within a matrixed structure, which is designed to drive innovation and the application of technology and design in new initiatives (interviewee Edward, 2022). At the helm is the CEO/Dean, with a leadership approach that emphasizes a flat hierarchy characterized by independent projects and distinct reporting lines. In reviewing historical organizational documents, the researcher found that in operational and coaching functions, faculty engage directly with students, and teams such as the Instructional Design and New Media (IDNM) team offer direct support to faculty and staff. Leadership roles, such as those with the titles of Chief Innovation Officer and the Chief Experience Officer, oversee a range of special projects and operational enhancements that contribute to achieving the organization's overarching goals. The complete matrixed leadership structure is illustrated in Figure 11.

**Figure 11: EdPlus Matrixed Leadership Structure as of July 1, 2023**



From: ASU internal communication (2023). Permission given by Dr. P. Regier, CEO and Dean of EdPlus.

Interviews with current and former leaders revealed that EdPlus seeks leaders and staff who are comfortable with change and ambiguity (interviewee Cynthia, 2021; interviewee Edward, 2022; interviewee Elle, 2022). As one participant, Dorothy, put it, “You know, great leaders hire other great people. And then those other great people go on to do first-rate work” (interviewee Dorothy, 2022). Elle, a seasoned hiring leader at EdPlus described the qualities that the managers prioritize when selecting new talent:

You have to start with a mindset, a little bit of being open to the fact that we won't ever be perfect. And we never want to consider ourselves done, or that the way we're doing things is the right way. And as we've done more, I think we have a lot more mix-and-match opportunities, the more we talk, but nothing feels as crazy anymore. So I think by having that open mindset, from the very beginning, [to] almost anything that comes in the door, we know we can implement almost anything. And it's a matter of having the proper mission, finding the way to "yes." So some days, I feel like my job is just dodging all of the "no's" across the university until they become a "yes." Whether it be through various departments or just different things because it can be scary. (interviewee Elle, 2022)

Another EMC board member, Dorothy, remarked on the talents required for EdPlus:

You need people with a high tolerance for ambiguity, a high tolerance for change, for building things where there's no roadmap, where you must create the roadmap. So it's a tolerance for risk. It's people of imagination, but also people who are excited to turn from the creative to the operational, like have the big ideas, and then implement them and make them real. Those are not the kind of people that you ordinarily find at a university. (interviewee Dorothy, 2022)

**Invited participation.** This is a secondary strategy within the Mobile Model that is closely connected to Collaborative Leadership and encourages leaders to bring people together in new ways necessary to advance the change process. Additionally, the goal is

to link individuals and their roles into the opportunities to influence results (Eckel & Kezar, 2003b).

It became clear through the data analysis that EdPlus rarely undertakes projects without the need for institutional partnerships. Lack of careful management, maintaining a *balance* of accountability, recognition, and innovation can lead to continuous tension. This negative situation can become evident especially in coordination between ASU's internal organizations that depend on each other, a coordination which requires trust, effective communication, and strong personal relationships. The data revealed *trust* and *personal relationships* as critical connections to change, and at which EdPlus excels. These relationships are evident between EdPlus and the faculty and EdPlus and other administrative areas, such as admissions, registrar, and central IT.

The management of relationships by EdPlus with external partners such as Starbucks, YouTube, and various educational technology providers demands not only a high degree of emotional intelligence but also a thoughtful and dedicated approach to nurturing these partnerships. Andrew, a professor, and senior advisor to Dr. Crow explained this important competency:

EdPlus manages partnerships, not just with vendors, but with other institutions—Starbucks, Plus Alliance, etc. Plus Alliance isn't inherently an EdPlus sort of thing, but it works because it's a complex partnership. And so if we need someone to manage complex relationships, EdPlus is there for us. If I need something done, and I know that it's a presidential priority, I have confidence I can send it over to Phil [Regier] and to the team at EdPlus and I know it'll get done. Because there's less of an ego, like they're just . . . they're instrumentalists. They just want to get things out. They're pragmatists. And so creating that culture has been an enormous benefit to ASU. (interviewee Andrew, 2021)

When such in-depth collaboration fails to take place, problems can emerge. As one dean, Bob, expressed,

In the couple of situations where EdPlus moved without getting people on board sufficiently, including me, we've had trouble. But in the moments when there's been a preliminary conversation, or "Are we all aligned here? Or do we all know the best way forward?", things have worked a little better. (interviewee Bob, 2022)

Dara, a vice provost working on student success put it this way:

I would say EdPlus' maturation has allowed us to kind of get things off the ground without having a lot of lost effort or lost time. It doesn't work all the time because there are moments when you need to, like, get the department on board. And if they're, like, hard to deal with or not fully behind it, that can be hard. We can also—we've overwhelmed departments. Math as an example is constantly, you know, rethinking its things because it's so central and coming up with an organized way to deal with that complexity, because there's so many classes, so central, a lot of faculty, a lot of tools, you know. We've actually done a pretty good job of putting that together. (interviewee Dara, 2022)

The data also revealed an important counterargument concerning the potential drawbacks of a solitary organization such as EdPlus as the sole supporter of online learning. Elle, a leader who works on operations within EdPlus explained:

I also think that by EdPlus administering ASU Online, we've accidentally given license to the academic units and the rest of the university to not have as much accountability for the success of online students. I think by being as competent as we are and forging ahead almost as much as we had to do it on our own, it gave everyone else a reason to not have to pay attention to the online learner, because "EdPlus has it covered. It's an EdPlus problem." (interviewee Elle, 2022)

Thus there is a *balance* to manage, as Chloe observed:

I think we need to be more careful about if we're just ordering people to do things. Or are we partnering with people to do things? And if they're our partners, I think we need to be more careful about crediting our partners. And I so often hear a high-level person saying, "We did this, and we did this and EdPlus did this." And then, you know, I sort of think, "Well, I know the faculty members

who had to work on that. And I know they gave a lot of their time, and they were very invested in it. And I do not see their name[s] anywhere.” (interviewee Chloe, 2022)

Many such collaborations have garnered recognition, including the President's Award for Innovation for EdPlus and its partners. The award poster for Study Hall (Figure 12) illustrates how these initiatives require the collaboration of numerous leaders inside and outside the ASU ecosystem. For projects such as Study Hall or the Starbucks College Achievement plan, success hinges greatly on the ability to work with external partners on shared goals. ASU Online requires the concerted effort of thousands of administrators, faculty, and staff to achieve success (interviewee Edward, 2022).

Figure 12: Award Poster for Study Hall



# President's Award for Innovation

## Study Hall

In March 2020, ASU and Crash Course, led by Hank and John Green, announced Study Hall, a new program on YouTube that provides access to beautifully taught foundational concepts.

Study Hall prepares learners worldwide for college success and has already reached 1 million universal learners in its first year. That's an initial step toward an even bolder ambition: Study Hall as a real-world laboratory to extend universal learning at an infinite scale, ASU's Realm 5. The program is poised to become the destination for college hopefuls on YouTube looking to understand how to navigate college, explore majors and fields of study and get an early start on foundational

topics with a direct path to earning university credit. Designed with a learner-first approach, Study Hall will reach learners where they are and enable them to make early decisions setting them up for success at ASU or any institution. Study Hall serves the unstoppable learner failed by his or her first college experience. We are doing all of this with the most popular and well-trusted YouTube learning channel and community, Crash Course.

**EdPlus at ASU**  
Casey Ambrose  
Wayne Anderson  
Andrew Bautista  
Robert Behnke  
Ron Carranza  
Jonathan Carroll  
Sean Hobson  
Aubrey Holland  
Shanae Kidd  
Robert Kilman  
Ricardo Leon  
Phil Regier  
Matthew Robinson

**Enterprise Marketing Hub**  
Jill Andrews  
Emily Goldsborough  
Christopher Hagan  
Ann Toca

**YouTube**  
Hama Bajaj  
Heather Di Diego  
Katie Kurtz  
John Rethans

**ASU Learning Enterprise**  
Maria Anguiano  
Kimberly Merritt  
Lukas Wenrick

**College of Integrative Sciences and Arts**  
Adam Paction  
Duane Roen

**School of Journalism and Mass Communication**  
Jessica Pucci  
Kristy Roschke

**Provost and Enrollment Strategic Communication**  
Cindi Farmer  
Laura Sposato

**School of Mathematical and Statistical Sciences**  
Jennifer Donovan  
James Tanton

**ASU Preparatory Academy**  
Amy McGrath

**ASU Student and Host**  
Yumna Samie

**New College of Interdisciplinary Arts and Sciences**  
Todd Sandrin

**Office of University Provost**  
Cheryl Hyman

**School for the Future of Innovation and Society**  
Andrew Maynard

**School of Molecular Sciences**  
William Comar

**Thought Cafe**  
Flavio Bernardes de Paula  
Cody Brown  
Paige Clarke  
Jon Corbiere  
Kirstie Peacock  
Meg Sebesta  
Joanna Song  
Xulin Wang

**Complexly**  
Blake de Pastino  
Madeline Doering  
Hank Green  
John Green  
Nick Jenkins  
Ceri Riley  
Julie Walsh Smith

**ASU** Arizona State University

From: EdPlus department poster hanging at the front entrance EdPlus office at ASU. Skysong.



***Creating new interactions and structures.*** These are central MM strategies, necessitating leaders to facilitate the change process (Eckel and Kezar, 2003b). EdPlus, from its earliest days, as noted before, has worked closely with the university to create new policies, technologies and structures supporting the online learner. Dr. Regier (2022) recalled that early on this collaboration entailed initiatives such as modifying the academic calendar; modernizing acceptance, transfer, and application processes; and demonstrating how the University has adapted its interactions and infrastructures to better serve online students.

The data revealed that prioritizing online learners within a distinctly structured organizational design led to technology developments for the existing organization (interviewee Edward, 2022). Dr. Crow (2022) described the intentionality of this strategy in his interview:

One, how could those technology tools be helpful to the success of our full immersion on-campus students? Number one, and then number two: How could those same technologies, when made meaningful and impactful on campus, how could they be then the foundation for what we did off-campus?

EdPlus initiated the development and expansion of new job titles and career progression pathways within the university (interviewee Cynthia, 2021). For example, initially a limited number of instructional designers (ID) were employed at ASU Online. Currently, there is a full laddering of (ID) positions, from associate to senior director, with a total exceeding 150 professionals employed by EdPlus and across the University (personal knowledge). Table 17 details the job roles introduced by EdPlus since the commencement of record-keeping in 2018. These roles, once formalized in the ASU HR

system, are available for adoption by any ASU entity, complete with standardized job descriptions and salary guidelines.

**Table 17:** *Unique New HR Job Titles Created by EdPlus Since 2018\**

---

Success Coach Lead	Chief Realm 4 Project Officer	ID Principle
Chief Innovation Officer	Enrollment Coach Sr.	Senior Creative Director
EdTech Innovation Fellow	Marketing Intelligence Analyst	Program Manager
Associate Director of Information Technology	Social Media Manager	Director of Contract Management
Asst. Director of Workforce Outreach	Business Intelligence Analyst	Chief User Experience Officer
Deputy Chief Meetings and Events Officer	Creative Design Lead	Custom Data Platform Architect
Senior Planning and Account Lead	Data Science Associate	Deputy Chief Growth Officer

---

\*Each title is discrete.

In addition to new jobs and functions, new language has been adopted by the University as a result of the work at EdPlus, as documented in the EMC board reports “glossary of terms”. In the monthly and quarterly EMC meetings, the committee manages a list of key terms that emerged from the EdPlus- supported activities. This language is now used across the university and is shown in Table 18.

**Table 18:** *Key Terms Used by the EdPlus EMC*

<b>Term</b>	<b>Definition</b>
Active Student	Any student admitted to the University who can enroll in a course.
Census: 21st day after a session starts	Used as a point in time for various reporting.
Conversion Rate (CVR)	The rate at which students convert from stage of the enrollment funnel to the next stage.
Core	Refers to the direct-to-consumer students versus the corporate partnership students.
Degree-Seeking Student	Students admitted to the university, enrolled in a degree who are working on fulfilling requirements for graduation.
E2S	Education to Student (enrolled in course that produces an academic record).
E2L	Education to Learner (enrolled in course that does not produce an academic record).
E2X2S	Education to X to Student (enrolled in course that produces an academic record). X may be another institution, including corporations, academic partners, government entities, nonprofits, or other entities through which ASU partners.
E2X2L	Enterprise to X to Learner (enrolled in course that does not produce an academic record). X may be another institution including corporations, academic partners, government entities, nonprofits, or other entities through which ASU partners.
Geopricing	Refers to modifying the basic list price of EdPlus' delivery channels (e.g., degree programs, Open

---

Term	Definition
	Scale Courseware) based on the geographical location of the buyer to reflect local country prices.
	for similar services in education and to remain competitive in pricing.
Headcount	A student who is enrolled at a point in time.
Managed program	Refers to the programs for which EdPlus oversees the operations.
Melt Rate	Students who drop classes before census.
Session-over-session Retention	Smaller increments of retention measurement to guide operational activities that allow for strategic, targeted interventions that impact student key performance indicators from initial melt rate to all measures of retention, general progress toward degree, and finally, graduation. Applies to term-over-term and summer-to-fall.
Session-to-Session Persistence	Represents the percentage of students who enrolled in the next session out of students who enrolled in the first session.
SCH	Student-Credit-Hour.
Year-over-Year Fall-to-Fall Official Census Reporting	How retention is generally measured for official purposes, such as reporting ASU graduation rates, first-time full-time freshman (FTFTF), and general retention data.
Term-to-Term Persistence Rate	Represents the percentage of students who enrolled in the next term out of students who enrolled in the first term.
Year-to-Year Plus Term persistence rate	Represents the percentage of students who enrolled in the fourth term out of students who

---

---

Term	Definition
	enrolled in the first term.

---

Note. Confidential document collection (EMC board books).

### ***Flexible Vision***

Flexible vision takes place when “leaders develop a picture of the future that is clear and succinct but that does not foreclose possible opportunities that might emerge. Visions must not be overly firm and must evolve as transformation progresses” (Eckel & Kezar 2003a, p. 78). The vision for ASU sets the trajectory, as previously discussed. The ASU Charter and mission statements emphasize inclusivity with principles such as this: “We measure our success not by who we exclude, but by whom we include and how they succeed.” According to several participants who have worked at multiple universities, ASU’s commitment to ambitious goals in enrollment, research, and student body equity, and the consistent achievement of these objectives, have promoted a university-wide conviction in the viability of change (interviewee Barry, 2021; interviewee Francis, 2022; interviewee Bob; 2022).

This ethos is a key factor in attracting and retaining leadership individuals at ASU who are dedicated to ongoing transformation. A former university leader, Fabio, expressed this philosophy as follows:

I think you and I—this brings tears to both of our eyes, right? There’s a phrase that made me come to ASU. And it was in President Crow’s [inauguration]. I never wanted to live in the desert, I never wanted to have anything to do with the desert. But he sent a copy of his first inaugural address. And in it, that was like one of the first times he used that phrase: We’re not going to be defined by who we exclude. And I thought that was the freshest air that ever blew across

higher ed in the United States, because up until that point, that's how you could tell who was good and who was bad. And he understood deeply that if we could be defined instead by who we can include, and how they succeed, which is obviously what a public university should be defined by, then we'd really have something. So scale and quality become a massive thing for him.

**Broader context.** This concept is identified as an MM secondary strategy and is evident often at the ASU Enterprise, including through communication, marketing, motivation, and influencing organizational design (Eckel and Kezar, 2003b). ASU's promotional materials, for instance, highlight its #1 Innovation Ranking, placing it above institutions such as MIT, Stanford, and Harvard. One communication leader explained how this positioning is part of ASU's drive for change, using external challenges such as the high dropout rate in postsecondary education, the correlation between completion rates and socioeconomic factors, and the student loan debt issue as motivators for transformation. These issues are referenced as a call to action, as one participant, Dorothy, noted in the discussion of broader context:

It's an important and complex moment across higher education. So that's a condition for change, something must change. We're also not in the very early rounds of the Internet, we're 20 years into it. And clearly, you know, it's the transition to a digital world and to a world of mixed realities has happened. So we're there. And then along comes COVID. And COVID takes all those trends and gives them a spin that we will never recover from fully. And that's not necessarily negative, that's a positive, as well. So, you know, anybody who thought we could go back, well, we can't go back. Things have changed. So those conditions have made it really ripe for change. I'm not talking about all the other trends in higher education, you know, student debt, and rising tuition and lack of public confidence and lack of focus on serving students' career aspirations. I mean, all of that is true also. And those are the conditions that EdPlus is kind of sucking up like rocket fuel. (interviewee Dorothy, 2022).

Another participant, a public policy professor connected to EdPlus described the EdPlus subculture specifically outside of the institution: "I would say it's defined by

pragmatism and creativity. It's aware of what's going on in the world. And it's, you know, realistic about its position in the global context" (interviewee Andrew, 2021).

***Moderate momentum***, linked to the strategy of Flexible Vision, involves controlling the speed at which change is implemented (Eckel and Kezar, 2003b). The data supported EdPlus' as a catalyst for change, operating within a university environment that often grapples with the challenging pace of innovation. Although transformative change is inherently gradual, several participants observed that EdPlus is expected to deliver swift outcomes in a university already known for its quick adaptation (interviewee Erick, 2022; interviewee Greg, 2022). The strategy of moderate momentum requires leaders to strike a careful *balance* between institutional objectives and the well-being of stakeholders (Eckel and Kezar, 2003b).

The concept of "innovation fatigue" was recurrent in the data as well, highlighting an issue that both the university and EdPlus must navigate as it works on change. One leader on the EMC, Chloe, described this issue as a potential concern:

I think that's where a lot of fatigue has popped up. Let's try this degree, let's do this degree. I mean, the faculty, I think there's been so much turnover, and there's so much buy-in on it. Faculty are willing, there's enough faculty willing to do that, and enough leaders ready to do that. It's the more minor things that turn into big things if you're not careful. (interviewee Chloe, 2022)

Dara, an administrator from one of the colleges highlighted the comprehensive, multiyear approach to redesigning math education as a case in point for innovation fatigue:

We can also—we've overwhelmed departments. Math as an example is constantly, you know, rethinking its things because it's so central and coming up with an organized way to deal with that complexity, because there's so many

classes, so central, a lot of faculty, a lot of tools, you know, we've actually done a pretty good job of putting that together. (interviewee Dara, 2022)

And a leader of another service group adjacent to EdPlus put it bluntly:

[The task is] figuring out actually how you staff it without killing the current team, which you know, has already, in my view, unrealistically stretched a set of skills related to a set of activities that has never been core to anything ASU has ever done, including to EdPlus. (interviewee Charles, 2022)

Innovation fatigue is a challenge to manage not just at EdPlus, but across the university, as this same leader observed:

And second—it may be more important than the money—is the people. You know, people can only do so much. We asked people here to do a lot. I mean, I think people here work 150% compared to many other universities, certainly, but it's hard to get people to work at 180% or 200%. And there's just limits at some point in time. And so the tension is also just the prioritization of people's time, at an operational level. (interviewee Charles, 2022)

Related to the incremental change ideas within Moderate Momentum is another core MM strategy, Visible Action.

### ***Visible Action***

This concept refers to “progress in the change process that marks continual advancement toward the articulated goals of the transformation agenda” (Eckel & Kezar, 2003b, p. 78). The gradual pace of transformative change can lead to a decline in enthusiasm and motivation on campuses when clear indicators of advancement toward goals are not immediately evident (p. 78).

***Communication.*** This is listed as a secondary MM strategy and emerged as foundational for all change initiatives undertaken by EdPlus. As previously discussed in detail, effective communication was revealed as perhaps the most essential activity



within EdPlus' interactions throughout the institution. Both internal and external communications are deemed crucial for success, and participants frequently cited communications as a key to resolving tensions between EdPlus and other university departments.

Focus on the “why” as a mechanism to drive change was referred to several times as a critical communications challenge to focus on. One former member of the EdPlus executive team, Elle, explained:

Well, at ASU, we have to be able to explain to people why we're doing it. If we do not have a strong reason and a "why," we do not get a lot of buy-in. Like saying President Crow said to do it doesn't usually get us very far the further down in the organization you get. So people understanding who you're serving and why you're serving them is one area that makes it successful. (interviewee Elle, 2022)

***Setting expectations and accountability.*** This is another secondary strategic approach related to Visible Action that clarifies the objectives of transformation and delineates anticipated improvements (Eckel and Kezar, 2003b). ASU articulates ambitious institutional goals within its trifold brochure that is mailed out annually to all university staff and stakeholders (Appendix N). These goals are publicly communicated and regularly updated on the ASU president's official website (Arizona State University, 2022a). The objectives range from quantifiable targets, such as increasing the graduation rate to over 85%, to more visionary aims, such as becoming the preeminent HEI for the innovative deployment of technology in high demand STEM fields.

Each department, including EdPlus, pursues its specific goals that contribute to the university's broader objectives. EdPlus updates and reports on its goals regularly,

with a primary focus on the trifold brochure's overarching aim to enroll 150,000 degree-seeking students. Meeting this goal leads to removal of educational barriers for many students. Various project-specific subgoals and persistence metrics are included. Within EdPlus, there is a broad understanding that its activities predominantly support this central objective. Several participants explained that one area that is unique to EdPlus is its dual focus on revenue and enrollment targets, a model not commonly seen in other university units that also provide institutional support services (interviewee Edward, 2022; interviewee Erick, 2022; interviewee George, 2022; interviewee Greg, 2022).

### ***Staff Development***

Staff development refers to “programmatically efforts for individuals to learn certain skills or gain new knowledge related to the change agenda” (Eckel & Kezar, 2003b, p. 78). According to Cynthia, a leader working on Culture within EdPlus:

ASU offers a number of staff onboarding and leadership programs. At EdPlus, new employees take an orientation course that acculturates them to the EdPlus values and roles EdPlus plays to support the university. Further, EdPlus executives are encouraged to pursue executive education or specialized training in areas related to their responsibilities” (interviewee Cynthia, 2021).

***Outside perspectives.*** This is a secondary MM strategy connected to staff development that ensures that change does not happen in isolation and is informed and valuable outside of the local use-case (Eckel and Kezar, 2003b). This concept was often referred to by participants, and EdPlus uses this strategy in several ways. Regarding leadership, EdPlus acquires talent from all different backgrounds and experiences. A former Chief Operating Officer explained:

We intentionally look for people who will help us expand maybe the skill sets in a particular team and kind of challenge us, you know, to a certain extent. So I think that's something that we strive for in EdPlus. Like not keep hiring the same cookie cutter type of people. (interviewee Elle, 2022)

One critical event that emerged is EdPlus' instrumental role in founding and supporting the ASU/GSV Summit, an event that has become a key conference in educational technology since its inception in 2008 (Appendix D). Dr. Regier (2022) explained how "the summit" originated from the concept of bringing together edtech entrepreneurs, a progressive university, and the education venture sector to stimulate the industry. This collaboration was seen as essential for the expansion of ASU Online and has grown into an annual event, attracting over 7,000 attendees in person and an additional 10,000 participants online.

On an interview question of governance, it was revealed that the EdPlus Management Committee (EMC) includes two external board members to incorporate diverse perspectives into its leadership and decision-making processes (interviewee Edward, 2022; interviewee Greg, 2022). Collaborations with entities such as Starbucks, Uber, and the Mastercard Foundation also bring new insights and narratives to the organization. Furthermore, EdPlus has helped ASU successfully launched three for-profit ventures to scale ASU-initiated innovations (internal confidential EMC board documents). InStride extends the tuition assistance model pioneered with Starbucks and Uber to other corporations nationwide. Cintana uses ASU Online infrastructure to assist global universities in expanding their distance learning capabilities. The latest initiative, Dreamscape Learn, creates a commercial framework for a novel immersive learning

technology designed to engage non-STEM majors in science and technology disciplines (internal confidential EMC board documents).

***Long-term orientation.*** This concept complements the moderate momentum strategy as a secondary strategy within the MM framework, providing a lens for assessing transformational change (Eckel and Kezar, 2003b). Several participants observed that many of EdPlus' foundational strategies have been adopted and tailored by additional individual units at ASU, leading to the creation of smaller, yet sustainable, centers of innovation (interviewee Charles, 2022; interviewee Dorothy, 2022; interviewee Greg, 2022). A review of the institution's resources and processes may reveal that certain segments already operate similarly to EdPlus or could be scaled up with minimal adjustment. However, these units often do not integrate the functions in the same manner or scale as EdPlus. The objective is to cultivate an environment in which innovation shifts from sporadic and incremental efforts to systematic, strategically planned, and transformational actions, thereby contributing to the development of robust academic entities for the future. A university leader, Greg, commented on this dynamic as follows:

I see with EdPlus, you've taught people how to run their own organizations, you've taught them how to grow their organizations. And so when [it] came time to say, is there something that could be carved out here that may make sense to move outside of EdPlus? Or, you know, be a partner with EdPlus? I think people felt comfortable doing that. Right. I think they . . . I think you had trained people within the organization, or you found people outside the organization that you knew, that could come in and run those, what I would call spin-off operations.

And I view that as a huge plus for what was built in EdPlus because I think it empowered these other organizations, because if you look at the spinouts, right, at this point, Global Launch, if you look at Prep Digital, you know, if you look at

Learning Enterprise, those began with EdPlus projects and in most cases EdPlus leadership moving over. (interviewee Greg, 2022)

And so, although this leadership role was not intentional for EdPlus at the outset of its design, the role demonstrates how the institutionalization of innovation has taken place in the form of organizational change within and outside the university over a long period of time. Dorothy, a member of the EdPlus management team described it as EdPlus' most significant accomplishment:

I think some of it has to do with being the implementer for President Crow's vision, versus that vision becoming so embedded in EdPlus that it generates its own new definitions, its own new projects. It is a skunk work for a skunkworks. And so new projects begin to be incubated whether they originated, you know, with the President's office or not. And that, it seems to me is its greatest success, which is to institutionalize innovation, which almost seems like a contradiction in terms.

But I think that's the trickiest thing of all--is we all know that innovation and accommodating change resides in leadership. And that's great. How do you distribute that leadership in a way that it becomes embodied in the institution, and then can be carried forth by the institution separate from the original leader? So I think that's, at the end of the day, that will probably be EdPlus' greatest contribution, that it represents the institutionalization of innovation and change at ASU. (interviewee Dorothy, 2022)

From such observations, it would seem that EdPlus needs to continue to recognize its role in supporting the institution and prioritizing collaboration and service over sole proprietorship of initiatives (personal observation).

## Mobile Model Interrelated Themes

### *Think Differently*

The principle of *think differently* is integrated throughout the primary and secondary strategies for transformation within the Mobile Model. To elucidate this concept, Eckel and Kezar (2003b) stated:

A key part of transformation is changing mind-sets, which in turn, alters behavior, appreciations, commitments, and priorities. Over the course of transformation efforts, people develop new beliefs and interpretations, and adopt new ways of thinking and perceiving that help create the foundation for significant change. (p. 49)

The concept of *thinking differently* has been identified in the data as a crucial aspect of EdPlus' operations, manifesting in diverse forms. It is often characterized by participants as both a mindset for change and a willingness to embrace risk. Cynthia, a long-standing university leader reflected on EdPlus' approach to new initiatives:

You know, there's the germination of a new idea, but there's no substance there. And so someone, i.e., the President, brings it to EdPlus and says, make it so. And that's what EdPlus does, and is good at figuring out: How can we make it successful? And let's try this, this, this, and due to everyone's connections across the university and the industry at large? We just figure things out. And it takes a certain kind of mindset to do that, and hiring the right kind of people who can think that way and are not just forewarned when things do not work out, according to a predisposed imagination. (interviewee Cynthia, 2022)

With his background and training from the business school, Dr. Regier as the Dean and CEO explained (2022) how he applied an entrepreneurial approach to managing EdPlus, aligning with the organization's revenue goals much like a business entity:

First off, I was an accounting professor, so I understood financials and then for several years I had developed and taught a course in strategy and so I

understand a lot about sustainable competitive advantage and how to obtain it. And I think that's been useful. And then I was asked to teach a particular type of leadership and entrepreneurship course. And I was game to do it because I was pretty tired of teaching accounting courses by that point. So I taught a leadership and entrepreneurship course for about four years, and I think that served me very well because I had a lot of entrepreneurs come through, and I read a lot about leadership and entrepreneurship as a result of those things. So, by the time the Provost, Betty, asked me to take over ASU Online, I was very well grounded in understanding of fundamental rules of business. I was well grounded in understanding principles of entrepreneurship and what entrepreneurs do.

In the case of major initiatives such as ASU Online, the Starbucks partnership, and Study Hall, Dr. Regier explained (2022) how these incremental innovations have led to substantial transformations. Each meaningful advancement enhances the university's readiness to embrace and execute the next innovative concept. He explained that such transformations expand ASU's imaginative capacity and operational capability. Consequently, these initiatives have a cumulative effect, bolstering the university's agility in implementing change.

For instance, the creation of Study Hall and the partnership with Uber were made possible by the foundational work done with the Starbucks initiative and ASU Online. Similarly, the launch of online Biochemistry and Physics degrees benefitted from the prior development of online laboratories in Electrical Engineering and Geology by the science and technology faculties (personal knowledge).

It was uncovered through the analysis that a core principle within EdPlus is to prioritize students and learners as the central motivation — “the why” behind their strategies. Elle, a leader responsible for operations within EdPlus elaborated on this approach:

I do think that we're always solution oriented. And we do a lot of design sessions and thinking, but I do not think every project comes about it the same way. Like the way in which I may conduct a design session could be different than others. Like everyone kind of comes about it. But I think one thing that we always do that keeps us consistent is: What does the learner need? No matter what we're designing or who we're working with, we always bring it back to whoever the learner or the constituent is, and how to make it suitable for them. So that's—no matter what we're doing, we always have to think of the learner journey first, and then everything else has, you know, kind of comes in around them. (interviewee Elle, 2022)

In the literature, this viewpoint aligns with a human-centered design philosophy (Buchanan, 2015; Pendleton & Brown, 2018). The design process, the various roles of designers, and particularly the function of the ID, exemplify the *think differently* ethos. Since the inception of ASU Online and EdPlus, IDs emerged as important agents of change. They are recognized for their unique job functions and the innovative methods and processes they bring to change initiatives. Gary, a leader who spearheaded the initial Instructional Design team for many years described their collaborative approach with faculty:

How do you make it all work with a very diverse group of faculty, some who are crazy into it, and others who go kicking and screaming? Not all of them, but the Engineering faculty who were vitally important to this effort still could be very, very difficult. Some of them were fantastic. They were early adopters, and just wonderful, but there is always a few. So managing the personalities, you know, keeping everybody happy, being flexible. Because really, in the end, it was their class. And now, there might be different opinions on who actually owns the thing. But we treated it like, "Hey, this is your classroom. We respect you and what you want to do. And so let's see if we can make this the best possible experience for everybody." (interviewee Gary, 2021)

This *balanced* approach to designing with partners recurred repeatedly as a critical strategy for trust-building, buy-in, and impact, not just between the designer and the



faculty, but between EdPlus and all its stakeholders. And in the early years, the IDs played many roles for others who now have discreet jobs. Gary further explained:

But it kind of boiled down to IDs as the core position, and they ended up doing a lot of different things. I mean, there was a tech support role, and sometimes some graphic design and some writing and a little bit of research and this and that. They were doing all sorts of things and building courses. Giving presentations and training and doing lots of things. So we talked about, "Oh, should we have a graphic designer? Should we have a trainer?". But in the in the end, we kind of settled on these IDs who fulfilled multiple roles. (interviewee Gary, 2021)

Dr. Regier (2022) recognized the importance of the ID role from the outset and was very supportive, as recalled by the director at the time: "I always felt confident that Phil understood and valued our area. He was a champion of IDs and the instructional design process." Reflecting on the ID role from the early days, Dr. Regier noted (2022):

We needed the IDs. When I said we weren't built for online, you couldn't build online without IDs. And so we needed those people, and they turned out to be good. And it turned out to be a sound basis for a lot of other things that we did going forward.

Dr. Regier's leadership was centrally important in promoting the role of Instructional Designers, but the success was also attributed to Gary's effective leadership of the ID team. Speaking of Gary, Dr. Regier (2022) remarked,

He had an intuitive or inherent understanding of how to treat faculty. And I think he must have conveyed that in one form or another, not just in who he hired, but then in how he mentored them. Because Marc was a good mentor, if you ask me, and you know a lot better than I do. But he didn't just hire people and then let them do their own thing. He really was thoughtful about which ID to pair with which faculty, or which program, and I think that's a huge reason why ASU Online was successful, because the IDs were able to work with faculty in a nonthreatening way.

The other thing is, Marc ran a very tight ship. That group was incredibly productive. It still is. Now they build 300 courses a year; they onboard 30 new

programs, but the number of courses that they review each year has just grown linearly, every year for 12 years, and it's incredible what we get out of the 40 people in that group, only about 20 to 25 of whom have the title of instructional designer in any way, shape, or form.

Another leader's endorsement of Dr. Regier's view on Edward's central leadership within the ID community testifies to the effectiveness of moderate momentum sustained over an extended period:

And so those people became kind of gatekeepers of innovation. Because they're making classes that are successful, but they're bringing in a certain amount of spice every time they make a new course. They're trying something new; they're trying something a little different. And there's a diversity of approaches in that core of IDs. But Edward, as the ringleader there, really was able to make an organization that struck with the right balance. (interviewee Fabio, 2022)

The data show how, over time, leaders throughout the university have recognized and endorsed the vital role of IDs. As mentioned earlier, Dr. Crow (2022) certainly recognized the unique role of the ID:

Well, I think it's unique because the one thing that EdPlus really represents, and you embody this yourself personally, and that is the IDs, the knowledge navigators, the people that are helping to take content and turn it into a new form of a learning environment.

Fin, a former provost, as the chief academic officer of the university, also emphasized the significance of the ID's role as essential to the institution's function: "You know, I think again, thinking back to that model of incentivizing innovation, [there] are ways in which—I'll just pick on IDs for a second—really effective, really, really helpful" (interviewee Fin, 2022). Additionally, deans and professors from Liberal Arts departments described the delicate relationship IDs have to navigate. A sample:

IDs have learned how to work with faculty, not the easiest group to work with, right? By any means. You're working with a historian or philosopher,

mathematician. That's not easy to have. That's not easy for me to work with him even when things are going well. They have strong views, they're smart, their whole life's been dedicated to this topic. And you're in there saying, "Now this module would be better in 20 minutes." And they're looking at you like, "What the hell are you talking about? Yeah, that's not going to work in 20 minutes. It takes us at least an hour and a half to get . . ." So that's just not going to work. So I think that's helped a lot. (interviewee Bob, 2022; interviewee Derrick, 2022)

### ***Balance***

*Balance* is presented as the final and critical element of the transformational change process (Eckel and Kezar, 2003b). With more than twenty interrelated strategies and themes for change, the MM underscores the importance for ASU and EdPlus leaders to strike the right *balance* across various change efforts. Several examples of this *balance* were synthesized from the data. From the beginning, ASU and EdPlus have had to *balance* the mission and revenue goals. It was clear from the outset that EdPlus needed to grow the online portfolio to develop the necessary resources to support innovations the university needed to pursue. As one leader, Greg, put it:

From almost day one, when Phil took over it was, "You're going to generate revenue." And, in fact, so much so, and you know this, that the narrative from the very beginning was, "You're going to generate enough revenue and spin off enough revenue that we can use it for scholarships for our on campus students."

Right. I mean, that's what your job is going to be. And so it had a social purpose, right, in some respects, because it was generating scholarships for the on-campus students. But nevertheless, it required it [EdPlus] to generate revenue and generate revenue at good margins to be able to do that. And you might run some parts of university that way, but the core academic business, you know, often isn't looked at that way. (interviewee Greg, 2022)

This requirement can create tension and as well needs constant consideration and *balance*. An original longtime member of the EMC, Erick, explained:

We have financial tensions everywhere, in everything we do at the university, right? There are limited resources to do things. And so as we decide to do X, it becomes harder perhaps to do Y, or if we do 10 X's, it becomes harder to do 10 Y's in some cases. And so, the tension, I think, is one, financial. (interviewee Erick, 2022)

As a byproduct of the dual assignment of revenue and mission-driven work, it became clear through the analysis that constant *balance* must be managed in the project portfolio. This need has prompted a consistent discussion throughout the history of EdPlus on project definition, what goal a project will be measured by, and how EdPlus and the university should think about resource allocation and the measurement of overall success. When leaders were asked about success and how to think about the EdPlus project portfolio, one leader in the President's office, George, had this to say:

In my mind, a project has to at some level or another be consistent with the charter and the mission. For some projects, success can be measured almost exclusively by the extent to which they've extended the institution's ability to serve the community or to expand access in higher education, or to advance use-inspired research. But the truly successful projects are ones that have those elements to them but are also capable of delivering some level of financial return to the institution—because there are many things that the institution needs to do to fulfill the charter that require resources.

So, for example, the access mission to students in Arizona cannot be met with just the direct resources available from those students or from the state. If we do not have other things going on to generate margin, there's no way we can provide sufficient financial aid to allow those students to attend the institution and therefore fulfill that component of the mission. In the same way, we can't be of service, we can't provide any of those sorts of larger, more innovative services without margin from something else. (interviewee George, 2021)

Ensuring an appropriate formula between top-down and bottom-up directives is also a good example of *balance*, as one leader within EdPlus, Elle, explained:

There's plenty of things around here where you can just tell by looking at it that if it's not something the Provost or the President would quickly grab onto; it's a

long haul. It's going to take longer, it's going to be a little bit more difficult—it's not to say it won't be successful, but it's going to be a harder project to get done. (interviewee Elle, 2022)

Another *balance* for EdPlus is scaling up while preserving the integrity and quality of the offering. Important questions surface, such as the rate at which the online student body can expand, the implications of an online-majority student population, and strategies for ensuring that departmental and faculty capacities are not compromised. These questions, brought up in the data, call for strategic deliberation and a considered approach *over a long period of time*.

Within the R&D or Skunkworks portfolio, critical questions frequently arise about the project's value, the distribution of resources, and the definitions of what constitutes success at various stages of a project's life cycle (personal knowledge). The institution often provides an extended incubation period (or long-term orientation) for initiatives considered vital to its mission objectives. Concurrently, a cultural inclination exists towards “finding a way to say Yes,” but this leaning is countered by the challenge of not being able to discontinue projects when they are no longer viable.

Furthermore, the ASU enterprise as a whole can exist in a perpetual state of *balancing* innovation with tradition, as explained by several participants. The endeavor to honor longstanding traditions and immediate successes while also establishing a foundation for sustained evolution leads to continuous debate and strain during the strategic planning and design phases at EdPlus. These issues are not restricted to ASU or EdPlus, of course, but surface in any organization undergoing continuous innovation (Aronowitz et al., 2018).

Additionally, achieving a harmonious mix of internal and external viewpoints and forging the right partnerships are of paramount importance. Determining the optimal number of collaborators, their perspectives, and their drives, as well as gauging the extent to which EdPlus should advocate for change without solid success metrics, is essential to *balance* (Eckel and Kezar, 2003a). These considerations are vital for any organization, and factors such as stakeholder buy-ins are particularly important within the framework of university governance.

### **Affected Culture: Primary Measurement of Transformation**

In this section, the findings of the ASU university culture are presented. The findings are addressed by the third research question:

RQ 3: What role does EdPlus play in changing the culture of the university?

Culture affects the institution's willingness to respond to change and are an outcome of the transformational change process itself. Awareness of the embedded culture is important to change initiatives, and each organization and suborganizations have their own cultures to justify (Eckel and Kezar, 2003a). The ASU culture has been documented extensively throughout this chapter.

EdPlus nurtures its own culture and appointed a Chief Culture Officer who helps manage six guiding cultural values of the organization. These values are (a) achieving milestones, (b) feeling a sense of urgency, (c) striving for excellence, (d) being bold, (e) solving problems, and (f) serving learners (*Arizona State University, 2021a*). The attention to the culture has extended to other organizations at the university as well. Another leader, Charles, who oversees the ASU technology organization, shared this:

I have borrowed significantly from EdPlus and its commitment to articulating its culture to the work that I have now been trying to do here at the University of Technology Office, so just to acknowledge, that you guys and your statement around culture have inspired me to take not only that seriously, but my very first enterprise hire was not a bunch of technology people. It was actually a Chief Cultural Officer. And again, it's not because I actually saw that what you had in your team was exactly what I wanted to replicate. But I saw how important the emphasis on culture was. (interviewee Charles, 2022)

When participants were asked if EdPlus has played a role in the culture change at ASU, the consensus was that it has. Several leaders focused specifically on ASU Online as the catalyst for culture change. They had much to say:

I'm sure it's had an effect on the culture of the institution. Because I think the faculty, the leadership, the senior leadership of the university and the faculty, you know, know that innovation is a good word. Change is a good word, trying new things, you get rewarded for that. There's less of a fear of failure than there might be many, many other universities. So I think there has been a culture shift. Now EdPlus is kind of the standard bearer for that. You know, the real engine for it is President Crow. But again, you know, to his credit, he's distributed that so that he's not the only standard bearer. He's really, he's managed to inculcate the leadership team, because these are people that he's picked to carry those ideas forward. (interviewee Dorothy, 2022)

I mean, there's a general openness to looking at almost anything online right now, frankly. And I think EdPlus has played a positive role. Like going back to the beginning, it would not have launched without EdPlus. It just wouldn't have got off the ground. And so it continues to play an important role still in launching. (interviewee Chloe, 2021)

EdPlus is, I think, a proof point for what it means to acquire talent that you didn't have before, talent that was new to the university environment in a whole wide variety of respects. And then the aggregation of that talent in the way that it can be successful and build a culture and influence the institution. . . . EdPlus is one of the places in the institution where you could look at it and see it's an exemplar, as President Crow would say, of exactly what we're trying to do across the institution in a unit-level organization. (interviewee Erick, 2022)

I do think that ASU culture has constantly been evolving with or without EdPlus. I think EdPlus has specifically worked very hard for people to embrace the unseen learner. And by the unseen learner, I do not just mean the online learner, which

obviously, is a big population. But we also helped spearhead certain university initiatives like Education for Humanity, that even though it doesn't currently sit inside of EdPlus, it started here. And we've been able to help expand that and grow and all these different types of people at a national and a global level. (interviewee Eamon, 2022)

It was a very important part of ASU culture that we built ASU Online from the inside out rather than just bought an independent company and say, "Here you go, just design all the courses," and I think it now becomes the model, in some ways, for how we take the knowledge core of the university and use it in more innovative ways. And so Learning Enterprise is now our new iteration of "Let's stand up a whole separate team with different expertise than the faculty are ever going to have and get them to partner with the faculty to advance in a new way." (interviewee Dorothy, 2022)

However, not all the culture change that has derived from EdPlus has been viewed as positive:

If you think about it, as I've already stated, certainly, in terms of mission EdPlus is hugely important, but the culture? I do not think so. If anything, I think what you've been faced with is actually an uphill battle. And again, it's not only because of the culture that you guys have put out there, but because you're also physically isolated by design. You're not filled with a bunch of PhDs in the shop. So you are designed differently. And I think that that, and its culture, that is you and your culture are seen by some, as you know, hopelessly and crassly commercial. (interviewee Frank, 2022)

This last observation supports the importance of the relationship work and the continuous communication required to help the university community understand the objectives of the unit.

### **Negative Impact from Change**

As the previous quote indicates, not every aspect of the change process overseen by EdPlus has been seen as positive. A crucial aspect of the current analysis was to identify and address the negative impacts and challenges that have surfaced throughout the evolution of EdPlus.



One important area of concern is the growing influence of EdPlus as it expands and contributes increasingly to the university's revenue. Vigilance in managing this shift in power dynamics is necessary. A senior administrator, Fabio, observed:

If we were truly corporate, many more things would be under EdPlus. And I'm sure it was considered. But I think people do not want that consolidation of power, because suddenly EdPlus would become the university. And you'd flip the university; the physical place would be supported by the bigger place. And so the fact that it's not connected to research—that's a problem. The one thing that's different about ASU Online as a university, from ASU, is that it's much more loosely coupled to the research enterprise. And the research enterprise has become such an important part of ASU. Right? ASU is now a true research university. So that's a that's a big problem. (interviewee Fabio, 2022)

Another concern that surfaced pertains to the allocation of new opportunities and initiatives, particularly those involving new concepts, innovations, and revenue-generating projects. Some participants expressed the concern that EdPlus might become overly protective or exclusive in its claims over specific areas of work and as the only group at the university obtain access to these scarce opportunities. One participant, George, commented:

I think where it could have had a negative impact on the institution is if it had become too territorial. And so while EdPlus is supporting a lot of development of curriculum materials and degree programs, it has not attempted to shut down the schools that have decided to keep doing that on their own or to supplement EdPlus services with work on their own.

Now EdPlus might have said, "No, we're the only ones who are going to have a green room on the campus. If you want a green room, you got to come up to Skysong where we have green rooms," and there actually have been discussions of that sort at different times. You know, should we allow somebody to make those kinds of investments in their own spaces? And the decision has been to let units that want to be independent be independent, at least until they figure out that they're not being successful. You know, WP Carey Business School as an example. So I think that that could have been a problem, but it wasn't. (interviewee George, 2021)

A closely related concern was whether EdPlus itself is directed too similarly to and like an external, for-profit organization. Erick, a leader in the President's office explained:

It's something that President Crow was always concerned about, and that is that we, in the languages of critics of ASU and institutions like ASU, we just have to be careful that we do not corporatize the institution. That we do not productize everything. And so the risk would be that the culture of EdPlus, and it's kind of "can-do attitude," and marketing savvy and reliance on technology and ability to sell, cause us to lose our way in terms of what the outcomes really are. Because all of those things, if applied only to a revenue goal, as opposed to a social impact goal, then could, under the wrong leadership, contort the institution. Now, I do not think that's the case at all today. But I suppose, you know, when President Crow's not here, or Phil's not here, or we have a different provost or something, you know, 10 years from now, 20 years from now, you just have to be careful that we do not lose our way on what we're doing. (interviewee Erick, 2022)

Pointing out the danger of EdPlus mimicked by the for-profit ventures on the private side versus the non-profit mission of ASU, a professor and senior advisor to Dr. Crow (2022) said this:

In the case that a unit like EdPlus increases the revenue and increases the operational efficiency of an organization, it's possible this could be exploited for institutional gains, or it could be turned into a business in and of itself. So there are probably for-profit companies out there that will basically replicate or aspire to replicate what EdPlus does. Now I think there's a check against this in the sense that those companies will always be empty vessels because they're not connected to a research university.

As EdPlus remains at the forefront of advancing new innovations swiftly and broadly, if these efforts are not handled delicately a risk grows of creating discontent within the wider institution. One academic administrator, Chloe, observed:

As we continue to push the agenda and we expect more out of the units, we need to be careful that we do not create resentment about: Why are we innovating? Are we innovating just for the sake of innovation? And do we have to go after every project that comes our way? Let's think carefully about which

ones make sense. So I would say I do not think there's been damage done, but it's not a 100% trusting relationship in terms of what the faculty think about EdPlus. But what is 100%, right? (interviewee Chloe, 2022)

Another participant, Elle, commented on the nature of competition and how this strategy is encouraged across the institution:

I do think that the university sets departments up for competition amongst themselves instead of a more collaborative way to work together. And I think EdPlus has set that tone for that as well. I noticed, sometimes even within EdPlus things are handed to people in a silo and if someone in that silo doesn't think to outreach outside of that silo, it will stay in that silo. There's never an expectation that everyone should work together on it. And I think EdPlus at times can be an example of, "We can do it better than you," and that hurts our relationships in parts of the university over time. (interviewee Elle, 2022)

In another critique, one Dean commented that the requirement to work through EdPlus on certain types of projects can at times suppress new ideas:

I just say this in a very general way. And I'm sure it's something that can be said of almost any academic entity. But, you know, sometimes it is the throttle that is putting a hold or it's the narrow passageway that you must go through so that all the good ideas can't quite get pushed through quick enough. I think it has to do with infrastructure, resources, and scale--we're big. So sometimes pushing the new things through can be a challenge or sometimes getting attention for things that need to be worked on or thought about can be a heavier lift than it should be. (interviewee Bob, 2022)

Another participant, Dorothy, commented on the roles especially of faculty members who are already tasked with a *balance* of teaching, research, and service activities:

I would speculate about confusion in the minds of faculty about what their role is. And how they *balance* their role as researchers, their role as classroom instructors, and then digital instructors. So I could imagine that that might be, that might be tricky. (interviewee Dorothy, 2022)

Ensuring that the model is conveyed clearly and continually has posed challenges. For instance, one Dean remarked about the budget model for online degrees:

I was just talking to one of our unit leaders. I was trying to convey to him the complexity of the budget in the College, but also across the university. And his challenge in conveying to faculty: "Why would we do online? Let's take off the Charter just for a second, because I hope we all get that. But why would we do this?" And so it's interesting that I still think there's room to communicate more broadly. There is a return to the unit to build and scale the program. There's return to the unit to build it and related programs too and so I think there sometimes can be a perception challenge. (interviewee Francis, 2022)

And last, a complexity became evident regarding always "chasing" the next new idea, the next big innovation, the next level of scale, the next new business model. This "chase" is present across ASU, but EdPlus carries additional pressure(s), as previously noted:

You know, the university has benefited from the dollars and cents that EdPlus puts into the system. And it's a little bit of a drug. Right? So, what have you done for me lately? It's like Wall Street quarters, you know. Did we have a good first quarter, good second quarter? you know, whatever. I think the EMC focuses very much on making sure that those missions are aligned. But I think there's a natural tension there. So that can be an issue. (interviewee Dorothy, 2022)

The participants, all highly experienced in administration, instruction, and design, were extremely aware of EdPlus' remarkable growth and development as well as the pitfalls of expansion and constant innovation. Thus, challenges of focus and continued excellence must be met as EdPlus looks toward the future. These challenges are discussed in the concluding chapter.

## Summary

Analysis of the study data revealed alignment among the primary, supportive, and interconnected strategies of the Mobile Model and EdPlus. Additionally, the unique nature of EdPlus is elucidated by the systematic categorization under Organizational Themes (Table 19), integrating insights from the literature, study data, and conclusions into a comprehensive framework of organizational characteristics.

**Table 19:** *Organizational Themes from the Data Analysis*

Organizational Theme	Description
The <b>Service</b> organization: Burton (2020), Burton & Obel (2018), Ouellett (2010)	<b>As a service organization</b> , EdPlus provides services to students, faculty, university administration, and external stakeholders.
The <b>Design</b> organization: Brown (2009), Brown & Katz (2011), Buchanan (1992, 2015), Cross (2006, 2019), Crow & Anderson (2022), Dunne (2018), Kezar (2018), Pendleton & Seeley Brown (2018), Selingo (2018), Simon (1998)	<b>As a design organization</b> , EdPlus designs the future of teaching and learning within the complex adaptive system (CAS) of the college or university it is a part of.
The <b>Enterprise</b> organization: Crow (2011, 2020), Galbraith (2012), Kretoivics & Eckert (2010), Lenington (1996), Stuckenbruck (1979), Teece and Linden (2017), Van de Ven & Poole (1995)	<b>As an enterprise organization</b> , EdPlus generates new revenue, manages an R&D portfolio, and reports up to a non-traditional governing body.
The <b>Digital</b> organization	<b>As a digital organization</b> , EdPlus partners with and builds new educational technologies to support its

---

Organizational Theme	Description
Bishop & Boughman (2021), Brynjolfsson & McAfee (2014), Christensen (1997), Ito (2018), Negroponte (1995), Norman & Yasin (2009), Snow (2017)	stakeholders and build the future of teaching and learning.
The <b>Learning</b> organization: Gioia & Chittipeddi (1991), Kezar (2018), Kezar & Eckel (2002), Kim & Maloney (2020), Senge (2008), Weick (1995)	<b>As a learning organization</b> , EdPlus is a learning laboratory. It creates and transfers new knowledge across the system to which it belongs.

---

*Note:* Researcher-created

The data revealed that EdPlus' chief responsibility is to grow ASU Online with a mindful approach, striking a *balance* between providing service and pursuing entrepreneurial endeavors as a "Skunkworks." Milestones include Dr. Crow's inauguration and tenure, the appointments of Dr. Phillips as Provost and Dr. Regier as Dean, the initial service agreement with Pearson, and the Starbucks Partnership, among others (Appendix D). The EdPlus methodology is culture centric, including the unique appointment of a Chief Culture Officer, integrating robust design, operational dynamics, and mold-breaking creativity applied to all its initiatives. Recruitment at EdPlus prioritizes emotional intelligence, inventiveness, and the capacity to navigate through situations that are ambitious, ambiguous, and pressing.

Participants explained how a fundamental strength of EdPlus is its ability to incorporate external viewpoints and cultivate mutually beneficial relationships both

within and beyond the university confines. EdPlus has notably influenced ASU's evolving culture and has identified focal points for its subsequent stages of development (interviewee Andrew, 2021; interviewee Adam, 2022).

Chapter 5 presents an analysis of the findings, the significance of the themes uncovered, and points of departure from the MM. The chapter also discusses the distinctive factors that characterize EdPlus as an agent of transformational change.

## CHAPTER 5: DISCUSSION

*“Life can only be understood backwards; but it must be lived forwards.” – Soren Kierkegaard*

This research study presented an analysis of Eckel and Kezar's (2003b) Mobile Model for Transformational Change (MM). In this study, the researcher applied the theoretical framework of the MM to the case of EdPlus at Arizona State University. Interview data from 28 participants demonstrate that EdPlus stands out as an organization responsible for transformational change at Arizona State University. This chapter has several objectives. First is discussion of the alignment of the findings with existing literature and examination of which findings were unforeseen or inconsistent with the theoretical framework. Then a novel organizational design model for EdPlus is revisited as the Learning Innovation Department (LID), and its characteristics are delineated. Finally, implications of this research and the findings are discussed, with specific recommendations for scholars, university leaders, EdPlus leaders, and further research, as well as limitations of the study.

### **Central Finding: Learning Innovation Department (LIDs)**

This section highlights the central discovery of this study, which is the validation and categorization of EdPlus at ASU within the literature, as an LID unique from any other service organization within ASU. Core characteristics of LIDs are provided with literature support. They are similar to but more expansive than traditional Centers for Teaching and Learning and other similar service organizations across ASU. It was shown, from the literature and through narratives from the data, that the digital education



movement has necessitated an evolution of CTLs and similar service organizations at ASU towards the LID model.

Support for digital education as a catalyst activity and research and development as an equally important supporting activity must remain in *balance*. Furthermore, instructional designers' roles at the center of change and their methods as designers emerged as a potentially scalable approach to implementation of transformational change at the organizational design level.

### ***What is an LID?***

As previewed in Chapter 1, the LID is acknowledged to have many different roots. Distance education and CTLs are vital sources, and the LID is also anchored in a services framework that may appear in continuing and professional development centers, information technology offices, libraries, fundraising and development teams, local instructional design groups, edtech support teams, and technology transfer offices. Although the nature of the services and activities within the LID can be unique, it also offers many traditional faculty services, such as pedagogical expertise, training, and educational technology support primarily for online learning (Keehn & Bishop, 2018; Kim & Maloney, 2020).

A gap in the literature was shown in how LIDs go beyond these traditional faculty service roles into areas such as new business model design and creation, new product development, advanced operational support, partnership development, visual design, edtech design and implementation, and strategic communications. All these activities support new revenue streams and mission-driven R&D activities for the parent

university. These organizational functions were discussed throughout Chapter 4 and presented using the MM theoretical framework.

As noted in Chapter 2, little consideration has been given in the literature to issues related to how faculty and staff at some universities view LIDs or how concepts such as business model creation and product development may be seen as counter to universities' academic missions or as frankly objectionable (Mills, 2012). However, LIDs, by their innovative nature, should be seen as crucial to the evolution of universities overall. Moreover, some organizational components of universities are required to operate as enterprises to ensure organizational viability and long-term adaptation to the changing world around them. This recommendation was outlined in Chapter 1 and is reconsidered in this chapter with specific questions and recommendations for university leaders.

The literature surrounding the LID and the data collected in this study show two primary activities for the LID. First, and of chief importance, is the role of a service organization that helps advance and propel the university's teaching and learning offerings in new and complex ways. This role embodies ASU's public access mission and is primarily delivered through ASU Online. The interview participants were in complete agreement on this point.

The first method for fulfilling this role is comprehensive. It includes designing, producing, supporting, and scaling digital teaching and learning offerings, such as online courses and degrees. In this role, LIDs serve students, faculty, university administration, and sometimes outside partners (Kim & Maloney, 2020) and governing bodies.

The second method, which emerged from the data as a necessary contingency to accomplishing the first and must remain in *balance* with the first, is that of an R&D innovation unit or Skunkworks (Selingo, 2018). Developed by Lockheed Aerospace Corporation during World War II, the Skunkworks is a designated location in which a set of individuals handpicked by leadership work on innovative, cross functional projects without the constraints of standard administrative processes, routines, and operating speed of the organization (Oliver & Cole, 2019). The Skunkworks activities support the unit's service objective and the institution's wider mission (Kim & Maloney, 2020).

To date, the literature provides no blueprint for how to best design an LID at a public research university in the United States. Much has been written on change in higher education (e.g., Atkinson & Blanpied, 2008; Bolman & Deal, 2017; Bass, 2020; Bond, 2023), but limited studies have investigated how to design the organizations necessary to keep higher education institutions viable and evolving in transformational ways. As a result, each new "college or university that is working on these transformations is doing so--de novo [from the beginning]" (Kim & Maloney 2020, p. 15).

### ***Evolved CTL***

Based on this study, it is the researcher's conviction that LIDs as evolutions of CTLs should be positioned differently from traditional service-level organizations at the college or university to garner the necessary support, resources, and funds for success. LIDs are then viewed as no longer a side activity; instead, they become mission-critical to advancing the entire institution and should be staffed, governed, and resourced

accordingly. Dr. Crow (2022) commented in his interview on the impact of EdPlus on the overall university transformation agenda and emphasis on technology:

It's the sociology of the team, empowered by the technology, altered the entire socio-technical system and all things about the University, from structure to finances, to operations, to efficiencies, to the use of technology, to the building of new buildings, to the reduction in the need for new classrooms, to the enablement of everything, that's what technology does. I mean, if you're not adaptive, it's the destroyer of all things in your enterprise.

Many CTLs, including the one at ASU, struggle to find ways to engage with the wider faculty community that needs their services as well as to develop the revenue models to generate enough funding for their activities (Ableser & Moore, 2018). Transitioning to an LID model offers potential solutions for both of these challenges.

### ***Characteristics of the LID***

The literature and data collected for this study support the several unique characteristics of the LID. With synthesis of the themes from the data, the characteristics are categorized by organizational design classifications: a **learning** organization (Senge, 2006), a **service** organization (Burton & Obel, 2018), a **design** organization (Buchanan, 2015), a **digital** organization (Snow et al., 2017), and an **enterprise** organization (Crow, 2011; Teece & Linden, 2017), as introduced in Table 19 in Chapter 4.

Table 20 presents these classifications with an LID framework, detailing goals and intended outcomes, the types of talent required, and project examples within the EdPlus case.

Table 20: Characteristics of the LID, Amplified, with EdPlus Examples

LID Attributes	Description	Organizational Goal	Human Resource	EdPlus at ASU Examples
<b>The Service organization</b> Burton & Obel (2018), Burton (2020), Ouellett (2010)	<b>As a service organization</b> , the LID provides services to students, faculty, university administration, and external stakeholders.	<ul style="list-style-type: none"> <li>- Faculty served</li> <li>- Student served</li> <li>- Grants supported</li> <li>- Platforms supported</li> <li>- Technologies supported</li> </ul>	<ul style="list-style-type: none"> <li>- Chief Operating Officer</li> <li>- Project management</li> <li>- Instructional design</li> <li>- Coaching and mentorship</li> <li>- Media development and support</li> <li>- Enrollment and financial services</li> </ul>	<ul style="list-style-type: none"> <li>- Instructional design support for faculty for online courses and degrees.</li> <li>- Workshops and professional development for faculty and staff.</li> <li>- Student recruitment for new degree programs.</li> <li>- Media creation and facility support for online degrees.</li> <li>- Financial and human resource management and support.</li> <li>- Technical development and support for online products and services for online/residential students.</li> </ul>
<b>The Design organization</b> Brown & Katz (2011), Cross (2006, 2019), Pendleton & Seeley Brown (2018), Crow & Anderson (2022), Simon (1998), Kezar (2018), Brown (2009), Buchanan (1992, 2015), Selingo (2018), Dunne (2018)	<b>As a design organization</b> , the LID designs the future of teaching and learning within the college or university's complex adaptive system (CAS).	<ul style="list-style-type: none"> <li>- Experiments</li> <li>- Successful R&amp;D projects</li> <li>- Partnerships</li> <li>- New pedagogical models</li> <li>- Appropriate edtech infusion</li> </ul>	<ul style="list-style-type: none"> <li>- Chief Design Officer</li> <li>- UX and experience design</li> <li>- Instructional design</li> <li>- Creative design</li> <li>- Communication design</li> <li>- Partnership design</li> <li>- Organizational design</li> </ul>	<ul style="list-style-type: none"> <li>- ASU Study Hall is a new content, resource, and pathway into the institution.</li> <li>- ASU adaptive learning efforts. From math education to intelligent tutor systems.</li> <li>- Master's degree in WWII History in partnership with the National WW2 Museum in New Orleans.</li> <li>- New education products in partnership with the Mayo Clinic education shield.</li> </ul>
<b>The Enterprise organization</b> Crow (2011, 2020), Stuckenbruck (1979), Van de Ven & Poole (1995), Kretovics & Eckert (2010), Lenington (1996), Teece & Linden (2017), Galbraith (2012)	<b>As an enterprise organization</b> , the LID generates new revenue, manages an R&D portfolio, and reports to a non-traditional governing body.	<ul style="list-style-type: none"> <li>- Revenue goals</li> <li>- Partnerships and contracts developed</li> <li>- Unique IP</li> </ul>	<ul style="list-style-type: none"> <li>- Chief Executive Officer</li> <li>- Chief Financial Officer</li> <li>- Chief Strategic Growth Officer</li> <li>- Business development</li> <li>- Partnership development and management</li> <li>- Marketing and communications</li> </ul>	<ul style="list-style-type: none"> <li>- The Starbucks College Achievement Program and Uber tuition assistance programs.</li> <li>- The EdPlus management committee operates in many ways, like a board of directors to set the EdPlus agenda and measure its success.</li> <li>- Spinouts of InStride, Cintana, and Dreamscape as "boundary expanding" companies that ASU is a co-creator.</li> <li>- New revenue generation from ASU Online.</li> </ul>
<b>The Digital organization</b> Snow (2017), Bishop & Boughman (2021), Negroponce (1995), Christensen (1997), Brynjolfsson & McAfee (2014), Ito (2018), Norman & Yasin (2009)	<b>As a digital organization</b> , the LID partners with and builds new educational technologies to support its stakeholders and build the future of teaching and learning.	<ul style="list-style-type: none"> <li>- Digital products and user experiences (UX)</li> <li>- New learning tools for students and faculty</li> <li>- New data collection and dissemination tools</li> </ul>	<ul style="list-style-type: none"> <li>- Chief Information Officer</li> <li>- Software engineering</li> <li>- Product management</li> <li>- Business analysts</li> </ul>	<ul style="list-style-type: none"> <li>- EdPlus User Experience Lab experience research and implementation across digital experiences.</li> <li>- Technical infrastructure to power the learning system(s).</li> <li>- Technical literacy to build well-designed experiences.</li> <li>- Data collection and analysis instruments to understand behavior and trends.</li> </ul>
<b>The Learning organization</b> Senge (2008), Kim & Maloney (2020), Kezar (2018), Kezar & Eckel (2002), Gioia & Chittipeddi (1991), Weick (1995)	<b>As a learning organization</b> , the LID is a learning laboratory. It creates and transfers new knowledge across the system to which it belongs.	<ul style="list-style-type: none"> <li>- New experiments and innovations</li> <li>- Employee productivity and satisfaction</li> <li>- Knowledge-sharing events and communities</li> </ul>	<ul style="list-style-type: none"> <li>- Chief Culture Officer</li> <li>- Chief Learning Officer</li> </ul>	<ul style="list-style-type: none"> <li>- EdPlus Action Lab is an intrinsically focused research organization.</li> <li>- ASU / GSV Summit is a convening of educational technology startups, funders, and the academic community.</li> <li>- Monthly instructional designer meeting, which EdPlus organizes for the broader ASU design community.</li> </ul>

### Theoretical Framework Revisited

In this section, the Mobile Model (MM) for Transformational Change is revisited based on analysis with reference to EdPlus. The MM served effectively as a benchmark and organizing framework for this analysis of EdPlus and its transformational change efforts. The MM is one of the few change models specifically tailored for the context of higher education organizations. Certain aspects of the MM framework were evident as anticipated by existing literature; thus, these components will not be discussed further.

Overall, the data showed that the participants had considerable ambiguity about several of the primary and secondary strategies (although they did not refer to the MM specifically). Several secondary strategies, such as *moderate momentum* and *long-term orientation*; *outside perspectives, external factors, and broader context*; and *financial resources* and *incentives* are very similar and could be combined. Two of the secondary strategies—*communications* and *financial resources*—were identified as critical to managing transformation and could be elevated as primary or interlinking strategies when applied to an LID.

The researcher also observed that several strategies should be addressed more directly and individually. For example, in alignment with the earlier recommendation regarding communication, the necessity of *building trust* and *personal relationships* emerged as critical strategies for the specialized work activities in an LID. Additionally, although some connections can be made between *think differently* and *design* methods, a more explicit grounding in design literature is recommended. The roles of design and the designer were confirmed as primary agents for change for the LID. In academic

discourse, as presented by Cross (2006) and Buchanan (2015), this approach is often articulated as “Think like a Designer.”

### **Summary**

Development and expansion are crucial for the future vitality of the academic community and its mission to garner public support. The expansion and recognition of LID organizations have been growing in higher education institutions, and the growth of LIDs is taking place throughout higher education in many organizational design manifestations. From the entrepreneurial activities of a single instructional designer to organizations as large as EdPlus, LIDs and their stakeholders are present in some form in almost every higher education organization. It is hoped that this chapter provides the community of academic professionals with a framework to organize their efforts, build their LIDs, and highlight their roles and contributions to the mission and objectives of their parent institutions. Chapter 6 reflects on the research questions, considers contributions of this study to new knowledge. Recommendations are offered for scholars and researchers, university administrators and staff, and leaders of EdPlus at ASU. The study’s limitations and final thoughts conclude the chapter.

## CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

*“In order to change an existing paradigm you do not struggle to try and change the problematic model. You create a new model and make the old one obsolete. That, in essence, is the higher service to which we are all being called.” – Buckminster Fuller*

Through a case study, EdPlus at Arizona State University (ASU), this study sought to increase understanding of the adaptability and transformative capacity of Higher Education Institutions (HEIs) to stay relevant and productive in their social impact mission of serving more students worldwide. This purpose was accomplished by the combining of two academic disciplines, Design and Management, within the context of higher education and against the backdrop of digital education. A new model, the "New Model" of the quotation above, was generated, the Learning Innovation Department (LID), grounded as an extension to previous service organizations, most notably Centers for Teaching and Learning.

With the application of the Mobile Model (MM) for transformational change, this research examined EdPlus at Arizona State University. The study highlighted the dual challenges of EdPlus operating as a service organization as well as an R&D engine for new partnerships, instruction, and revenue opportunities. In the research questions, the study emphasized technological tools in education and incorporation of the perspectives of those engaged in EdPlus' design and implementation. The findings should contribute to the understanding of the history and expansion of distance



education at ASU. This study also offers new knowledge for HEI leaders and scholars to build, further investigate, and improve their own digital education and LID strategies.

EdPlus is recognized as an entity with a unique organizational design. With design and designers at its core, it has facilitated transformational change at ASU. Although the study was limited to ASU, the LID model can be referenced or modeled in the development of similar structures in other HEIs, albeit with considerations of their distinct cultures and contexts. In this final chapter, the researcher reflects on the research questions and synthesizes the study's contributions to knowledge in theory, research, practice, and leadership, with concluding remarks.

### **Reflection on the Research Questions**

The central research question, introduced in Chapter 1, was this: How do leaders designing the learning innovation department at Arizona State University approach transformational change initiatives that help the university advance its strategic public charter? From this overarching question, six sub-questions were developed:

1. How does the Mobile Model for Transformational Change explain the case of learning innovation departments at ASU and within the literature?
2. How do institutional leaders categorize EdPlus in terms of transformational change?
3. What role does EdPlus play in changing the culture of the university?
4. What strategies and processes were used in the planning, development, and implementation of the transformation initiatives?

5. How has the organization changed over time to support transformation initiatives?
6. What are the critical incidents that have shaped and evolved the design and role of EdPlus? (Appendix B)

As shown in Chapter 4, the central RQ and six sub-questions have been conclusively answered, with supporting data from participants.

With regard to Research Question 1, although the Mobile Model was a helpful guide for exploring EdPlus' organizational design, the model presented some limitations and redundancies, as explained in Chapter 5. Despite these challenges, the MM remained a valuable framework for investigating EdPlus and presenting the findings. The interrelated strategies of *balance*, *thinking differently*, and a robust organizational *culture* were instrumental in elucidating the LID model.

With regard to Research Question 2, the data collected underscored EdPlus' dual function as a service provider and an innovation R&D hub. A critical insight was the recognition of EdPlus' unintentional yet major role in institutionalizing innovation at ASU. By undertaking complex problems and nurturing leadership and cultural aspirations, EdPlus inadvertently became a beacon for institutionalizing innovation within and beyond ASU.

With regard to Research Question 3, EdPlus has cultivated its distinct culture and dramatically benefits from ASU's overarching leadership and culture of innovation, access, and inclusion. The ASU public charter underpins this amalgamation. EdPlus' foundation is rooted in a commitment to a cultural ethos that values culture over

strategy. The development of this culture began and became successful with visionary and consistent leadership, consistent communication, and the strategic selection and development of talent aligned with these values and the unique work within EdPlus.

With regard to Research Question 4, despite its growth in revenue and personnel over a long period, EdPlus maintains the startup ethos—an intentional strategy by the university's administration managed by its resource and governance model. This structure has been shared with thousands of university leaders who have visited ASU and EdPlus in pursuit of ideas and models to shape and apply to their organizational designs. ASU relies on EdPlus to chart its course in discovering the latest innovations and how educational technology will support the university.

In addition, the joint reporting strategy involving the dean and the unique governance structure exemplified by the EdPlus Executive Management Committee (EMC) stand out as distinctive models within ASU. Fundamentally, EdPlus prioritizes learner-centric decision-making, sometimes leading to unavoidable tensions within the incumbent culture. To address these tensions, EdPlus leverages technology and strategic communication, striving to align its internal and external partners with the overall university mission.

With regard to Research Question 5, in some ways EdPlus has changed dramatically to support the growth and importance of ASU Online and its transformative projects. In fact, growth in staff, the types and nature of EdPlus partnerships, the types of functions it supports, and the types of new risks it takes in service of the university all

led to an early change in the name and title of the overall organization from ASU Online to EdPlus.

Frequent adjustments to the leadership team, processes, and day-to-day operations are required for EdPlus to remain adaptable and focused. At the macro level, the type of overall goals and roles of EdPlus have remained primarily the same in governance and leadership while the scale has increased with achievement. Dr. Philip Regier as the CEO has provided continuity over the 12-year period to date. The funding logic has not changed. As EdPlus' capabilities expanded, its ability to reincorporate service-level responsibilities also changed, such as marketing and coaching from partners (e.g., Pearson).

With regard to Research Question 6, numerous critical events have informed the organizational design of EdPlus. The longstanding commitment of ASU to digital learning and high-quality instructional design, combined with the strategic hires of Dr. Michael Crow, Provost "Betty" Phillips, and Dean Philip Regier, profoundly influenced the organization at a "people" level. At the project level, the central focus of ASU Online has been expansion while maintaining quality. Although partnerships with entities such as Starbucks, Uber, YouTube, and Global Silicon Valley (GSV) have been noteworthy, they relate to the foundational aims of ASU Online and the overall ASU charter emphasizing access and impact. External factors such as the 2010 recession, technological advances, shifts in the for-profit online education sector, and the COVID-19 pandemic served as unique catalysts, steering EdPlus' overall approach to transformation.

These research questions, and the many forthright and extensive responses by participants, provided a structured pathway for addressing of the overarching inquiry of this study. Nonetheless, alternative approaches may yield equally enlightening discoveries.

### **Implications of the Findings**

This section provides recommendations for three groups to whom this research may pertain: scholars and researchers, university administrators, and leaders in and affiliated with EdPlus. The recommendations stem from in-depth analysis and are tailored to address the unique challenges and opportunities of each group. For scholars and researchers, the suggestions aim to spur further investigation and scholarship that build upon the study's findings and the growing literature at the intersection of design studies, organizations, and innovation in higher education. For university administrators, the findings can inform institutional strategy, policymaking, and organizational design, ensuring that the LID efforts consider the study results. For leaders within and around EdPlus, these recommendations provide several actionable steps to enhance the unit's effectiveness and impact, nurturing a culture of continuous improvement and responsiveness to the dynamic educational environment at ASU.

### ***Recommendations for Scholars and Researchers***

Achievement of deep and pervasive change at the cultural level and sustaining it over time present measurement challenges, as recognized by Eckel and Kezar (2003a). Future scholarship could include a rubric or questionnaire that aids leaders in crafting a measurable model for culture change, applicable at both the macro level and within the

subcultures of individual departments and teams. In addition to a just-in-time approach to culture change, a more summative evaluation would help determine the level of *deep and pervasive change over a long period of time* which is another requirement of transformational change.

Merriam (2001) argued that insights from case studies can directly influence policy, procedures, and future research (Hancock & Algozzine, 2017). Keehn and Bishop (2016) and Maloney and Kim (2020) highlighted institutions within the Harvesting Academic Innovation for Learning (HAIL) community as a unique group of CTLs and individual changemakers within universities evolving towards the LID model. Researchers can examine how these unique cases align with or differ from the MM framework and LID characteristics of EdPlus at ASU. This cross case comparison would expand on the current work and add to the development of additional recommendations for the LID model. At the time of this study, Keehn and colleagues are developing a follow-up survey to the 2016 survey to promote understanding of the further evolution of change within CTLs.

Additional research should examine the overall resistance to change within the higher education sector and how the LID should be introduced within that environment. Research in this area could significantly contribute to the successful transformation of education systems that currently display reluctance towards change, allowing LID efforts to thrive. ASU has had unique leadership in effect for a long period that has undoubtedly had a major impact on the ability of EdPlus to lead change quickly at scale.

The emergent roles of design and the instructional design approach appear ready for continued inquiry. Scholars could explore the impact of these change agents, moving from pedagogical innovation and institutional change processes beyond the classroom and into the boardrooms and executive management teams. Such research would provide a clearer understanding of how methods and approaches can drive change at all leadership levels of the organization.

Within the context of ASU, future research can include the new ASU Public Enterprise Design (Millward, 2011). Examination could take place of EdPlus organizational design in juxtaposition to the three ASU enterprises: academic, learning, and knowledge. Additionally, exploration of the intersections, potential conflicts, and expansions of the new Learning Enterprise concerning the EdPlus support of ASU Online offers new opportunities for inquiry. These aspects were not within the scope of the current study because of their implementation after this study began.

Additionally, scholars and researchers can compare the LID with questions about several major events that took place after the initiation of this research. For example, the COVID-19 pandemic, for the first time in contemporary history, forced a worldwide temporary transition to remote-first learning, for which the long-term effects remain to be fully explored and understood.

Lastly, the rapid acceleration of artificial intelligence through Large Language Models (LLMs) provides an opportunity for significant disruption to how universities operate. The rate of adoption, specifically for university students (Raman et al., 2023) and integration into mainstream technology, is unparalleled, with more than 100 million

users signing up for Chat GPT in just 2 months (“Chat GPT reaches,” 2023). The evolution of LIDs in response to these developments will be critical in determining their future utility and effectiveness for their institutions. Will they thrive and be positioned as a strategic organization working on solutions, or will these technologies minimize the role of the LID altogether?

### ***Recommendations for University Administrators***

ASU hosts thousands of guests from public and private organizations. EdPlus is frequently included in these visits, having engaged with over 920 distinct visiting organizations and more than 5,000 individual visitors since 2015 alone (internal report). Many of these visitors are representatives of colleges and universities worldwide, curious about and wishing to develop their digital education and change agendas. The visits also present opportunities for EdPlus to learn from colleagues about their questions and interests in transformation.

This research illustrates and documents not only EdPlus’ unique role and capabilities but also offers an additional perspective through which to view EdPlus’ organizational structure and influence on transformational change. It is this researcher’s hope that the insights obtained from this study will be helpful for other institutional administrators considering their transformation and digital education strategies, regardless of their size and type.

EdPlus itself has gone through a massive transformation—from a unit of less than 20 staff with a singular objective (to build and grow new online programs) to an organization of more than 700 employees involved in a broad range of activities and



initiatives. Based on this development, several foundational recommendations may be made for any institution, consortium, or higher education organization desiring to cultivate and promote Learning Innovation from the inside out.

First, it is critical to establish plans to develop *Alignment* among the LID's governance, leadership, organizational designs, objectives, resources, and culture. Such a recommendation may seem obvious, but the researcher can attest that complete alignment rarely occurs. The result can be a misfit among the context, people, and productivity of the unit (Burton, 2020). To stay grounded in the public service mission is important and something most stakeholders can agree on in principle. Alignment is also important, as noted in the instructional design literature (e.g., Martin, 2011; Mills & Harris, 2019), to ensure quality experience in course design and delivery (Polikoff & Porter, 2014). Alignment also requires a commitment to *transparency* and *communication*, two additional recommendations of the MM.

A second recommendation is for the LID to be built from the ground up for *Adaptability*. The environment in and around the LID is constantly changing. Moving beyond Flexible Vision, the LID should serve as the “beachhead” or “front door” for new ideas, relationships, technologies, and revenue opportunities. The LID can serve as the interpretation layer between the incumbent culture and the direction in which the broader organization needs to go. Most staff in an LID should be able to thrive in a state of ambiguity and to imagine, execute, and scale the new models for the institution. Deployment of a design process can help initiate these recommendations, moving opportunities to the right next question or stage.

When an HEI institution desires to launch or convert an existing unit to a LID, the last critical and nonnegotiable item is selecting the right leadership, as extensively discussed. The most appropriate and effective LID leader(s) should have a grounding in the academic culture and understanding of the unwritten rules of the academy. The suitable leader can *balance* these qualities with knowledge of the enterprise side of higher education because the LID must also manage a revenue objective. The right leader also understands the importance of sound pedagogy and how technology and design can be thoughtfully utilized in projecting the knowledge core of the faculty and university. A reiterated comment on leadership from Dorothy, one of the EMC members makes this point:

That's the trickiest thing of all, is we all know that innovation, and accommodating change resides in leadership. And that's great. How do you distribute that leadership in a way that it becomes embodied in the institution and then can be carried forth by the institution separate from the original leader? We believe that several critical questions and considerations should be addressed by an academic institution or administrator contemplating building an LID in support of transformational change efforts. (interviewee Dorothy, 2022)

Beyond these more thematic recommendations and acknowledgment of the importance of context and culture for more detailed guidance, a question-asking approach will assist leaders in navigating their unique LID transformations. Here are several:

1. What are the environmental factors necessitating change?
2. Is there a clear alignment in the need for change among the faculty, administrative staff, and oversight stakeholders? If not, are the gaps understood by each stakeholder?

3. How will success be measured? What outcomes are driving the adopted educational technology strategy and implementation?
4. What is the institutional inclination and process for building and supporting public/private partnerships?
5. How will the LID be governed?
6. What are the attributes of the leader(s) of the proposed LID? What is their relationship with the academic core and understanding of the business of higher education?
7. How should the LID fit into the overarching organizational structure of the academic unit or institution?
8. How will the LID be funded? Will it be centrally funded or conduct its operations from the revenue it generates? What are the incentive models required to create participation?
9. What are the job functions and competencies of the LID team? What makes them unique, and how will they be recruited?
10. Are change and competency being built from the inside out or, in a shortcut, built from the outside in? What are the advantages and disadvantages of each?
11. What is the role of Design at the enterprise and local levels? How many designers are designated to work on change? Is there a Chief Design Officer (“Defining the role,” n.d.)?

### ***Recommendations for EdPlus at ASU Leaders***

As a final set of recommendations, the researcher offers insights gained from this study to help EdPlus at ASU in its evolution as an LID. Prompted by Research Question 4, "What strategies and processes were used in the planning, development, and implementation of the transformation initiatives?" participants were asked how EdPlus could enhance its success opportunities. The responses are organized into seven themes and strategies for EdPlus leaders to consider (Table 21).

**Table 21:** *Themes and Strategies for EdPlus leaders*

<b>Theme</b>	<b>Strategy</b>
Student Engagement and Support	<ul style="list-style-type: none"> <li>- Consider locating EdPlus staff on campus for visibility and access to students and university-wide stakeholders.</li> <li>- Look to expansion beyond the transfer market for new online students who do not have viable options for the traditional 4-year experience.</li> </ul>
Collaborative Partnerships	<ul style="list-style-type: none"> <li>- Partnership with local universities who do not have capabilities or interest in online education.</li> <li>- More internal recognition of collaborative contributions to EdPlus projects, specifically within the faculty ranks.</li> </ul>
Operational Flexibility and Innovation	<ul style="list-style-type: none"> <li>- <i>Balance</i> scalability with adaptability in content and course design.</li> <li>- Increase the amount and type of workshops and trainings on ed. tech innovations.</li> <li>- Process convergence across modalities (e.g., financial aid, and career services). Do not reinvent the wheel.</li> </ul>

---

Theme	Strategy
Strategic Leadership and Planning	<ul style="list-style-type: none"> <li>- Additional leadership with the specialized understanding of how to navigate university culture.</li> <li>- Succession planning for EdPlus senior leadership.</li> <li>- Keeping pace and ideally ahead of the edtech marketplace.</li> <li>- Increase international offerings and penetration.</li> </ul>
Transparency and Governance	<ul style="list-style-type: none"> <li>- Clearer rules of engagement, from incentives to how new experiments are structured for internal partners.</li> <li>- Advisory board establishment with deans and faculty members.</li> </ul>
Research and Development	<ul style="list-style-type: none"> <li>- Careful evaluation of EdTech tools and partnerships prior to launch.</li> <li>- Expansion of capacity to develop and commercialize new ASU technologies.</li> </ul>
Communication and Relationship Building	<ul style="list-style-type: none"> <li>- Ongoing relationship building with enterprise colleagues.</li> <li>- Provide more transparency in operational practices and decision making, specifically for new ASU leaders.</li> </ul>

---

*Note.* Researcher-created.

Beyond the suggestions in Chapter 5, future research might explore the perspectives of faculty and staff as opposed to leadership to gain further insight into the evolution and effectiveness of EdPlus as a service organization. Other potential avenues of inquiry could include an in-depth examination of internal and external partnerships or a closer look at the specific strategies related to educational technology and learning design. Such inquiries might yield valuable insights, as these elements have been

identified as important, yet not fully explored, avenues for exploration within the current research literature.

### **Contribution to New Knowledge**

This section presents the implication of the findings across four categories: theory, research, contribution for practitioners and higher education leaders. Table 22 summarizes each and is followed by detailed explanation.

**Table 22:** *Summary of Original Contributions*

<b>Aspect</b>	<b>Original Contribution</b>
Theory	<ul style="list-style-type: none"> <li>• Applied the Mobile Model for Transformational Change to an organizational design focusing on Learning Innovation.</li> <li>• Situated the LID within specific types of change –transformation versus innovation, adaptation, organic and strategic change.</li> <li>• Presented the convergence and divergence of the LID across four paradigms and six distinct approaches to change within Higher Education.</li> </ul>
Research	<ul style="list-style-type: none"> <li>• Situated the LID as rooted in attributes of the CTL but introduced new and unique characteristics uncovered from the data.</li> <li>• Defined unique characteristics of the LID beyond traditional university service organizations including CTL’s.</li> <li>• Categorized the LID within five organizational themes using supporting literature: service, design, enterprise, digital, and learning.</li> <li>• Unveiled and presented detailed narrative descriptions of the evolution, utility, and impact of EdPlus at ASU as The Case and LID.</li> <li>• Explained the LID’s long-term impact on the institutional culture while presenting its unique subculture and approaches to change work.</li> <li>• Developed the “EdPlus at ASU” case as a central finding.</li> </ul>
Practitioners	<ul style="list-style-type: none"> <li>• Offered insights on the critical alignment among goals, leadership, resources, and assignments of the LID.</li> </ul>

Aspect	Original Contribution
Higher Education Leaders	<ul style="list-style-type: none"> <li>• Examined the crucial MM interrelated themes of <i>Balance</i> and <i>Think Differently</i> to assist practitioners in their LID organizational design and change efforts.</li> <li>• Uncovered the catalyzing role of Design, and more specifically instructional design and its pronounced impact on supporting change.</li> <li>• Provided a new lexicon for change agents working within and around LIDs on their unique value and role within the university.</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Introduced a roadmap for designing and organizing an LID, drawing on the unique case of EdPlus at ASU.</li> <li>• Showed the critical balance between top-down leadership and the LID's daily activities and approaches.</li> <li>• Introduced governance, resource allocation, and cultural tenets for the LID, considering environmental factors that might influence a LID's quality and scaling efforts.</li> <li>• Analyzed and differentiated the utility and value of the LID compared to traditional service units within a public research university with a particular emphasis on the incumbent Center for Teaching and Learning.</li> </ul>

*Note.* Researcher-created.

### ***Theoretical Contribution***

The primary theoretical contribution of this study was application of the MM to the transformational change and organizational design of a Learning Innovation Department, EdPlus, and its functions. The novel integration of design studies literature, design methods, and the designer's role as an agent of change within the digital education movement in higher education is unique. The Mobile Model was also used as an organizational framework to support data analysis and interpretation which has been followed before (McCann, 2007; Evans, 2016; Fallon, 2020; Gillespie, 2020;) but never applied in this unique way. Unique applications and criticisms of the model were

provided. Lastly, The study also addressed a theoretical gap in the literature by examining transformational change within higher education versus other types of change and uncovering the unique organizational design characteristics of the LID.

### ***Research Contribution***

As highlighted in Chapter 2, a gap exists in the literature concerning the application of the MM to an LID organizational design (Burton & Obel, 2018). This study addressed this gap by examination of the influence of a single organization, EdPlus, on ASU's broader transformational change. The study and construction of the “EdPlus Case” (Stake, 1995), provides empirical evidence that EdPlus has expanded beyond the traditional scope of Centers for Teaching and Learning (Keehn & Bishop, 2018; Wright et al., 2018), indicating a shift towards a more integral role in academic innovation. Conceptualizing the LID as an extension of traditional Center for Teaching and Learning services offers a new perspective on the faculty services model, raising essential questions to those working on securing more support for their CTLs. The introduction of a new LID framework and its organizational design characteristics opens avenues for further research. Findings indicated that EdPlus operates with a unique approach, differentiated from traditional academic service organizations by its emphasis on a culture centric methodology (Bergquist, 1992, 2008; Manning, 2009) with design and the innovative use of technology as foundational pillars. Moreover, this study illustrates how an insider researcher can effectively act as both a designer and an investigator of the organization studied. This approach, although not new, holds value for future insider researchers with an organizational design-centric focus (Cross, 2006).



***Contribution for Practitioners***

The insights from this study are valuable for practitioners engaged in LID initiatives. The nascent field of academic innovation lacks a standardized lexicon and established organizational structures, underscoring the need for strategic design and implementation. The researcher advocates elevating design functions to the executive level, integrating them into core strategic and decision-making processes within universities. Echoing findings from a recent Educause review, the study identifies Instructional Designers as change agents who adopt a systems-thinking approach and forge extensive partnerships that help shape every facet of the student experience (Bond et al., 2023). These individuals apply design methods (Buchanan 1992; Cross, 2006; Pendleton & Brown, 2018) that are potentially scalable for addressing broader organizational design and transformation challenges across the university.

***Contribution for Leaders***

This study serves as a practical model and source of critical questions before leaders take steps to enact systemic changes. The study provides a blueprint for identifying and cultivating the right combination of leadership characteristics for maximum results. The study also outlines the competencies needed for leaders who combine service delivery and entrepreneurial innovation in development of an online portfolio. In addition, the study sheds light on the emerging roles within an LID necessary for success. Highlighted are the mindset, positioning, and resourcing required for staff to achieve their objectives, and underscored are the importance of strong leadership and relationships in the development of a highly effective LID.

## Limitations

Several limitations of this study must be acknowledged pertaining to the highly contextual nature of a single-case qualitative research design. Assumptions and generalizations drawn from this research must be applied to other universities and Learning Innovation Designs (LIDs) with caution because of the inherent specificity of the ASU case. Nevertheless, some key characteristics and insights can be applied and adapted to other institutions to reduce redundancy and enhance the probability of long-term success. Application and adaptation are key assumptions that underpin this thesis. Further, while some institutions may have the necessary resources to require or build out a full-scale LID, other institutions may not have the alignment in leadership or initial startup funding that ASU and EdPlus had to begin development.

A first limitation has to do with the insider status of the researcher. This role certainly provided unparalleled access to data but inevitably introduced a level of bias that was a challenge to remove from the analysis and presentation of the results. The dual role of insider and researcher may have affected the objectivity of the study results. Familiarity with the subject can influence the interpretation of data and the researcher's perspective (Unluer, 2012) but also can be useful bringing emotions and feelings (Patton, 2015) into the interpretation of the constructions (Stake, 1995). Although precautions were taken to mitigate researcher bias in the research design, it is important that the researcher acknowledges this potential limitation and exercises reflexivity of interpretation to mitigate the impact of bias on the study conclusions.

A second limitation is the focus on a specific historical period. Numerous critical events emerged during the study period that fell outside the research scope, such as the COVID pandemic, ASU's Public Enterprise design shift creating a new learning enterprise, and the sudden integration of Large Language Models and artificial intelligence. These developments, while relevant, could not be accommodated within the scope and timeline. However, as noted, they offer exciting opportunities for further research.

A third limitation is a measurement challenge with the type of change under investigation, Transformational change sets an ambitious standard that is not easily met or measured (Eckel & Kezar 2003a). Although the MM offers guidance, participants frequently found it challenging to distinguish transformational change from other forms of change, such as strategic change, innovation, and different approaches to change that were considered outside the scope of the research.

A fourth limitation, due to the nature of the interview sample focusing on the leaders building and shaping EdPlus at ASU, voices from other stakeholders, including a wide representation of faculty, staff and students were not captured. Without these contributions to the data, broad conclusions about the impact on institutional culture change are difficult to draw.

A final limitation is that of the single-case study design and its constraint on generalizability, as well as the inability to conduct cross case comparisons, which are valuable in qualitative research for broader insights. Focusing intensely on one case was a deliberate choice for the researcher to understand better that single and unique case.

However, this approach may have restricted the applicability of the findings to other contexts because distinct characteristics of the specific case may not be present elsewhere.

### **Final Remarks**

The researcher acknowledges that the success of EdPlus as a transformational change agent is highly dependent on its context within ASU, and that the environmental circumstances surrounding the creation of EdPlus are unique to that point in time.

Several critical events created the unique environment for the establishment of EdPlus.

1. A dramatic reduction took place in ASU's per-student funding from the state due to the 2008-2009 recession.
2. Political and consumer backlash was evident regarding for-profit online education in the form of regulations and reduction of for-profit enrollment.
3. ASU Online was an early market entrant, offering fully online undergraduate programs in the western United States.
4. Alignment was created between the ASU mission, president, provost, and unit leadership.

However, the pandemic and other environmental conditions discussed throughout this dissertation may create another moment of similar disruption and opportunity. COVID-19, for example, continues to influence learners' choices to learn at a distance. Because of COVID-19, many learning institutions shuttered their on-campus classes and shifted to virtual instruction. Cases in point: In Spring 2020, due to the pandemic, 84% of U.S. undergraduate students had to shift to online classes. By fall

2020, 75% were taking at least one online course, with 44% studying entirely online.

This change marked an increase from fall 2019, with 97% more students taking online courses and a 186% rise in those enrolled exclusively online (Capranos & Magda, 2022).

Despite a return to in-person classes by 2024, online learning remains integral in many educational institutions, often by choice. A recent Best Colleges report pointed out that 70% of U.S. students view online education as comparable to or superior to traditional classes, and 90% see a positive return on investment from online degrees, although financial barriers to graduation persist (Venable, 2022). The global online education market is expected to grow, reaching \$166.60 billion in 2024 and increasing by 9.48% annually until 2027 (Statistia, 2023). The critical point is that distance learning, and online education specifically, have become widely embraced and engaged in by students around the globe, and traditional universities continue to explore how to adapt and change to this shift to learning with technology.

Critics of online education may claim that digital learning compromises the authenticity of traditional college education, arguing that a lack of physical presence and interaction produces less effective and substandard learning outcomes (Serdyokov, 2017). Others argue that some students do not perform as well in the online modality (Chen et al., 2020) or that faculty are not as well-prepared to teach online as in the physical classroom (Cutri & Mena, 2020).

Despite such criticism, the demand for access to higher education is growing, locally and internationally. Each year, for the next 10 years, approximately 30 million people living in India alone will try to access online education (National Education Policy,

2020). Globally, in 2021, approximately 220 million students were enrolled in formal postsecondary education, more than doubling the enrollment figure from 2000. It is estimated that by 2040, 590 million students will pursue higher education (Calderon, 2018).

A persistent question remains whether HEIs can transform quickly and expansively enough to stay relevant and valuable in their teaching and learning missions. The LID and its designers and practitioners offer a unique organizational design to meet such challenges. Communities like HAIL and the steady increase of visitors to ASU and EdPlus seeking new ideas further support the growing desire for inspiration and guidance for beginning and developing LIDs.

ASU, and particularly EdPlus, have produced remarkable and revolutionary changes in higher education that provide educational opportunities to more people in more places than ever thought possible. Dr. Crow's recognition of the need for such availability indicates the motivation and inspiration he transmitted (and transmits) to continue to build EdPlus and expand and elevate Arizona State University:

We are doing this because, at the end of the day, the reason we have not achieved equality is that, while we have the aspiration, our designs are inadequate. Our systems are inadequate. Our laws are inadequate. Our tools are inadequate. So, we need to set the goal at a higher level and then start peeling back everything that limits us from getting there. We need new designs. New systems. New perspectives. (Crow & Debars, 2020)

It is hoped that the analyses and conclusions of this thesis contribute to the intent of these words, the noble mission of the ASU Charter, and the continued development of EdPlus at ASU, nationally and globally, for all those who desire to

progress in their lives through education. Additionally, it is hoped that the models of the LID and EdPlus serve as a new design and system to help other universities in their transformational change efforts to provide increasingly accessible higher education. In conclusion, Dr. Kezar emphasized during a personal conversation on the critical role of change work, pinpointing a specific issue addressed by this study, “it’s mostly people in senior leadership positions who see themselves as change agent leaders. And we need a much more expansive root level hierarchy involved. It’s really thinking about it and arming those who are relatively inexperienced with the new knowledge they will need to execute on important ideas they have. There’s a lot of people who are innovative, but they don’t necessarily know how to take that innovation and integrate it.” (peer conversation, 2024)

## REFERENCES

- Ableser, J., & Moore, C. (2018). The role of the teaching and learning center in promoting transformative learning at a metropolitan university. *Metropolitan Universities, 29*(3). <https://doi.org/10.18060/21456>
- Adler, P. A., & Adler, P. (1987). *Membership roles in field research*. Sage.
- Adler, P. A., & Adler, P. (1994). Observational techniques. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 377–392). Sage.
- Al-Edenat, M. (2018). Reinforcing innovation through transformational leadership: Mediating role of job satisfaction. *Journal of Organizational Change Management, 31*(4), 810–838. doi: 10.1108/JOCM-05-2017-0181
- Alexander, B. (2020). *Academia next: The futures of higher education*. Johns Hopkins University Press.
- Alexander, B. (2013). *Peak education*. <https://bryanalexander.org/uncategorized/peak-education-2013/>
- Allen, I. E., Seaman, J., Poulin, R., & Straut, T. T. (2016). *Tracking online education in the United States*. <https://eric.ed.gov/?Id=ED572777>
- American Academy of Arts and Sciences. (2015). Public research universities: Why they matter. Lincoln Project Excellence and Access in Public Higher Education [https://www.amacad.org/sites/default/files/publication/downloads/publicresearchuniv\\_whytheymatter.pdf](https://www.amacad.org/sites/default/files/publication/downloads/publicresearchuniv_whytheymatter.pdf)
- Archibald, D., & Worsley, S. (2019). The father of distance learning. *Techtrends, 63*, 100–101. doi: 10.1007/S11528-019-00373-7



- Arciénaga Morales, A. A., Nielsen, J., Bacarini, H. A., Martinelli, S. I., Kofuji, S. T., & García Díaz, J. F. (2018). Technology and innovation management in higher education— Cases From Latin America And Europe. *Administrative Sciences*, 8(2), 11-12. doi: 10.3390/admsci8020011
- Arizona State University. (2014). *ASU EdPlus: Arizona State University 2014*.  
<https://vimeo.com/111799827>
- Arizona State University. (2019). *Uber and ASU Online*. <https://uber.asu.edu/>
- Arizona State University. (2020a). *ASU Facts*. <https://www.asu.edu/facts/#/>
- Arizona State University. (2020b). *EdPlus at Arizona State University. What We Do*.  
<https://edplus.asu.edu/what-we-do>
- Arizona State University, Office of the President. (2020c). *ASU Charter*.  
<https://president.asu.edu/asu-mission-goals>
- Arizona State University. (2021a). *Arizona State University*.  
[https://www.wikiwant.com/En/arizona\\_state\\_university#/references](https://www.wikiwant.com/En/arizona_state_university#/references)
- Arizona State University. (2021b). *Admission: Pathway Programs*.  
<https://admission.asu.edu/transfer/pathways>
- Arizona State University. (2021c). *Education For Humanity*.  
<https://edforhumanity.asu.edu/>
- Arizona State University. (2021d). *Global Freshman Academy*. <https://gfa.asu.edu/>
- Arizona State University, Office of the President. (2022a). *Biography*.  
<https://president.asu.edu/the-president/biography>
- Arizona State University. (2022b). *EdPlus annual report 2022*. [Private document].

- Arizona State University. (2022c). *Facts and figures*. <https://www.asu.edu/about/facts-and-figures>
- Arizona State University. (2023). *Facts and figures*. <https://www.asu.edu/about/facts-and-figures>
- Armstrong, M., & Armstrong, M. (2009). *Armstrong's handbook of management and leadership: A guide to managing for results* (2nd ed.). Kogan Page.
- Aronowitz, S., Smet, A., & McGinty, D. (2018). Getting organizational redesign right. McKinsey & Company. <https://www.mckinsey.com/business-functions/organization/our-insights/getting-organizational-redesign-right>
- Atkinson, R. C., & Blanpied, W. A. (2008). Research universities: Core of the U.S. science and technology system. *Technology in Society*, 30(1), 30-48. doi: 10.1016/j.techsoc.2007.10.004
- Baez, B. (2002). Confidentiality in qualitative research: Reflections on secrets, power, and agency. *Qualitative Research*, 2(1), 35-58. doi:10.1177/1468794102002001638
- Barbour, M. K. (2021). The shift to distance learning: Tracing the roots of 100+ years of practice and opportunity. *Tech Trends*, 65, 919–922. doi:10.1007/S11528-021-00670-0
- Baskarada, S. (2014). Qualitative case study guidelines. *The Qualitative Report*, 19(40), 1-25.
- Bass, R. (2020). What's the problem now? *To Improve the Academy*, 39(1), 3-30. <https://doi.org/10.3998/tia.17063888.0039.102>

- Bates, T. (2007). Strategic planning for e-learning in a polytechnic. In M. Bullen & D. Jones (Eds.), *Making the transition to e-learning: Strategies and issues* (pp. 47-65). Information Science Publishing. doi:10.4018/978-1-59140-950-2. Ch004
- Baturay, M. H. (2015). An overview of the world of MOOCS. *Procedia—Social And Behavioral Science*, 174, 427-433. doi:  
<https://doi.org/10.1016/j.dbspro.2015.01.685>
- Bauer-Wolf, J. (2021). *New Hampshire governor proposes merging two- and four-year college systems*. Higher Ed Dive. <https://www.highereddive.com/news/new-hampshire-governor-proposes-merging-two-and-four-year-college-systems/594943/>
- Bergquist, W. H. (1992). *The four cultures of the academy: Insights and strategies for improving leadership in collegiate organizations*. Jossey-Bass.
- Bergquist, W. H., Pawlak, K., & Bergquist, W. H. (2008). *Engaging the six cultures of the academy: Revised and expanded edition of The four cultures of the academy* (2nd ed). Jossey-Bass.
- Bianco, J. M. (2020). *Campus museums as partners for change in higher education* [Northeastern University]. doi: <https://doi.org/10.17760/D20361052>
- Birnbaum, R. (1992). *How academic leadership works: Understanding success and failure in the college presidency*. Jossey-Bass.
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802-1811. doi: <https://doi.org/10.1177/1049732316654870>

- Bok, D. (2003). *Universities In the marketplace: The commercialization of higher education*. Princeton University Press.
- Boblin, S. L., Ireland, S., Kirkpatrick, H., & Robertson, K. (2013). Using Stake's Qualitative Case Study Approach to Explore Implementation of Evidence-Based Practice. *Qualitative Health Research, 23*(9), 1267–1275.  
<https://doi.org/10.1177/1049732313502128>
- Bolman, L. G., & Deal, T. E. (2017). *reframing organizations: Artistry, choice, and leadership* (6th ed.). Jossey-Bass.
- Bommersbach, J. (2022). Michael Crow is up to something. *janabommersbach.com*  
[Reprinted from *Phoenix Magazine*, 2004].  
<https://janabommersbach.com/michael-crow-is-up-to-something>
- Bond, A., Lockee, B., & Blevins, S. (2023). Instructional designers as institutional change agents. *Educause Review*.  
<https://er.educause.edu/articles/2023/10/instructional-designers-as-institutional-change-agents>
- Bonner, A. J., & Tolhurst, G. (2002). Insider-outsider perspectives of participant observation. *Nurse Researcher, 9*(4), 7-19.  
<http://handle.uws.edu.au:8081/1959.7/40376>
- Brew, A., & Peseta, T. (2008). The precarious existence of the academic development unit. *International Journal for Academic Development, 13*(2), 83–85. doi:  
<https://doi.org/10.1080/13601440802076467>

- Brown, B., Richard, B., Carl, D., Dennis, D., Kipum, L., Victor, M., & Ramia, M. (2020). Introduction. *Design Issues*, 36, 1–4. doi: [10.1162/desi\\_E\\_00570](https://doi.org/10.1162/desi_E_00570)
- Brown, M. (2020). *2020 Educause Horizon Report | Teaching And Learning Edition—2020. Educause.*  
<https://via.hypothes.is/https://library.educause.edu/media/files/library/2020/3/2020horizonreport.pdf>
- Brown, P. A. (2008). A review of the literature on case study research. *Canadian Journal for New Scholars in Education/Revue canadienne des jeunes chercheurs et chercheurs en education*, 1(1).
- Brown, T., & Katz, B. (2019). *Change by design: How design thinking transforms organizations and inspires innovation.* Harper Business.
- Bryman, A. (2012). *Social research methods (4th ed.)*. Oxford University Press.
- Brynjolfsson, E., & MacAfee, A. (2016). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies.* W.W. Norton & Company.
- Buchanan, R. (1990). Myth and maturity: Toward a new order in the decade of design. *Design Issues*, 6(2), 70-80. doi: [10.2307/1511439](https://doi.org/10.2307/1511439)
- Buchanan, R. (1992). Wicked problems in design thinking. *Design Issues*, 8(2), 5. doi: [10.2307/1511637](https://doi.org/10.2307/1511637)
- Buchanan, R. (2015). Worlds in the making: Design, management, and the reform of organizational culture. *Journal of Design, Economics, and Innovation*, 1(1), 5–21. doi: [10.1016/j.sheji.2015.09.003](https://doi.org/10.1016/j.sheji.2015.09.003)

- Buckland, R. (2009). Private and public sector models for strategies in universities. *British Journal Of Management*, 20(4), 524–536. doi: 10.1111/J.1467-8551.2008.00593.X
- Burton, R. M. (2020). Fit, misfit, and design: JOD studies that touch reality. *Journal of Organizational Design*, 9(5), 1-7. doi: <https://doi.org/10.1186/s41469-020-00081-0>
- Burton, R. M., & Obel, B. (2004). *Strategic organizational diagnosis and design: Developing theory for application* (2nd ed.). Kluwer Academic Publishers.
- Burton, R. M., & Obel, B. (2018). The science of organizational design: Fit between structure and coordination. *Journal Of Organizational Design*, 7(5), 2-13. doi: 10.1186/S41469-018-0029-2
- Butterfield, L. D., Borgen, W. A., Amundson, N. E., & Maglio, A.-S. T. (2005). Fifty years of the critical incident technique: 1954-2004 and beyond. *Qualitative Research*, 5(4), 475-497. doi: 10.1177/1468794105056924
- Cai, Y. (2017). From an analytical framework for understanding the innovation process in higher education to an emerging research field of innovations in higher education. *Review Of Higher Education*, 40(4), 585–616. doi: 10.1353/Rhe.2017.0023
- Calderon, A. (2018). *Massification of higher education revisited*. [https://www.researchgate.net/publication/331521091\\_massification\\_of\\_higher\\_education\\_revisited](https://www.researchgate.net/publication/331521091_massification_of_higher_education_revisited)

- Cameron, R., & Harrison, J. L. (2012). The interrelatedness of formal, non-formal and informal learning: evidence from labour market program participants. *Australian Journal of Adult Learning, 52*(2), 277-309. <https://linkgale.com.ezproxy1.lib.asu.edu/apps/doc/A313886720/>
- Cann, O. (n.d.). Machines will do more tasks than humans by 2025 but robot revolution will still create 58 million net new jobs in next five years. *World Economic Forum*. <https://www.weforum.org/press/2018/09/machines-will-do-more-tasks-than-humans-by-2025-but-robot-revolution-will-still-create-58-million-net-new-jobs-in-next-five-years/>
- Capranos, D., & Magda, A. J. (2022). Online learning at public universities: Views of AASCU member institutions as Covid-19 transforms higher education. *Wiley University Services*. <https://universityservices.wiley.com/wp-content/uploads/2022/02/2022-onlinelearningatpublicuniversities2022-Final.pdf>
- Carey, K. (2020). The corporations devouring American colleges. *HuffPost Highline*. <https://www.huffpost.com/highline/article/capitalist-takeover-college/>
- Carlisle, D. L., & Weaver, G. C. (2020). The role of centers: Disrupting the status quo while stabilizing initiatives in undergraduate STEM. *Change: The Magazine of Higher Learning, 52*(1), 60-70. doi: <https://doi.org/10.1080/00091383.2020.1693852>
- Carlson, S. (2003, January 17). After losing millions, Columbia U. will close online-learning venture. *Chronicle of Higher Education*.

<https://www.chronicle.com/article/after-losing-millions-columbia-u-will-close-online-learning-venture/>

Challis, D., Holt, D., & Palmer, S. (2009). Teaching and learning centers: Towards maturation. *Higher Education Research & Development*, 28(4), 371–383. doi: <https://doi.org/10.1080/07294360903067021>

Chamie, J. (n.d.). *Student Debt Rising Worldwide*. Yale Global Online. <https://yaleglobal.yale.edu/content/student-debt-rising-worldwide>

Charmaz, K., & Belgrave, L. L. (2015). Grounded theory. In G. Ritzer (Ed.). *The Blackwell Encyclopedia Of Sociology* (p. 45). John Wiley & Sons. doi: <https://doi.org/10.1002/9781405165518.wbeosg070.pub2>

ChatGPT reaches 100 million users two months after launch. (2023, February 2). *The Guardian*. <https://www.theguardian.com/technology/2023/feb/02/chatgpt-100-million-users-open-ai-fastest-growing-app>

Chell, E. (1998). Critical incident technique. In G. Symon. & C. Cassell. (Eds.), *Qualitative methods and analysis in organizational research: A practical guide* (pp. 51-72). Sage.

Chen, S. Y., Basma, D., Ju, J., & Ng, K. M. (2020). Opportunities and challenges of multicultural and international online education. *Professional Counselor*, 10(1), 120-132. <http://tpcjournal.nbcc.org>

Chen, Y.-Y., Shek, D. T. L., & Bu, F.-F. (2011). Applications of interpretive and constructionist research methods in adolescent research: Philosophy,



- principles, and examples. *International Journal of Adolescent Medicine and Health*, 23(2). <https://doi.org/10.1515/ijamh.2011.022>
- Christensen, C. M., & Eyring, H. J. (2011). *The innovative university: Changing the DNA of higher education from the inside out*. Jossey-Bass.
- Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Sage.
- Corcoran, B., Wan, T., Young, J. R., & Greenberg, S. (2018). This year's ASU+GSV Summit is hard to describe. Here's our best attempt. *EdSurge*.  
<https://www.edsurge.com/news/2018-04-18-this-year-s-asu-gsv-summit-is-hard-to-describe-here-s-our-best-attempt>
- Corkindale, G. (2011). The importance of organizational design and structure. *Harvard Business Review*. <https://hbr.org/2011/02/the-importance-of-organization>
- Cornell, R. L. (2009). *A study of transformational change at three schools of nursing implementing healthcare informatics* [Doctoral dissertation, University of South Florida]. ProQuest Dissertations & Thesis Global Database.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage.
- Cross, N. (2006). *Designerly ways of knowing*. Springer.
- Crow, M. M. (2010). Differentiating America's colleges and universities: A case study in institutional innovation in Arizona, *Change: The Magazine of Higher Learning*, 42(5), 36-41. doi: <http://doi:10.1080/00091383.2010.505164>

- Crow, M. M. (2002). *A new American university: The new gold standard*. Arizona State University.  
[https://newamericanuniversity.asu.edu/sites/default/files/asu\\_inauguraladdress.pdf](https://newamericanuniversity.asu.edu/sites/default/files/asu_inauguraladdress.pdf)
- Crow, M. M. (2011). The research university as comprehensive knowledge enterprise: A prototype for a new American university. In L. Weber & J. J. Duderstadt (Eds.), *University research for innovation* (pp. 211-224). *Economica*. [https://glion-books.com/wp-content/uploads/2016/09/g2010\\_14\\_The-Research-University-as-Comprehensive-Knowledge-Enterprise\\_CROW.pdf](https://glion-books.com/wp-content/uploads/2016/09/g2010_14_The-Research-University-as-Comprehensive-Knowledge-Enterprise_CROW.pdf)
- Crow, M. M. (2018, May 2). What being the first in my family to go to college taught me about opportunity. *Medium*. <https://medium.com/@michaelmcrow/what-being-the-first-in-my-family-to-go-to-college-taught-me-about-opportunity-B0aa40a53645>
- Crow, M.M. and Anderson, D. (2022). "Design-build: Making Sense of Routine and Transformational Change in Higher Education," *The New College President's Handbook*. Edited by James Soto Antony, Ana Mari Cauce, Lynn Gangone, Tara Nicola, Cambridge: Harvard University Press, 2022
- Crow, M. M., & Dabars, W. B. (2015). *Designing the new American university*. Johns Hopkins University Press.
- Crow, M. M., & Dabars, W. B. (2020). *The fifth wave: The evolution of American higher education*. Johns Hopkins University Press.

- Cutri, R. M., & Mena, J. (2020) A critical reconceptualization of faculty readiness for online teaching, *Distance Education*, 41(3), 361-380. doi: <https://doi.org/10.1080/01587919.2020.1763167>
- Darby, J. L., Fugate, B. S., & Murray, J. B. (2019). Interpretive research: A complementary approach to seeking knowledge in supply chain management. *The International Journal of Logistics Management*, 30(2), 395–413. <https://doi.org/10.1108/IJLM-07-2018-0187>
- Daughtery, C. (2009). An Exercise in Rigor: A Review of Robert K. Yin’s Case Study Research Design and Methods. *The Qualitative Report*, 14(2), 162-165. <https://doi.org/10.46743/2160-3715/2009.2842>
- Davidson, C. N. (2017). *The new education: How to revolutionize the university to prepare students for a world in flux*. Basic Books.
- Davis, J. (2003). *Learning to lead*. American Council On Education. Praeger Publishers.
- Defining the role of a chief design officer*. (n.d.). McKinsey. <https://www.mckinsey.com/capabilities/mckinsey-design/our-insights/business-value-of-design/interactives/defining-the-role-of-a-chief-design-officer>
- Denzin, N. K. (1978). *Sociological methods: A sourcebook*. McGraw-Hill.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research* (4th Ed). Sage.
- Dill, D. D. (1996). Academic planning and organizational design: Lessons from leading American universities. *Higher Education Quarterly*, 50(1), 35–53. doi: <https://doi.org/10.1111/j.1468-2273.1996.tb01689.x>

- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147-160. doi: [10.2307/2095101](https://doi.org/10.2307/2095101)
- Dixon, K. M. (2018). *Exploring a culture of assessment in student affairs at one public HBCU* [Doctoral dissertation, Grand Canyon University]. ProQuest Dissertations & Theses Global Database.
- Dunne, D. (2018). Implementing design thinking in organizations: An exploratory study. *Journal of Organization Design*, 7(1), 1-16. doi: [10.1186/S41469-018-0040-7](https://doi.org/10.1186/S41469-018-0040-7)
- Dusst, E., & Winthrop, R. (2019, May 17). Revolutionizing online education: A conversation with President Michael Crow of Arizona State University. *Brookings*. <https://www.brookings.edu/blog/education-plus-development/2019/05/17/revolutionizing-online-education-a-conversation-with-president-michael-crow-of-arizona-state-university/>
- Eckel, P. D., & Kezar, A. (2003a). Key strategies for making new institutional sense: Ingredients to higher education transformation. *Higher Education Policy*, 16(1), 39-53. doi: [10.1057/palgrave.hep.8300001](https://doi.org/10.1057/palgrave.hep.8300001)
- Eckel, P. D., & Kezar, A. (2003b). *Taking The Reins: Institutional Transformation In Higher Education*. Rowman & Littlefield.
- Eckel, P. D., & Kezar, A. (2011). *Taking the reins: Institutional transformation in higher education*. Ace Series On Higher Education.
- Eckel, P. D., Hill, B., & Green, M. (1998). En route to transformation. on change: An occasional paper series of the Ace Project on Leadership and Institutional

Transformation. *American Council on Education*.

<http://files.eric.ed.gov/fulltext/ED435293.pdf>

Edplus, Arizona State University. (2020). *EdPlus At Arizona State*.

<https://edplus.asu.edu/>

Edplus, Arizona State University. (2021). *EdPlus At Arizona State University: How we*

*work*. <https://edplus.asu.edu/how-we-work>

Eshach, H. (2007). Bridging in-school and out-of-school learning: Formal, non-formal, and informal education. *Journal of Science Education and Technology*, 16, 171–

190. doi: <https://doi.org/10.1007/s10956-006-9027-1>

Etsy. (2023). *Mobiles*.

<https://www.etsy.com/listing/1070674231/handmade-origamicrane-mobile-medium>

Evans, K. S. (2016). *Exploring strategies that enhance assessment in student affairs*

[Doctoral dissertation, Northeastern University]. ProQuest Dissertations & Theses Global Database. (umi no. 1780636691).

Faller, M. B. (2018). ASU ranked most innovative school in US for the fourth straight

time. *ASU News*. <https://asunow.asu.edu/20180909-asu-news-ranked-most-innovative-us-school-fourth-time>

Faller, M. B. (2021). New pillars of education to serve community in multiple ways. *ASU*

*News*. <https://news.asu.edu/20210126-solutions-transforming-higher-education-better-serve-communities>

Faller, M. B. (2022). 20 years in: A look at President Crow's vision for accessibility and

- excellence in the New American University. ASU News.  
<https://news.asu.edu/20221123-arizona-impact-20-years-look-president-crows-vision-accessibility-and-excellence-new>
- Fallon, J. (2020). *Becoming minority serving: Understanding how institutional agents transform their institutions to better serve target student populations* [Doctoral dissertation, Indiana University]. *ProQuest Dissertations Publishing*.
- Findlow, S. (2008). Accountability and innovation in higher education: A disabling tension? *Studies In Higher Education, 33*(3), 313–329. doi: 10.1080/03075070802049285
- Fingerhut, H. (2017). *Republicans skeptical of colleges' impact on U.S., but most see benefits for workforce preparation*. Pew Research Center.  
<https://www.Pewresearch.Org/Fact-Tank/2017/07/20/Republicans-Skeptical-Of-Colleges-Impact-On-U-S-But-Most-See-Benefits-For-Workforce-Preparation/>
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin, 51*(4), 327-357. <https://www.apa.org/pubs/databases/psycinfo/cit-article.pdf>
- Fox-Turnbull, W. (2011). Stimulated recall using auto photography—A method for investigating technology education. In C. Benson & J. Lunt (Eds.), *International handbook of primary technology education* (pp. 195-209). Springer.
- Frantz, A. C., Beebe, S. A., Horvath, V. S., Canalas, J., & Swee, D. E. (2004). The roles of teaching and learning centers. *To Improve the Academy, 23*(1), 72–90. doi: <http://dx.doi.org/10.3998/tia.17063888.0023.008>

- Friedman, L., & Friedman, H. (2011). Online learning as a change agent in education. *SSRN Electronic Journal*, 2011, 1-23. doi:10.2139/ssrn.1870008
- Galloway, H. (2021). *YouTube Impact 2021: The facts and figures from Oxford economics show the real impact YouTube had on real people in 2021*. YouTube.Com.  
<https://www.youtube.com/howyoutubeworks/progress-impact/impact/report/>
- Garvin, D. A. (2000). *Learning in action: A guide to putting the learning organization to work*. Harvard Business School Press.
- Giesinger, C. H., Becker, S. A., Davis, A., & Shedd, L. (2016). Scaling solutions to higher education's biggest challenges: An NMC Horizon Project strategic brief, 3(2), Whole issue. *New Media Consortium*. <https://www.learntechlib.org/p/182095>
- Gillespie, A. (2020). *A post implementation review of transformational change initiatives in higher education* [Doctoral dissertation, University of Southern Mississippi]. ProQuest Dissertations & Theses Global Database. 1756.
- Gioia, D., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12(6), 433-448.  
<http://www.jstor.org/stable/2486479>
- Globoforce. (2013a). *The Recognition Blueprint: An expert's guide to building culture and engagement through recognition*. <https://whc.workhuman.com/rs/862-JIQ-698/images/recognitionblueprint-2018-final-digital.pdf>
- Globoforce. (2013b). *The science of happiness*.  
[http://go.globoforce.com/rs/globoforce/images/wp\\_culture\\_globoforce.pdf](http://go.globoforce.com/rs/globoforce/images/wp_culture_globoforce.pdf)

- Goldstein, S. M., Johnston, R., Duffy, J., & Rao, J. (2002). The service concept: The missing link in service design research? *Journal of Operations Management*, 20(2), 121–134. [https://doi.org/10.1016/S0272-6963\(01\)00090-0](https://doi.org/10.1016/S0272-6963(01)00090-0)
- Goldstein, J. (2011). *Complex adaptive systems: An introduction to computational models of social life*. Princeton University Press.
- Gosling, D. (2009). Educational development in the UK: a complex and contradictory reality. *International Journal for Academic Development*, 14(1), 5--18. doi: [10.1080/13601440802659122](https://doi.org/10.1080/13601440802659122)
- Government of India. (2020). *National Education Policy 2020*. [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- Grainger, B. (2013). Introduction to MOOCs: Avalanche, illusion, or augmentation? *Policy Brief of UNESCO Institute For Information Technologies In Education*. <https://iite.unesco.org/publications/3214722/>
- Grant, M. J., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal*, 26(2), 91–108. doi: <https://doi.org/10.1111/j.1471-1842.2009.00848.x>
- Grawe, N. D. (2018). *Demographics and the demand for higher education*. Johns Hopkins University Press.
- Gray, L., Wong, G., Rempel, G., & Cook, K. (2020). Expanding qualitative research interviewing strategies: Zoom video communications. *Qualitative Report*, 25, Article 9. <https://nsuworks.nova.edu/Tqr/vol25/iss5/9>



- Greguska, E. (2020). ASU ranked no. 1 in innovation for 6th year by U.S. News and World Report. *ASU News*. <https://news.asu.edu/20200913-asu-news-us-news-world-report-no-1-innovation-sixth-year>
- Grosshans, W., & Chelimsky, E. (1990). Case study evaluations. General Accounting Office Program Evaluation and Methodology Division. <https://www.gao.gov/assets/pemd-10.1.9.pdf>
- Hall, R. W. (2020). Creating the Innovative University. *Technology & Innovation*, 21(4), 1–14. <https://doi.org/10.21300/21.4.2020.3>
- Hager, P. J. (2012). Formal Learning. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 1314-1316). Springer. doi: [https://doi.org/10.1007/978-1-4419-1428-6\\_160](https://doi.org/10.1007/978-1-4419-1428-6_160)
- Hammersley, M. (2015). Ethnography. In G. Ritzer (Ed.), *The Blackwell encyclopedia of sociology* (p. 112). John Wiley & Sons.
- Hancock, D. R., & Algozzine, R. (2017). *doing case study research: A practical guide for beginning researchers* (3rd ed.). Teachers College Press.
- Harris, J., Pryor, J., & Adams, S. (2006). *The challenge of intercoder agreement in qualitative inquiry*. <https://www.researchgate.net/publication/228490436> The challenge of intercoder agreement in qualitative inquiry
- Hartzler, R., & Blair, R. (Eds.). (2019). *Emerging issues in mathematics pathways: Case studies, scans of the field, and recommendations*. Charles A. Dana Center at the University of Texas at Austin.

- Holley, K. A. (2009). Interdisciplinary Strategies as Transformative Change In Higher Education. *Innovative Higher Education*, 34(5), 331-344. doi:10.1007/S10755-009-9121-4
- Holt, D., Palmer, S., & Challis, D. (2011). Changing perspectives: Teaching and learning centers' strategic contributions to academic development in Australian higher education. *International Journal for Academic Development*, 16(1), 5-17. doi: <https://doi.org/10.1080/1360144X.2011.546211>
- How We Work: EdPlus at Arizona State University. (2021). <http://edplus.asu.edu/how-we-work>
- Huang, M. H., & Chen, D. Z. (2017). How can academic innovation performance in university–industry collaboration be improved? *Technological Forecasting And Social Change*, 123, 210-215. doi: 10.1016/j.techfore.2016.03.024
- Hung, D., & Nichani, M. (2001). Constructivism and e-Learning: Balancing Between the Individual and Social Levels of Cognition. *Educational Technology*, 41(2), 40–44. <http://www.istor.org/stable/44428658>
- Hurd, D. L. (2007). *Leading transformational change: A study of internationalization at three universities in the United States* [Doctoral dissertation, Florida Atlantic University]. ProQuest Dissertations & Theses Global Database.
- James, M. A., & Derrick, G. E. (2020). When “culture trumps strategy”: Higher education institutional strategic plans and their influence on international student recruitment practice. *Higher Education*, 79, 569–588. doi: 10.1007/S10734-019-00424-1

- James, N., & Busher, H. (2009). *Online interviewing*. Sage.
- Janesick, V. (1998). Journal writing as a qualitative research technique: History, issues, and reflections. <https://files.eric.ed.gov/fulltext/ed420702.pdf>
- Janghorban, R., Roudsari, R. L., & Taghipour, A. (2014). Skype interviewing: The new generation of online synchronous interview in qualitative research. *International Journal of Qualitative Studies on Health and Well-Being*, 9(1), 1-3. doi: 10.3402/Qhw.V9.24152
- Jorgensen, D. L. (2020). *Principles, approaches and issues in participant observation*. Routledge.
- Joseph, J. (2018). Evolution of the journal and the field of organization design. *Journal of Organization Design*, 7(1), 7-8. doi: <https://doi.org/10.1186/s41469-018-0031-8>
- Julian, M. (2018). *The successful integration of health informatics into an undergraduate nursing curriculum: A case study*. [Doctoral dissertation, Capella University]. ProQuest Dissertations & Theses Global Database.
- Kahn, C. H. (2017). *From bricks to clicks: The transformational processes and policies for colleges beyond 2020* [Doctoral dissertation, D'youville College]. ProQuest Dissertations & Theses Global.
- Karnieli-Miller, O., Strier, R., & Pessach, L. (2009). Power relations in qualitative research. *Qualitative Health Research*, 19 (2), 279-289. doi: 10.1177/1049732308329306
- Kearney, S., (2020). Defining design: Is a universal definition possible? *Nomat*. <https://www.nomat.com.au/2018/01/24/defining-design/>

- Keehn, A., & Bishop. (2018). *Leading academic change: An early market scan of leading-edge postsecondary academic innovation centers*. University System of Maryland. <https://www.usmd.edu/cai/leading-academic-change-early-market-scan-leading-%C2%adedge-postsecondary-academic-innovation-centers>
- Kegan, R., & Lahey, L. L. (2009). *Immunity to change: How to overcome it and unlock potential in yourself and your organization*. Harvard Business Press.
- Kezar, A. J. (2018). *How colleges change: Understanding, leading, and enacting change* (2nd ed.). Routledge.
- Kezar, A. J., & Eckel, P. D. (2002a). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts? *Journal Of Higher Education*, 73(4), 435–460. doi: <https://doi.org/10.1353/jhe.2002.0038>
- Kezar, A., & Eckel, P. (2002b). Examining the institutional transformation process: The importance of sensemaking, interrelated strategies, and balance. *Research In Higher Education*, 43(3), 295-328. <http://www.jstor.org.ezproxy1.lib.asu.edu/stable/40196456>
- Kim, J., & Maloney, E. (2020). *Learning innovation and the future of higher education*. Johns Hopkins University Press.
- Kolko, J. (2015). Design thinking comes of age. *Harvard Business Review*. <https://hbr.org/2015/09/design-thinking-comes-of-age>

- Kolomitro, K., & Anstey, L. M. (2017) A survey on evaluation practices in teaching and learning centers. *International Journal for Academic Development*, 22(3), 186-198. doi: 10.1080/1360144X.2017.1313162
- Kotter, J. P. (1985). *Power and influence*. Free Press.
- Kotter, J. P. (1996). *Leading change*. Harvard Business School Press.
- Kretovics, M. A., & Eckert, E. (2010). *Business practices in higher education: A guide for today's administrators*. Routledge. doi: 10.4324/9780203838624
- Langham, A. T. (2012). *Academic realignment: An investigation of change within a new academic unit at a research university* [Doctoral dissertation, Eastern Michigan University]. ProQuest Dissertations & Theses Global Database. (umi no. 1287057989).
- Langley, A., & Tsoukas, H. (Eds.). (2017). *The Sage handbook of process organization studies*. Sage.
- Leapold, T., Ratcheva, V., & Zahidi, S. (2018). The future of jobs report. *World Economic Forum*. <http://reports.weforum.org/future-of-jobs-2018/>
- Lenington, R. L. (1996). *Managing higher education as a business*. American Council On Education/Oryx Press Series On Higher Education. Oryx Press.
- Levinson-Rose, J., & Menges, R. J. (1981). Improving college teaching: A critical review of research. *Review of Educational Research*, 51(3), 403–434. doi: <https://doi.org/10.2307/1170213>
- Lewis, L. K. (2011). *Defining organizational change. organizational change: Creating change through strategic communication*. Wiley & Sons.

- Lieberman, D. (2005). Beyond faculty development: How centers for teaching and learning can be laboratories for learning. *New Directions for Higher Education*, 131, 87–98. doi: <https://doi.org/10.1002/he.189>
- Liedtka, J. (2015). Perspective: linking design thinking with innovation outcomes through cognitive bias reduction. *Journal of Product Innovation Management*, 32(6), 925–938. doi: [10.1111/jpim.12163](https://doi.org/10.1111/jpim.12163)
- Lincoln, Y., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- Linder, K. E. (Ed.). (2019). *The business of innovating online: Practical tips and advice from industry leaders*. Stylus Publishing.
- Mahler, M. (2014). *From the artist: How to make a real mobile*. Houzz.  
<https://www.houzz.com/magazine/from-the-artist-how-to-make-a-real-mobile-stsetivw-vs~34452702>
- Manning, K. (2009). Engaging the Six Cultures of the Academy (review). *The Review of Higher Education*, 33(1), 130–132. <https://doi.org/10.1353/rhe.0.0106>
- Marcus, J. (n.d.). *How technology is changing the future of higher education*. *The New York Times*.  
<https://www.nytimes.com/2020/02/20/education/learning/education-technology.html>
- Marin, L. F., Valgardson, B. A., & Watson, E. (2022). Evaluation in the time of crisis: Evidencing value at a center for teaching and learning during the Covid-19 pandemic. *International Journal for Academic Development*, 27(2), 135–147. doi: <https://doi.org/10.1080/1360144X.2022.2082437>

- Martin, J. (2019). Higher education as a complex adaptive system: considerations for leadership and scale. In E.E.R. Hartzler & R. Blair (Eds.), *Emerging issues in mathematics pathways: Case studies, scans of the field, and recommendations*, (pp. 57-64). Charles A. Dana Center at the University of Texas at Austin.  
[www.dcmathpathways.org/learn-about/emerging-issues-mathematics-pathways](http://www.dcmathpathways.org/learn-about/emerging-issues-mathematics-pathways)
- Martin, R. L. (2009). *The design of business: Why design thinking is the next competitive advantage*. Harvard Business Press.
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Sage.
- McCann, A. L. (2007). *The identification of factors influencing diffusion of an assessment innovation on a university campus*. [Doctoral dissertation, University of Nebraska-Lincoln].  
<https://www.proquest.com/openview/4846fc42ad38299e077c201332703b03/1?pq-origsite=gscholar&cbl=18750>
- McKay, T., & Shum, S. (2018). *architecting for learning analytics: Innovating for sustainable impact*. Educause.  
<https://er.educause.edu/articles/2018/3/architecting-for-learning-analytics-innovating-for-sustainable-impact>
- Mercer, J. (2007). The challenges of insider research in educational institutions: Wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education*, 33(1), 1-17. doi: 10.1080/03054980601094651

- Merriam, S. B. (1988). *Qualitative research and case study applications in education*. Jossey-Bass.
- Merriam, S. B., & Tisdell, E. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Michael M. Crow. (2021). *Wikiwand*. [https://www.wikiwand.com/en/michael m. crow](https://www.wikiwand.com/en/michael_m._crow)
- Mills, N. (2012). The corporatization of higher education. *Dissent*, 59(4), 6-9. doi: [10.1353/dss.2012.0087](https://doi.org/10.1353/dss.2012.0087)
- Millward, R. (2011). Public enterprise in the modern Western world: An historical analysis. *Annals of Public and Cooperative Economics*, 82(4), 375-398. doi: <https://doi.org/10.1111/j.1467-8292.2011.00447.x>
- Mitchell, M. (2011). *Complexity: A guided tour*. Oxford University Press.
- Mitchell, N. (2010). *The participant-researcher relationship in educational research* [Doctoral dissertation, University of Nottingham]. [http://eprints.nottingham.ac.uk/11357/1/nick\\_mitchell\\_2010.pdf](http://eprints.nottingham.ac.uk/11357/1/nick_mitchell_2010.pdf)
- Moore, M. G., & Kearsley, G. (1996). *Distance education: A systems view*. Wadsworth.
- Morphew, C. (2009). Conceptualizing change in the institutional diversity of U.S. colleges and universities. *Journal of Higher Education*, 80(3), 243–269. doi: <https://www.jstor.org/stable/25511108>
- Moustakas, C. E. (1994). *Phenomenological research methods*. Sage.
- National Center For Education Statistics. (2022). *Fast facts: Distance learning*. <https://nces.ed.gov/fastfacts/display.asp?id=80>
- Negroponte, N. (1996). *Being digital*. Vintage Books.



- Nelson, T., & Vicki, S. (2017). Addressing complex challenges through adaptive leadership: A promising approach to collaborative problem solving. *Journal of Leadership Education, 16*(4), 111–123. doi: 10.12806/V16/I4/T2
- Norman, A. A., & Yasin, N. M. (2009). An analysis of information systems security management: The hierarchical organizations vs. emergent organization. *International Conference for Internet Technology and Secured Transactions* (pp. 1-8). IEEE Publishing. doi: 10.1109/icitst.2009.5402551
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16*(1), 1-13. doi: 10.1177%2f1609406917733847
- Nworie, J. (2015). Institutionalization of teaching and learning gains in higher education. *Educational Technology, 55*(5), 21–28. <https://www.jstor.org/stable/4443040>
- Obel, B., & Snow, C. C. (2012). Editorial. *Journal of Organization Design, 1*(1), 1-2. doi: <https://doi.org/10.7146/jod.6352>
- Ouellett, M. L. (2010). Overview of faculty development: History and choices. In K. L. Gillespie, D. L. Robertson, & Associates (Eds.), *A guide to faculty development*, (pp. 3-20). Jossey-Bass.
- Owen, C. (2007). Design thinking: Notes on its nature and use. *Design Research Quarterly, 2*, 16-27. [https://www.researchgate.net/publication/283361054\\_Design\\_thinking\\_Notes\\_on\\_its\\_nature\\_and\\_use](https://www.researchgate.net/publication/283361054_Design_thinking_Notes_on_its_nature_and_use)

- Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Sciences Research*, 34(5, Pt 2), 1189-1208.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1089059/>
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (Fourth edition). SAGE.
- Pendleton-Jullian, A. M., & Brown, J. S. (2018). *Design unbound: Designing for emergence in a white-water world*. MIT Press.
- Pérez-Peña, R. (2014). Starbucks to provide free college education to thousands of workers. *The New York Times*.  
<https://www.nytimes.com/2014/06/16/us/starbucks-to-provide-free-college-education-to-thousands-of-workers.html>
- Perifanou, M., & Economides, A. A. (2022). The landscape of MOOC platforms worldwide. *International Review of Research in Open and Distributed Learning*, 23(3), 104–133. doi: <https://doi.org/10.19173/irrodl.v23i3.6294>
- Peterson, M., & Spencer, G. (1991). Understanding academic culture and climate. *New Directions For Institutional Research*, 17(4), 3-18. doi: 10.1002/ir.37019906803
- Pheatt, L. E. (2017). *The pursuit of profit or prestige: What the diffusion of MOOCs can tell us about disruptive innovation in U.S. higher education* [Doctoral dissertation, Columbia University]. doi: <https://doi.org/10.7916/D8WD4BV3>
- PLuS Alliance. (2021). *Global solutions with impact*. <https://www.plusalliance.org/>
- POD Network. (2018). *Defining what matters: Guidelines for comprehensive center for teaching and learning (CTL) evaluation*.

[https://podnetwork.org/content/uploads/pod\\_ctl\\_evaluation\\_guidelines\\_2018](https://podnetwork.org/content/uploads/pod_ctl_evaluation_guidelines_2018)

[.p](#)

POD Network. (2023). *Centers and programs*. <https://podnetwork.org/center/centers-for-teaching-and-technology/>

Polikoff, M. S., & Porter, A. C. (2014). Instructional alignment as a measure of teaching quality. *Educational Evaluation and Policy Analysis*, 36(4), 399-416.

<https://journals.sagepub.com/doi/full/10.3102/0162373714531851>

Polit, D. F., & Beck, C. T. (2012). *Nursing research: Generating and assessing evidence for nursing practice* (9th ed.) Lippincott, Williams & Wilkins.

Potter, J., & Devecchi, C. (2020). *Delivering educational change in higher education: a transformative approach for leaders and practitioners*. Routledge.

Powell, S., Olivier, B., & Yuan, L. (2015). Handling disruptive innovations in HE: Lessons from two contrasting case studies. *Research in Learning Technology*, 23(22404), 1-14. doi: 10.3402/Rlt.V23.22494

Puranam, P. (2012). A future for the science of organization design. *Journal of Organization Design*, 1(1):18–19. doi: 10.7146/Jod.6337

Quan, G. M., Corbo, J. C., Finkelstein, N. D., Pawlak, A., Falkenberg, K., Geanious, C., Ngai, C., Smith, C., Wise, S., Pilgrim, M. E., & Reinholz, D. L. (2019). Designing for institutional transformation: Six principles for department-level interventions.

*Physical Review Physics Education Research*, 15(1), 1-22. doi:

<https://doi.org/10.1103/PhysRevPhysEducRes.15.010141>

- Raman, R., Mandal, S., Das, P., Kaur, T., Sanjanasri, J. P., & Nedungadi, P. (2023, March 28). *University students as early adopters of ChatGPT: Innovation diffusion study*. Research Square preprint. doi: <https://doi.org/10.21203/rs.3.rs-2734142/v1>
- Razzouk, R., & Shute, V. (2012). What is design thinking and why is it important? *Review of Educational Research*, 82(3), 330-348. doi: 10.3102/0034654312457429
- Rethinking the future of higher education: Interview with ASU President Michael Crow. (2018, July 11). *Forbes, Workday*.  
<https://www.forbes.com/sites/workday/2018/07/11/rethinking-the-future-of-higher-education-interview-with-asu-president-michael-crow/>
- Roberts, L. (2019, January 10). Mark Brnovich targets ASU tax dodge: "Michael Crow has become the most powerful person in Arizona." *AZ Central*.  
<https://www.azcentral.com/story/opinion/op-ed/laurieroberts/2019/01/10/asu-michael-crow-target-mark-brnovich-lawsuit-tax-dodge/2539874002/>
- Rogers, E M., & Shoemaker, F. F. (1971). *Communication of innovations: A cross-cultural approach* (2nd ed.). Free Press.
- Roopnarinesingh, U., & Whiteman, A. S. (2020). Tracing the evolution of distance education and its impact on graduate health administration programs. *Reports on Global Health Research*, 3(2), 1-8. doi: 10.29011/rghr-118.100018
- Sammut-Bonnici, T. (2015). Complex adaptive systems. In L. C. Cary, L. C. (Ed.), *Wiley encyclopedia of management* (pp. 1–3). John Wiley & Sons. doi: 10.1002/9781118785317.weom120209.

- Schneijderberg, C., & Merkator, N. (2013). The new higher education professionals. In B. M. Kehm & U. Teichler (Eds.), *The academic profession in Europe: New tasks and new challenges* (pp. 53–92). Springer Netherlands. doi: 10.1007/978-94-007-4614-5\_5
- Schroeder, C. M. (2012). *Coming in from the margins: Faculty development's emerging organizational development role in institutional change*. Stylus Publishing.
- Schumann, D. W., Peters, J., & Olsen, T. (2013). Cocreating value in teaching and learning centers. *New Directions for Teaching and Learning*, 2013(133), 21–32. doi: <https://doi.org/10.1002/ti.20043>
- Scott, J. (1990). *A matter of record: Documentary sources in social research*. Polity Press, B. Blackwell.
- Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*. Sage.
- Selingo, J. (2018). *The rise of the chief innovation officer in higher education*. <https://info.entangled.solutions/the-rise-of-the-chief-innovation-officer-in-higher-education/>
- Serdyukov, P. (2017). Innovation in education: What works, what doesn't, and what to do about it? *Journal of Research in Innovative Teaching & Learning*, 10(1), 4–33. doi: 10.1108/jrit-10-2016-0007
- Shah, D., Pickard, L., & Ma, R. (2022). *Massive list Of MOOC platforms around the world in 2022. The Report By Class Central*. <https://www.classcentral.com/report/mooc-platforms/>

- Shekedi, A. (2005). *Multiple case narrative: A qualitative approach to studying multiple populations*. John Benjamins.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education For Information*, 22(2), 63-75. doi: 10.3233/Efi-2004-22201
- Shepard, N. (2014). Starbucks offers a free college education to thousands of employees. *Statesboro [Ga] Herald*.  
<https://www.statesboroherald.com/local/associated-press/starbucks-offers-free-college-education-to-thousands-of-employees/>
- Shi, Y. (2021, January 29-31). Research of the development of distance learning under the COVID-19 circumstances based on video conferencing software and MOOCs [Paper presentation]. 2021 2nd International Conference on Education, Knowledge, and Information Management (ICEKIM), Xiamen, China. IIEE  
<https://ieeexplore.ieee.org/abstract/document/9479573/authors>
- Shirky, C. (2014). *The end of higher education's golden age*.  
<http://shirky.com/weblog/2014/01/there-isnt-enough-money-to-keep-educating-adults-the-way-were-doing-it/>
- Simmons, N. (2018). Critical incident method. In M. Allen (Ed.), *Sage encyclopedia of communication research methods* (pp. 300-302). Sage. doi: 10.4135/9781483381411
- Simon, H. A. (1988). The science of design: Creating the artificial. *Design Issues*, 4(1/2), 67-82. doi: 10.2307/1511391
- Simon, H. A. (1996). *The sciences of the artificial* (3rd ed.). MIT Press.

- Simon, H. A. (1997). *Administrative behavior: A study of decision-making processes in administrative organizations* (4th ed.). Free Press.
- Simonson, M., & Schlosser, L. A. (2009). *Distance education: Definition and glossary of terms* (3rd ed.). Information Age Publishing.
- Simonson, M., Schlosser, C., & Orellana, A. (2011). Distance education research: A review of the literature. *Journal of Computing in Higher Education*, 23, 124–142. doi: <https://doi.org/10.1007/s12528-011-9045-8>
- Singer, S. R. (2002). Learning and teaching centers: Hubs of educational reform. *New Directions for Higher Education*, 2002(119), 59–64. doi: <https://doi.org/10.1002/he.71>
- Skinner, B. (1974). Designing higher education. *Daedalus*, 103(4), 196-202. <http://www.jstor.org/stable/20024262>
- Smalley, A. (2020). Higher education responses to coronavirus (COVID-19). *National Conference of State Legislatures*. <https://www.ncsl.org/research/education/higher-education-responses-to-coronavirus-covid-19.aspx>
- Smith, B. D. (2011). *A case study of organizational change: college restructuring in response to mandated department eliminations* [Doctoral dissertation, University of Las Vegas Nevada]. Proquest Dissertations & Theses Global Database.
- Sorcinelli, M. D. (2002). Ten principles of good practice in creating and sustaining teaching and learning centers. In K. H. Gillespie (Ed.), *A guide to faculty*

- development: Practical advice, examples, and resources* (pp. 9-23). Anker Publishing.
- Stake, R. E. (1995). *The art of case study research*. Sage.
- Starbucks College Achievement Plan. *ASU Starbucks*. Accessed June 2, 2021.  
<https://starbucks.asu.edu/>
- Stockley, D., & Stockley, D. (2004). Strategic planning for technological innovation in Canadian post-secondary education. *Canadian Journal of Learning and Technology* [*La Revue Canadienne De L'apprentissage et de la Technologie*], 30(2), 1-14. <https://www.learntechlib.org/p/43068/>
- Strauss, A. (1998). *Qualitative analysis for social scientists*. Cambridge University Press.
- Stuckenbruck, L. C. (1979). The matrix organization. *Project Management Quarterly*, 10(3), 21-33.
- Sunal, C.S., & Wright, V.H. (2012). Online learning. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 1-3). Springer. doi: [https://doi.org/10.1007/978-1-4419-1428-6\\_388](https://doi.org/10.1007/978-1-4419-1428-6_388)
- Teece, D.J., & Linden, G. (2017). Business models, value capture, and the digital enterprise. *Journal of Organizational Design*, 6, Article 8. doi: <https://doi.org/10.1186/s41469-017-0018-x>
- Tharchen, T., Garud, R., & Henn, R. L. (2020). Design as an interactive boundary object. *Journal of Organizational Design*, 9, Article 21. doi: <https://doi.org/10.1186/S41469-020-00085-W>



- Thomas, L. (2019). *U-M's Schlissel announces plan to grow academic innovation*.  
<https://ai.umich.edu/press-release/u-ms-schlissel-announces-plan-to-grow-academic-innovation/>
- Tiernan, S. (1993). Innovations in organisational structure. *Irish Journal of Management*, 14(2), 57.  
<http://login.ezproxy1.lib.asu.edu/login?url=https://www.proquest.com/sc-holarly-journals/innovations-organisational-structure/docview/207630242/se-2>
- Tierney, W. G. (1991). Organizational culture in higher education: Defining the essentials. In M. Peterson (Ed.), *Ashe reader on organization and governance*, (pp. 126-139). Ginn Press.
- Tierney, W. G., & Lanford, M. (2016). Conceptualizing innovation in higher education. *Higher Education: Handbook of Theory and Research*, 31, 1–40. doi: 10.1007/978-3-319-26829-3\_1
- Tuli, F. (2010). The basis of distinction between qualitative and quantitative research in social science: Reflection on ontological, epistemological, and methodological perspectives. *Ethiopian Journal of Education And Sciences*, 6(1), 97-108. doi: 10.4314/Ejesc.V6i1.65384
- Unluer, S. (2012). Being an insider researcher while conducting case study research. *Qualitative Report*, 17(29), Article 2. <https://hdl.handle.net/11421/10871>
- Van De Ven, A. H., Ganco, M., & Hinings, C. B. (2013). Returning to the frontier of contingency theory of organizational and institutional designs. *Academy of*

- Management Annals*, 7(1),393–440. doi:  
<https://doi.org/10.1080/19416520.2013.774981>
- Van De Ven, A., & Poole, M. (1995). Explaining development and change in organizations. *Academy Of Management Review*, 20(3), 510-540.  
<http://www.istor.org/stable/258786>
- Vargo, S. L., Maglio, P. P., & Akaka. M. A. (2008). On value and value co-creation: A service systems and service logic Perspective. *European Management Journal*, 26, 145–152. doi: <https://doi.org/10.1016/j.emj.2008.04.003>
- Venable, M. A. (2022). *2022 Online education trends report*.  
<https://www.bestcolleges.com/research/annual-trends-in-online-education/>
- Walker, M., & Loots, S. (2018). Transformative change in higher education through participatory action research: A capabilities analysis. *Educational Action Research*, 26(1), 166–181. doi:10.1080/09650792.2017.1286605
- Warner, J. (2015). ASU is the "New American University"—It's terrifying. *Inside Higher Education*. <https://www.insidehighered.com/blogs/just-visiting/asu-new-american-university-its-terrifying>
- Webster, R. (2005, May 14). *E-Learning and organizational change: A change management case study*. In *Proceedings of the 2005 conference towards sustainable and scalable educational innovations informed by the learning sciences: sharing good practices of research, experimentation, and innovation*. (pp. 926-929). IOS Press.
- Weick, K. E. (1995). *Sensemaking in organizations*. Sage.

- Wheeler, S. (2012). Distance learning. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 1018-1020). Springer. doi: [https://doi.org/10.1007/978-1-4419-1428-6\\_432](https://doi.org/10.1007/978-1-4419-1428-6_432)
- White, C. C. (2016). *A single site study on the implementation of change in higher education* [Doctoral dissertation, The University of Alabama]. Proquest Dissertations & Thesis Global.
- Wilcox, K., Sarma, S., & Lippel, P. (2016). *Online education: A catalyst for higher education reforms*. Massachusetts Institute of Technology Online Education Policy Initiative. <https://jwel.mit.edu/assets/document/online-education-catalyst-higher-education-reforms>
- Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review*, 15(1), 45-55. <http://americanscholarspress.us/journals/lmr/pdf/lmr-1-2019/lmr-v15n1art4.pdf>
- Wise, S. B., Ngai, C., Corbo, J. C., Gammon, M. A., Rivard, J. K., & Smith, C. E. (2022). Toward institutionalizing successful innovations in the academy. *To Improve the Academy*, 41(1), 151-184. doi: <https://doi.org/10.3998/tia.481>
- Wohlin, C., Kalinowski, M., Romero Felizardo, K., & Mendes, E. (2022). Successful combination of database search and snowballing for identification of primary studies in systematic literature studies. *Information and Software Technology*, 147, Article 106908. doi: <https://doi.org/10.1016/j.infsof.2022.106908>

- Woolsey, L. K. (1986). The critical incident technique: An innovative qualitative method of research. *Canadian Journal of Counselling and Psychotherapy*, 20(4), 242-254. <https://cjc-rcc.ucalgary.ca/article/view/59733>.
- Wright, M. C., Lohe, D. R., & Little, D. (2018). The role of a center for teaching and learning in a de-centered educational world. *Change: The Magazine Of Higher Learning*, 50(6), 38–44. doi: <https://doi.org/10.1080/00091383.2018.1540826>
- Yazan, B. (2015). Three Approaches to Case Study Methods in Education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), 134-152. <https://doi.org/10.46743/2160-3715/2015.2102>
- Yin, R. K. (2018). *Case study research and applications: Design and methods (6th ed.)*. Sage.
- Young, J. (2017). What do you call it when colleges turn their research powers on their own practices? *EdSurge News*. <https://www.edsurge.com/news/2017-01-19-what-do-you-call-it-when-colleges-turn-their-research-powers-on-their-own-practices>
- Zhang, S., Che, S., Nan, D., & Kim, J. H. (2022). MOOCs as a research agenda: Changes over time. *International Review of Research in Open and Distributed Learning*, 23(4), 193–210. doi: <https://doi.org/10.19173/irrodl.v23i4.6361>

## APPENDICES

### Appendix A: Search Strategies

For this literature review, it was important to identify critical themes and terms and develop an appropriate systematic search strategy. The search focused on scholarly journal articles and book chapters in English for 2000 to 2022; the search combined carefully chosen keywords in the title or abstract. Table 23 displays the guiding themes and key search terms with the total number of publications by keyword.

**Table 23:** *Overview of the Literature Review*

Themes	Keywords	Number of Publications
Design Studies	Design in Organizations (39) Design Thinking and Higher Education (264) Organizational Design and Higher Education (36) Higher Education Policy (2,122) Service Design and Higher Education (75) Higher Education Redesign (444)	2,980
Distance Education	Distance Education and Higher Education (2,762) Innovation and Distance Education (855) Center for Teaching and Learning (85) Learning Innovation Department (31) Distributed Education (97) Learning Development and Higher Education (151) Online Education and Higher Education (1,616) MOOC (6,563)	12,160

Themes	Keywords	Number of Publications
Organizations	Change in Higher Education (766) Change and Complexity and Higher Education (655) Higher Education Culture (43) Higher Education Leadership (317) Higher Education Management (379) Transformational Change and Higher Education (73) Mobil Model for Transformational Change (15)	2,248

*Note:* Researcher-created.

The following databases were explored: DOI.org, ERIC, Google Scholar, Johns Hopkins University Press, Jossey-Bass, JSTOR, Library of Congress, Open WorldCat, Oxford University Press, POD Network, Proquest, ResearchGate, SAGE Journals, Scopus, Springer Open, Springer Link, Taylor and Francis, and Wiley Online Library. As previously started, search parameters were scholarly journal articles and academic books from 2000 to 2022 in English. This range was chosen for the following reason: From approximately 2000, as technology and the Internet developed exponentially. It is widely recognized that U.S. universities began to embrace the need for learning innovation, and the growth in online education began to take shape from this date as a primary catalyst for change.

Search criteria included peer-reviewed journals, qualitative and quantitative studies, discussion articles, English only, and consideration of U.S. and international universities. “Seminal” works earlier than the years specified, such as those by theorists,

were also included for relevant topic areas (e.g., change, design, culture, organizations, higher education, and distance education). Exclusion criteria were as follows:

Publication years other than those specified, content areas outside of those listed, conference papers, and website articles not part of a peer-reviewed journal, languages other than English. Table 24 summarizes the inclusion and exclusion criteria.

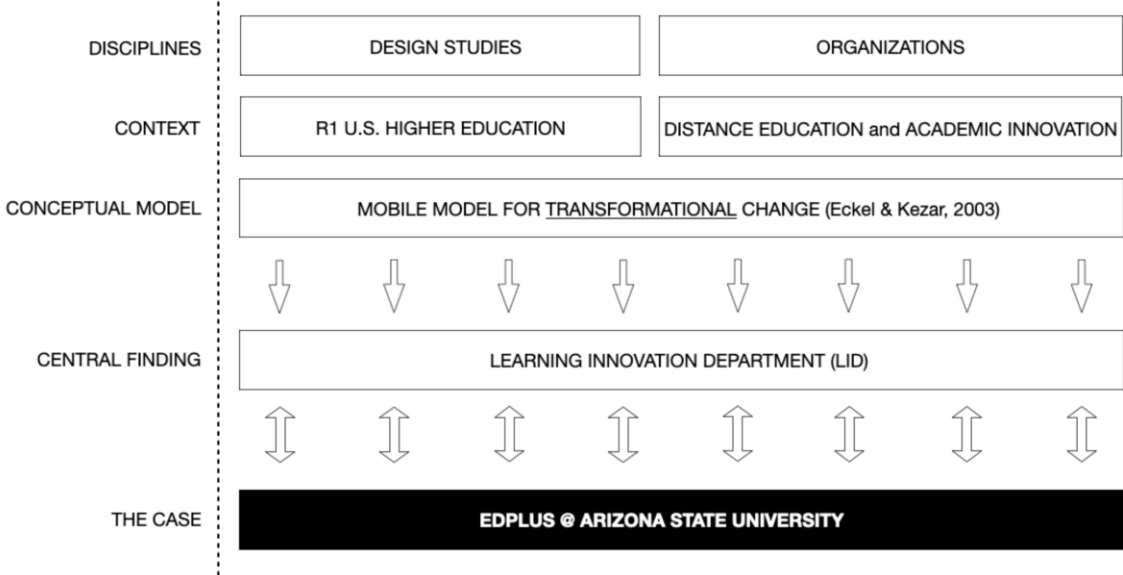
**Table 24:** *Criteria for Literature*

Inclusion Criteria	Exclusion Criteria
Scholarly articles, journals, and conference papers.	Non-scholarly journals and articles
Qualitative and quantitative studies 2000-2022	Journal articles outside of 2000-2022
English only	Publications in other languages
Universities	Databases outside of those listed
Seminal books and articles for theory	Higher education only
Higher education domain	Website articles, blogs, and videos
Online web-based	Theoretical or conceptual papers

*Note.* Researcher-created

An initial search of the Scopus database for these keywords returned 17,388 publications. Applying the inclusion and exclusion criteria, the researcher deemed 85 publications as relevant to the study. The publications in this refined sample were then analyzed to select those most applicable to the overarching research question. A visual map of the research themes is displayed in Figure 13.

Figure 13: Visual Map of Themes for Literature Review



Note. Researcher-created.



## **Appendix B: Overview of Participants**

The purposeful sample, as discussed in Chapter 3, was used to capture the change management experiences and approaches of top leaders who were involved with EdPlus at Arizona State University. Therefore, the sample consisted of top university leaders involved in the management of transformation change and left or still serve the institution. The leaders were sampled from the ASU executive team, the EdPlus management committee, ASU faculty who were involved in or taught online at ASU, staff who either participated or observed the transformation process at EdPlus and ASU, and external advisors. A total of 35 were invited, of which 28 agreed to participate; some declined, and others did not respond.

The composition of the 28 participants met the criteria for a single narrative case study (Yin, 2018). Data saturation was reached not by the number of interviewees but by the depth of the data provided in the process of interviewing (Creswell & Poth, 2018).

The demographic composition of the 28 participants is as follows. Twenty-three were over 50 years of age and 15 were below 50 years of age. Among them, 8 were female, and 20 were male. Although length of service to ASU was not a criterion for participation, the shortest amount of service was 5 years, and the average was 21. Other demographic profiles of the participants included position held and tenure in office.

The following steps were taken as safeguards for the anonymity of the participants: (a) Each participant was systematically assigned a pseudonym to preserve

confidentiality, and (b) university positions were not disclosed so that the participants could not be identified within their respective roles. Although anonymity was the goal, it was not guaranteed, given the public roles of the participants, and was explained and agreed to by the participants as part of the consent procedures. The participants' demographic characteristics and interview details are presented in Appendix C, Table 26.

**Appendix C: Data Source Tables**

Appendix C presents the data source tables. These include the demographic characteristics of the participants, Table 25, and the sources of documents analyzed, Table 26.

**Table 25: Participants’ Demographics (N = 28, 1 participant interviewed twice)**

Interview Number	Name	Interview Date	Gender	*Type of Service	Number of Institutions of Work Service	Years of ASU Service	Profile
1	Adam	02/04/22	M	E	N/A	5	Adam is an experienced education entrepreneur, having founded global enterprises which under his leadership served over a million students across 23 countries. He cofounded an education venture fund, is a leading investor in various industries, and has been instrumental in launching numerous educational companies and initiatives. In addition to his business pursuits, Adam has been involved in community service and sitting on boards of education technology firms and nonprofit organizations.
2	Alice	01/25/22	F	A, S	1	36	Alice served as vice-provost for academic planning and budget at a public university. She played a central role in the academic, enrollment, and budgeting aspects of the institution. Previously, Alice was integral to the founding and development of ASU's Polytechnic campus, where she held various planning and budget roles. Before her tenure at the university, she worked in a state-level management consulting initiative for government agencies.
3	Amy	01/18/2022	F	A, F	4	7	Amy is a senior administrator overseeing a large academic unit in education. Before her current position, she held an administrative role at another educational institution in the Midwest. Amy is passionate about reshaping the educational workforce and innovating teacher and leadership training. She collaborates with educational organizations both nationally and globally, focusing on systemic changes. With expertise in various educational fields, Amy has published several scholarly articles. She also manages projects funded by foundations and has a long history of community engagement, partnering with urban schools and various community organizations. She also brings 15 years of experience from the business sector, including roles in sales, management, and human resources.
4	Andrew	06/14/2021	M	A, F, E	1	10	Andrew is an Assistant Professor and serves as an advisor to the institution's leader for innovation. His research focuses on institutional design concerning knowledge-intensive sectors, and he's an expert in organization theory and public policy. Having contributed to several academic journals and media outlets, Andrew plays a role in overseeing institutional projects and policy work.
5	Barry	10/27/2021	M	A, F	1	44	Barry served as the vice-provost for student success and is a professor in the Economics Department, focusing on labor economics and productivity. He began his academic tenure in the late 1970s, with visiting positions at international institutions. Before his academic journey, Barry held important roles as an economist in government agencies and has degrees from in economics and management science.

## Appendices

Interview Number	Name	Interview Date	Gender	*Type of Service	Number of Institutions of Work Service	Years of ASU Service	Profile
6	Bob	01/12/2022	M	A, F	6	5	Bob is the dean of Humanities at a public research university. He previously worked in Washington, D.C., where he led the English Department and started a study institute. He co-lead an environmental humanities organization and has written extensively on cultural phenomena, winning awards for his work. At his current university, Bob focuses on environmental topics, broad public engagement, and promotion of diversity in academia.
7	Brad	01/12/2022	M	A, F	5	21	Brad is an educator and leader who currently serves as the president of a major American metropolitan research university. He holds a PhD in Public Administration. Under his guidance, the university has become recognized for its innovation, inclusivity, and societal impact. The institution has established numerous new multidisciplinary schools and research centers, especially focusing on sustainability, biomedicine, and security. Enrollment, research, and university prestige have all increased during his tenure. Brad previously held a leadership position at an Ivy League university and has advised various U.S. government departments and international bodies on knowledge and technology.
8	Brian	01/24/2022	M	F	3	40	Brian is a Professor of Child Development at a university and directs two major research centers there. His research investigates children's school adjustment, peer relationships, and emotional well-being, including hope and empathy. Brian is heavily involved in projects aiming to understand and bolster children's interpersonal relationships. Additionally, he plays a senior leadership role in the Children's Equity Project.
9	Charles	01/26/2022	M	A, F	4	5	Charles is an experienced technologist with over 25 years in digital work. He currently serves as the chief information officer at a university, directing its technological infrastructure and services. Previously, he cofounded a non-profit focused on digital innovation for public benefit and held a key position at a university in the Northeast, championing tech-driven initiatives. Charles also serves on many non-profit and private boards and does community work.
10	Chloe	12/7/2021	F	A, F	1	31	Chloe is the executive vice president and university provost at a university, having previously served as the dean of natural sciences, where she oversaw academic growth and groundbreaking research in various scientific domains. In her tenure as a Foundation professor, Chloe spearheaded research focused on culturally informed health models, aiming to bridge health disparities in marginalized communities. Chloe has earned numerous accolades, including distinguished career awards from top professional associations, and listing as one of the Most Influential Women in her region.
11	Claire	02/02/2022	F	S	1	22	Claire has over 20 years of experience at a university, aiding faculty in instructional technology, online program management, and curriculum development. She has held positions in various academic departments, including design, technology, and liberal arts. Currently, Claire guides the implementation of learning technology and oversees the strategic planning of digital initiatives.
12	Cynthia	06/03/2021	F	S	1	35	Cynthia serves as the senior advisor to the Dean and CEO and focuses on development a culture that spurs innovation, prioritizes employee well-being, and underscores the importance of meeting organizational goals. With a rich history in higher education, she was appointed her institution's inaugural chief culture officer, emphasizing values that guide teams toward

Interview Number	Name	Interview Date	Gender	*Type of Service	Number of Institutions of Work Service	Years of ASU Service	Profile
							excellence.
13	Daniel	01/07/2022	M	A, F	3	37	Daniel is the dean of a prominent college within a university and holds a position in the School of Politics and Global Studies. He also serves as vice-provost for strategy. Having joined the university in 1986, he has an academic background from the University of Iowa. Throughout his career, he has published numerous articles and coauthored several books. Some of his works have been supported by the National Science Foundation.
14	Dara	01/12/2022	M	A, F	2	15	Dara is an associate dean focused on student and academic programs at a university. He handles student-related matters, including recruitment, retention, academic advising, and program development. Additionally, as a sociologist, his research centers on academic achievement and student success. Dara also holds a clinical professor position in a school dedicated to social and family dynamics. Before assuming his current role, Dara was affiliated with a research university in Washington state holding both administrative and faculty positions. He is an active member of several professional associations in sociology and education.
15	Derrick	03/15/2022	M	A, F	4	17	Derrick is the dean of natural sciences at a university, with a BA from a renowned East Coast institution and a PhD in Biology from a prominent technological institute. Following postdoctoral training in London, he held faculty positions in Pennsylvania and played a role in launching a medical college in Arizona. Derrick is deeply committed to development an inclusive academic environment.
16	Dorothy	01/04/2022	F	A, F, E	7	3	Dorothy is an experienced leader in education and digital media, focusing on transformative technologies. In 2023, she took on the role of Interim President of a college within a major city's university system. Throughout her diverse career, Dorothy has held prominent academic positions, multiple tech startups, served on various corporate boards, and authored several books. As an educator and strategist, she's been involved in developing partnerships, initiatives, and advisory roles across different universities and organizations. Her academic credentials include degrees from several institutions, including a PhD from a where she was a distinguished fellow.
17	Eamon	02/24/2022	M	A, F	3	19	Eamon has a background in behavior and population genetics, with a research emphasis on the evolution of complex social behaviors. He previously served in senior administrative roles at a research university and throughout his career held several leadership roles, including the founding director of a school of life sciences and faculty member of a noted Californian university. He has contributed extensively to the scientific community, with over 250 publications and several books. Eamon has been recognized as a top publishing scientist and is internationally honored with multiple awards and fellowships from prestigious institutions across the globe.
18	Edward	01/14/2022	M	A, F	1	37	Edward is a senior leader at a major educational institution, overseeing digital education and initiatives aimed at innovative learning. Under his leadership, the online student base grew, and the institution introduced numerous online programs with advanced technologies. He has been critical in building several global partnerships, creating opportunities for nontraditional students worldwide, and collaborating with corporations to provide education benefits. Edward has also played an important role in global educational initiatives aimed at increasing access to quality education in various regions. He has a background in philosophy and business, with an undergraduate degree from an

## Appendices

Interview Number	Name	Interview Date	Gender	*Type of Service	Number of Institutions of Work Service	Years of ASU Service	Profile
							institution in the Southwest and a doctorate from a university in the Midwest.
19	Elle	01/14/2022	F	S	2	17	Elle is the associate vice-president and plays a role in supporting their online platform. She focuses on developing and implementing online programs, with an emphasis on maintaining quality and supporting student success. Elle's expertise lies in improving business processes and leading diverse teams in system development. With over two decades of experience in higher education and technology, she consistently seeks innovative solutions to enhance student engagement. Elle holds a degree in business administration and a master's in leadership.
20	Erick	01/11/2022	M	A, E	2	21	Erick serves as senior vice president of university affairs and is the chief of staff at a public research university. He plays a critical role in implementing strategic objectives for the institution's top leadership and collaborates across various university departments for multiunit initiatives. His responsibilities include liaising with public affairs, policy affairs, global engagement, and corporate relations. With a background in law, Erick has experience as a corporate counsel and public affairs at different governmental levels. He holds a BA and JD.
21	Fabio	01/05/2022	M	S, E	2	13	Fabio serves as the chief academic technology officer for a major educational initiative and is also a professor of practice in the computing department at a prominent university. He has been instrumental in advancing new approaches to higher education, merging data analytics, social networking, and evidence-based teaching. Before his present roles, Fabio held an important role at a leading education publishing company. In this position, he facilitated strategic partnerships and spearheaded innovative educational technologies, earning him recognition as a technology innovator in higher education.
22	Fin	01/05/2022	M	A, F	2	35	Fin is a provost emeritus and university professor where he played a role in leading the institution's academic activities, including overseeing all academic units, strategic planning, and international academic efforts. Previously he held various administrative positions at the same university and initiated his career outside of the U.S., founding a multidisciplinary research institute and leading an academic program. Recognized for his achievements by several educational non-profit policy entities, Fin has also published many works focusing on the connection between leisure behavior and the psychological health of older adults.
23	Floyd	01/25/2022	M	A, F,	5	26	Floyd has a passion for understanding how people learn to write and how teachers can facilitate this process. His research spans multiple disciplines and focuses on collaborative writing, audience dynamics, and various writing theories. Having coauthored the majority of his 300 publications, Floyd places value on collaboration, especially with students. He is a professor of English at a university and has played important roles in redesigning online courses and leading special projects.
24	Francis	02/15/2022	M	A, F	4	13	Francis is the vice provost at a university and leads the institution's College of Interdisciplinary Arts and Sciences. Since 2017, he has driven enrollment growth, secured \$5M in NSF funding for STEM transfer student success, and lead the development of various innovative academic programs. Apart from his administrative roles, Francis is an educator in microbiology and other foundational courses.

Interview Number	Name	Interview Date	Gender	*Type of Service	Number of Institutions of Work Service	Years of ASU Service	Profile
25	Frank	01/18/2022	M	F	3	20	Frank serves as a special advisor to the president at a university, focusing on sustainable urbanism and educational advancements. At the university, he also directs a unit that nurtures partnerships between the university and the surrounding communities. He has played an important role in urban university settings and conceptualized award-winning campuses. With a background in design and architecture, Frank has held leadership roles at multiple educational institutions and has affiliations with renowned architectural and urban development organizations.
26	Gary	12/4/2021	M	S, E	1	30	Gary is a senior instructional design and new media professional who worked on distance learning at ASU over a thirty-year period. Gary is trained in instructional systems.
27	George	11/9/2021	M	A, S	2	21	George was appointed as senior vice president and university planner in 2004, overseeing program, facility, and financial planning across multiple campuses of a university toward realization of the institution's future vision. Before this role, he served for 24 years at another university, where he held positions, managing areas such as space, academic budgeting, enrollment, and information technology.
28	Greg	01/6/2022	M	A, F, E	1	12	Greg is a professor of practice at a university and currently presides over a major edtech startup. He previously spearheaded a revenue-generating model for a university, where he oversaw various functions, such as fundraising, research, and real estate transactions and leading a team that secured substantial investments for the institution. Before his affiliation with the university, Greg founded a successful research and technology consulting firm and worked for a time at Syracuse University. He has an extensive educational background, including a doctorate in public administration focusing on technology and information policy.

*\*Type of service:* A: Administrator, E: External Advisor; F: Faculty; S: Staff.

*Note.* Average years of ASU work service, approximately 21.

**Table 26: Documents Analyzed**

Document Number	Document Name	Type of Document	Creation Date	Summary	Link
1	FedEx, PluS Alliance, and Pearson	EMC Report	04/13/2016	Discussions on existing partnerships with UNSW and Kings college as part of the PluS Alliance, and Pearson.	Confidential
2	Micromasters	EMC Report	04/25/2016	Discussion on the Micromasters Design in partnership with EdX.	Confidential
3	Global freshman academy (GFA)	EMC Report	05/09/2016	Review of progress and goals related to the Global Freshman Academy (GFA) in partnership with EdX.	Confidential
4	Confidential	EMC Report	05/31/2016	Confidential	Confidential
5	Confidential	EMC Report	07/25/2016	Confidential	Confidential
6	Action lab and ASU online headcount	EMC Report	08/10/2016	Discussion on setting up and advancing the EdPlus Action Lab which is dedicated to efficacy research around ASU Online and EdTech experiments.	Confidential
7	Laureate and Asia society	EMC Report	08/24/2016	Partnership review around Asia Society and Laureate	Confidential
8	Laureate and PLuS alliance	EMC Report	09/30/2016	Partnerships discussion around Laureate and PLuS Alliance	Confidential
9	People and functional areas	EMC Report	10/14/2016	Review of EdPlus Organizational design and leadership.	Confidential
10	Education for humanity and engineering	EMC Report	10/27/2016	Review and design session around a new Education for Humanity team and building online engineering programs.	Confidential
11	EdPlus retreat recap and premium messaging	EMC Report	12/21/2016	Recap from EdPlus leadership retreat and discussion around ASU Online premium branding.	Confidential
12	Pearson and EdX	EMC Report	01/18/2017	Partnership discussion about Pearson and EdX	Confidential
13	Purdue global and premium brand	EMC Report	05/04/2017	Partnership discussion about Purdue Global and ASU Online branding	Confidential
14	Product demonstrations	EMC Report	09/07/2017	New Skunkworks product demonstrations	Confidential
15	FedEx and open scale courseware	EMC Report	12/18/2017	Discussion around partnerships and open scale learning	Confidential
16	Confidential	EMC Report	02/06/2018	Confidential	Confidential
17	Open-scale and continuing and professional education	EMC Report	03/18/2018	Discussion around non-credit learning	Confidential
18	Confidential	EMC Report	04/27/2018	Confidential	Confidential
19	Confidential	EMC Report	06/18/2018	Confidential	Confidential
20	New ASU online degrees and Firecake	EMC Report	08/18/2018	Discussion around new online degrees to focus on for new development.	Confidential
21	Confidential	EMC Report	09/04/2018	Confidential	Confidential
22	Uber	EMC Report	10/05/2018	Review of the new partnership with Uber	Confidential



Document Number	Document Name	Type of Document	Creation Date	Summary	Link
23	Uber and project attainment / RISE	EMC Report	11/02/2018	Review of the new partnership with Uber	Confidential
24	Marketing pilots	EMC Report	12/03/2018	Discussion of new outreach efforts	Confidential
25	Communication plans and biochemistry	EMC Report	01/31/2019	Discussion around the design and development of Biochemistry	Confidential
26	Confidential	EMC Report	03/04/2019	Confidential	Confidential
27	Uber and Pearson	EMC Report	04/04/2019	Partnership discussion around Uber and Pearson	Confidential
28	InStride and Neo/Ogilvy	EMC Report	05/02/2019	Discussion around InStride, a new organization built to expand education as a benefit program in partnership with TPG Rise fund.	Confidential
29	OPM and Universal Learner	EMC Report	08/26/2019	Review of the OPM space and definition of the Universal Learning model	Confidential
30	Marketing campaigns	EMC Report	09/27/2019	Outreach discussion	Confidential
31	Consulting and learning enterprise	EMC Report	10/31/2019	Review and launch of Learning Enterprise model	Confidential
32	InStride, Uber and Pearson	EMC Report	01/04/2020	Partnership discussions around InStride, Uber and Pearson	Confidential
33	New ASU online programs and pricing	EMC Report	05/22/2020	Discussion around new degrees for ASU Online.	Confidential
34	Earned Admissions and Innovation Award	EMC Report	08/22/2020	Review of new earned admission category for GFA and ULC model providing a flexible admission path into the university.	Confidential
35	ASU, Pearson and COVID	EMC Report	08/27/2020	Discuss the response to COVID	Confidential
36	Confidential	EMC Report	10/23/2020	Confidential	Confidential
37	Math and Computer Science Academy (MACS)	EMC Report	11/30/2020	Review of R&D efforts in math and computer science.	Confidential
38	Readiness assessment	EMC Report	02/10/2021	Discussion on work being done with other universities on their readiness to chance through digital teaching and learning efforts.	Confidential
39	Confidential	EMC Report	03/26/2021	Confidential	Confidential
40	Magic Slides	EMC Report	04/21/2021	Discussion of EMC process and EdPlus governance.	Confidential
41	ASU Online retention	EMC Report	05/26/2021	Review of ASU Online retention and persistence strategies	Confidential
42	Confidential	EMC Report	08/17/2021	Confidential	Confidential
43	Confidential	EMC Report	09/13/2021	Confidential	Confidential
44	CSU and marketing playbook	EMC Report	10/18/2021	Confidential	Confidential
45	Confidential	EMC Report	12/21/2021	Confidential	Confidential

Document Number	Document Name	Type of Document	Creation Date	Summary	Link
46	Confidential	EMC Report	01/20/2022	Confidential	Confidential
47	MACS Academy and Cambridge University	EMC Report	03/18/2022	Discussion around Math and Computer Science and partnership with Cambridge University Press	Confidential
48	Dr. Crow Inauguration Speech	Speech	01/11/2002	Speech and plans from Dr. Crow's first speech and Presentation as ASU President.	<a href="https://www.youtube.com/watch?v=TwPr40WiNQ0">https://www.youtube.com/watch?v=TwPr40WiNQ0</a>
49	University OFR Report 2018	Presentation	01/25/2018	ASU financial report and business plan presented to the Arizona Board of Regents, the ASU governing body.	<a href="https://ofr.azregents.edu/wp-content/uploads/2018/01/ASU-OFR-Business-Plan-Update-February-2018-REVISED-SUBMITTED.pdf">https://ofr.azregents.edu/wp-content/uploads/2018/01/ASU-OFR-Business-Plan-Update-February-2018-REVISED-SUBMITTED.pdf</a>
50	University ABOR State of the Union	Presentation	02/09/2023	Presentation by Dr. Crow and the ASU Executive Committee to the ASU Board of Regents – ASU'	<a href="https://president.asu.edu/read/state-of-the-asu-public-enterprise-and-arizona-state-university">https://president.asu.edu/read/state-of-the-asu-public-enterprise-and-arizona-state-university</a>
51	Study Hall Presidents Award for Innovation	Award Poster with Participants	01/01/2021	Award with participants names for Study Hall.	<a href="https://cfo.asu.edu/presidents-awards">https://cfo.asu.edu/presidents-awards</a>
52	Starbucks Presidents Award for Innovation	Award Poster with Participants	01/01/2020	Award with participants names for the Starbucks College Achievement Plan partnership and program.	<a href="https://cfo.asu.edu/presidents-awards">https://cfo.asu.edu/presidents-awards</a>
53	Global Freshman Academy Presidents Award for Innovation	Award Poster with Participants	01/01/2019	Award with participants names for the Global Freshman Academy.	<a href="https://cfo.asu.edu/presidents-awards">https://cfo.asu.edu/presidents-awards</a>
54	EdPlus Story Deck	Presentation	01/01/2024	Full presentation of the EdPlus Story presented to visitor to ASU.	Confidential
55	Arizona Board of Regents celebrates President Crow's first 20 years at ASU	Blog Post	08/29/2022	Michael M. Crow celebrated his 20th anniversary as ASU President with a special event hosted by the Arizona Board of Regents. He was honored with the title of Regents Distinguished President and a unique medallion symbolizing his contributions to the university and Arizona. The celebration included tributes from colleagues, gifts from other Arizona universities, and a poem by Arizona's inaugural poet laureate, Alberto Ríos.	<a href="https://news.asu.edu/20220829-university-news-abor-celebrates-crow-20-years-asu">https://news.asu.edu/20220829-university-news-abor-celebrates-crow-20-years-asu</a>
56	ASU Uber Partnership Website	Website	01/01/2022	Presentation of all the features and activities between ASU and Uber in partnership.	<a href="https://uber.asu.edu/">https://uber.asu.edu/</a>
57	EdPlus Website	Website	01/14/2022	Review of outward facing materials on how EdPlus is organized and what it does in service of the ASU Charter	<a href="https://Edplus.Asu.Edu/What-We-Do">https://Edplus.Asu.Edu/What-We-Do</a>
58	ASU Transfer Pathways	Website	01/20/2022	Review of the ASU transfer pathways program and partners in the consortia network.	<a href="https://admission.asu.edu/transfer/pathways">https://admission.asu.edu/transfer/pathways</a>
59	Education for Humanity	Website	01/20/2022	Education for Humanity program and website materials for external visitors	<a href="https://asuforrefoees.asu.edu/education-humanity">https://asuforrefoees.asu.edu/education-humanity</a>
60	Global Freshman Academy Website	Website	01/01/2022	Global Freshman Academy external website for learners and the academic community	<a href="https://gfa.asu.edu/">https://gfa.asu.edu/</a>

Document Number	Document Name	Type of Document	Creation Date	Summary	Link
61	New American University inauguration address	PDF Presentation	10/19/2021	Hard copy of Dr. Crow's inauguration address.	<a href="https://newamericanuniversity.asu.edu/sites/default/files/asu_inauguraladdress.pdf">https://newamericanuniversity.asu.edu/sites/default/files/asu_inauguraladdress.pdf</a>
62	EdPlus Visitor Tracking	Spreadsheet	11/01/2023	Full list of EdPlus visitors organized by type and industry.	Confidential
63	ASU Student Success Presentation	Presentation	08/26/2019	Full report of ASU's longitudinal student success strategies and successes.	Confidential
64	Dr. Crow introduced EdPlus to ASU Community	Video	11/14/14	Introduction video by Dr. Crow to the ASU community introducing EdPlus at ASU in its evolution from ASU Online.	<a href="https://vimeo.com/111862189">https://vimeo.com/111862189</a>

*Note.* Researcher-created.

### Appendix D: EdPlus Critical Incidents

A number of the important historical milestones, or “critical incidents,” have already been illustrated. All of these incidents, as reported by the participants in the interviews, are summarized in Table 27.

**Table 27:** *Timeline of Critical Incidents in the History of EdPlus*

Year	Category (from open-coded references)	ASU Online Enrollment
1986	- Distance Education at ASU is primarily Instructional Television Fixed Service (for master’s degree students in engineering and business working locally.	N/A
2002	- Marc Van Horne joins ASU as manager of distance education. - Dr. Crow joins ASU. - Adrian Sannier takes office as CIO.	N/A
2003	- University sets initial ASU Online enrollment goal: 10,000 students in fully online degree programs.	N/A
2005	- Central IT office, UTO, gathers all disparate technology under a single enterprise structure. - ASU pushes entrepreneurship as an idea across all aspects of the university.	N/A
2006	- Sean Hobson joins EdPlus at ASU as an instructional designer.	N/A
2007	- From H1N1 scare, University develops a pandemic strategy, concluding that it does not have capacity in online to remain open.	N/A

<b>Year</b>	<b>Category (from open-coded references)</b>	<b>ASU Online Enrollment</b>
	- Dr. "Betty" Phillips joins ASU as Provost.	
2008	- 50% of per-student state funding disappears due to national recession.	
	- ASU Online as an organization is developed under new leadership.	100
	- ASU and GSV Advisors partner to launch the ASU/GSV Summit to stimulate the EdTech community. ASU Online managed.	
2009	- Dr. Phillips appoints Dr. Philip Regier as Dean of ASU Online from his role as Executive Dean of the W.P. Carey Business School.	
	- ASU signs first online program management partnership deal with Pearson Online Learning Services.	1,000
	- ASU/GSV Summit for Educational Technology is launched at Skysong in Scottsdale with 200 participants.	
2010	- ASU Online relaunches with Pearson.	
	- ASU Online moves to Skysong innovation park in Scottsdale, AZ.	
	- Begins with programs from ASU West Valley Campus.	1,500
	- New incentive structures developed for faculty and departments.	
	- ASU Online enrolls 500 new online students.	
2011	- Spike in ASU Online enrollment by 57%.	2,200

<b>Year</b>	<b>Category (from open-coded references)</b>	<b>ASU Online Enrollment</b>
2012	- ASU Online reaches 3,000 students.  - First online electrical engineering B.A. program launch in the U.S.	3,000
2013	- ASU and Knewton partner on Adaptive Math supported in large part by EdPlus.	9,959
2014	- ASU and Starbucks partner for tuition assistance program. EdPlus designs and operates the program.  - Formal launch of EdPlus rebranded from ASU Online name.	13,749
2015	- Global Freshman Academy is launched with EdX, the Harvard and MIT spinoff platform for distribution of online courses.  - EdPlus creates initial business plan for ASU Prep Digital.  - EdPlus begins support of Baobab project with Mastercard Foundation.	20,017
2016	- ASU, Kings College London, and UNSW launch the PLuS Alliance supported by EdPlus.	25,784
2017	- More than 7,000 Starbucks partners enrolled in ASU Online.  - EdPlus launches Micromasters with EdX.  - ASU Online brings online MBA as a managed program.  - EdPlus Enrollment Center launches.	30,583

<b>Year</b>	<b>Category (from open-coded references)</b>	<b>ASU Online Enrollment</b>
2018	<ul style="list-style-type: none"> <li>- Online course exchange established with Plus Alliance universities.</li> <li>- EdPlus establishes partnership with Uber for tuition assistance benefits.</li> <li>- ASU launches InStride in partnership with TPG Rise fund.</li> <li>- EdPlus launches partnership with National WWII museum in New Orleans.</li> </ul>	37,374
2019	<ul style="list-style-type: none"> <li>- ASU launches Cintana to work with global universities for online learning.</li> <li>- Because of COVID, the world moves into remote first model.</li> <li>- ASU Online launches BA in Physics.</li> </ul>	44,253
2020	<ul style="list-style-type: none"> <li>- EdPlus leads ASU partnership with Asia Society for global competency curriculum.</li> <li>- EdPlus launches the Me3 product to assist high school learners make better college decisions.</li> <li>- First Uber graduates from ASU Online.</li> <li>- ASU adjustments to Pandemic benefited by ASU Online footprint.</li> <li>- EdPlus leads partnership with YouTube, Complexly and Google to launch Study Hall.</li> </ul>	53,993
2021	<ul style="list-style-type: none"> <li>- Astronomical and Planetary Science online program launch.</li> </ul>	57,848

---

<b>Year</b>	<b>Category (from open-coded references)</b>	<b>ASU Online Enrollment</b>
2022	- Launch of Dreamscape Learn in partnership with Dreamscape Immersive. EdPlus managed and supported.	62,551
2023	- Transitioned entirely away from Pearson services for ASU Online coaching and recruitment.	66,062

---

*Note.* Researcher-created from interviews and documents.



**Appendix E: Participant Recruitment Letter**

Subject: Interview Request

Dear Participant:

As an influential leader at Arizona State University (ASU), your participation is requested for my doctoral dissertation at Dublin City University. My dissertation is titled "Learning Innovation Departments as Transformational Change Agents for Higher Education."

I am studying how EdPlus at ASU, a learning innovation department (LID) at ASU, operates as a change agent within the university. With virtual interviews, 10 to 20 individuals will be invited to participate from administrators, faculty, and staff at ASU. As a leader in this important initiative, your views and perspectives are vital for understanding the shaping and evolution of the LID within the broader context of the university.

The central research question is this:

***How do leaders designing a learning innovation department at Arizona State University approach transformational change initiatives that help the university advance its strategic public charter?***

Subresearch questions include:

1. How do institutional leaders categorize EdPlus in terms of transformational change at ASU and within the literature?
2. What role does EdPlus play in changing the culture of the university?
3. What strategies and processes were used in the planning, development, and implementation of the transformation initiatives?
4. How has the organization changed over time to support transformation initiatives?
5. What are the critical incidents that have shaped and evolved the design and role of EdPlus?

I will also be collecting and analyzing related documents, such as strategy documents (presentations, strategic reports, organizational charts), with your approval, and public promotional materials (website assets, press releases, and marketing materials).

For participation, I estimate the initial interview will take 60 minutes, with the potential for a 30-minute follow-up to accommodate your schedule. After the interviews, I will transcribe the discussion and send it to you for review and correction.

If you agree to participate, please read the attached Plain Language Statement, and **send me back a completed Informed Consent Form prior to the interview.**

**I appreciate your consideration**, as the outcomes of this research may supply you with additional insights about EdPlus. Findings may also provide other universities with a blueprint to follow for transformational change in higher education. Additionally, the results may provide material for future scholars to build upon. If you agree to participate, I can work with you or your designee to schedule the interview(s).

Sincerely,  
Sean Hobson  
Chief Design Officer, EdPlus at ASU  
Doctoral Candidate, Dublin City University  
[602.628.1560](tel:602.628.1560)  
[sean.hobson@asu.edu](mailto:sean.hobson@asu.edu)

## **Appendix F: Informed Consent Template**

Study Title: **Learning Innovation Departments as Transformational Change Agents for Higher Education**

Principal Investigator: Sean Hobson

Dublin City University

Faculty of Humanities and Social Sciences

I, \_\_\_\_\_, do consent to participating in this research study conducted by Sean Hobson, as part of his dissertation at Dublin City University.

### **Purpose**

The purpose of this study is to examine the Learning Innovation Department, EdPlus, its organizational design, and development of initiatives as catalysts for transformational change for the university, Arizona State University.

### **Risks**

The risks associated with this study are no more than in daily activities. Given the public and easily accessible nature of my role within the institution, I recognize that my name will be public and connected with the findings. I give permission for use of my name in this study. The researcher will honor any decision I make for determination of any materials I deem sensitive in nature and cannot be published.

The Plain Language Statement of Dublin City University is included with this letter for my information.

I understand that my participation is purely voluntary and that I may withdraw at any point without detrimental consequences.

I consent to the use of my data for future studies within the following parameters:  
principal investigator’s sharing of data for my use; scholarly publications, presentations,  
and reports by the principal investigator.

Once the information has been collected and analyzed, recordings, written  
information from interviews, or any other related data will be stored in a password-  
protected database of the researcher’s, to which he alone has access. The data will be  
held for 5 years and then destroyed.

**Please complete the following (Circle Yes or No for each question)**

- |                                                                    |          |
|--------------------------------------------------------------------|----------|
| I have read the Plain Language Statement.                          | Yes / No |
| I understand the information provided.                             | Yes / No |
| I have had an opportunity to ask questions and discuss this study. | Yes / No |
| I have received satisfactory answers to all my questions.          | Yes / No |
| I am aware that my interview will be videotaped.                   | Yes / No |

**Signature**

I have read and understood the information in this form. My questions and  
concerns have been answered by the researchers, and I have a copy of this consent  
form. Therefore, I consent to take part in this research project.

**Participant’s Signature:** \_\_\_\_\_

**Name in Block Capitals:** \_\_\_\_\_

**Witness:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## **Appendix G: Plain Language Statement**

### **DUBLIN CITY UNIVERSITY Plain Language Statement**

#### **Introduction to the Study**

This research study will focus on Learning Innovation as a discipline within the broader category of Academic Innovation in Higher Education, and how universities at the forefront of this work are designing themselves and deploying their resources.

This research will take place during an unprecedented time in higher education. At the time of this writing, universities around the world are responding to a global pandemic, the COVID-19 virus, that has already resulted in schools and universities across the globe closing their physical campuses. Partly as a result, many universities have pursued and developed other means of instruction that involve many technological innovations.

This research will be conducted by Sean Hobson, a PhD candidate at Dublin City University in the Faculty of Humanities and Social Sciences. The research study will use a qualitative, instrumental collective single case-study design focused on EdPlus, a Learning Innovation Department in Arizona State University (ASU), a public research university in the United States. Leaders at ASU will be interviewed for their perspectives, insights, and understanding of the development of EdPlus.

#### **Details of Involvement**

Informed consent will be obtained before the principal investigator proceeds with each interview. Participants will be interviewed with semi-structured questions using the online synchronous video software, Zoom. The interviews are anticipated to last for 1 hour, with a second interview of 30 minutes possible for continuation of the

discussion. The principal investigator will then transcribe and analyze the interviews with qualitative methods. Following analysis, the principal investigator will invite participants to review their transcripts and the analysis for accuracy, clarity, and omissions and return the documents to the investigator. This process should take approximately 30 to 45 minutes. The investigator will then review the documents and adjust them accordingly for additional data analysis and reporting of results.

### **Potential Risks to Participants**

For participation, there are no risks to participants greater than those encountered in everyday lives.

### **Benefits of Participation**

Participants will receive early access to the findings and may gain additional information on EdPlus toward additional insights and further development and refinement of this Learning Innovation Department. Findings may also provide participants with information they may share with leaders of other higher education institutions in consulting capacities.

### **Confidentiality of Data**

Confidentiality will be provided for sensitive data, and the principal investigator will take measures to protect the security of all data. Data will be destroyed after a 5-year period, as is customary for such a research project. Participants will be asked for permission for the use of their data for future studies within the following parameters: principal investigator's sharing of data for participants' use; scholarly publications, presentations, and reports by the principal investigator.

**Voluntary Participation**

Participation in this research study is completely voluntary. Participants may withdraw from the study at any point.

**Other Relevant Information**

Given the small sample size (10 to 20 participants) and the public/visible nature of the participants as leaders at ASU (names and titles on university websites and documents), it is not possible to provide anonymity for this study. Participants will be asked for permission to use their names in this study, and this provision will be noted on the informed consents. However, sensitive materials, subject to the participants' input, will be anonymized or omitted to protect confidentiality.

The principal investigator is an "insider," having worked in higher education for 18 years, and presently on the staff of EdPlus at ASU. He has long associations, credibility, and rapport with most of the projected participants. He will encourage participants' authenticity and dedication, like his own, in rigorous scholarship. He will reiterate his respect for participants' wishes that some topics will not be discussed or that some information shared will remain confidential.

**If participants have concerns about this study and wish to contact an independent person, please contact:**

The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000

## Appendix H: DCU REC Approval Letter

Ollscoil Chathair Bhaile Átha Cliath  
Dublin City University



Mr. Séan Hobson  
Fiontar & Scoil na Gaeilge

Dr. Mairéad Nic Giolla Mhichíl  
Fiontar & Scoil na Gaeilge

25<sup>th</sup> January 2021

**REC Reference:** DCUREC/2020/260

**Proposal Title:** Learning Innovation Departments as Transformational Change Agents for Higher Education

**Applicant(s):** Mr. Séan Hobson, Dr. Mairéad Nic Giolla Mhichíl, and Prof. Mark Brown

Dear Colleagues,

Further to expedited review, the DCU Research Ethics Committee approves this research proposal.

Materials used to recruit participants should note that ethical approval for this project has been obtained from the Dublin City University Research Ethics Committee.

Should substantial modifications to the research protocol be required at a later stage, a further amendment submission should be made to the REC.

Yours sincerely,

A handwritten signature in cursive script, appearing to read 'Geraldine Scanlon', is written in blue ink on a light-colored background.

**Dr Geraldine Scanlon**  
Chairperson  
DCU Research Ethics Committee



**Taighde & Nuálaíocht Tacaíocht**  
Ollscoil Chathair Bhaile Átha Cliath,  
Baile Átha Cliath, Éire

**Research & Innovation Support**  
Dublin City University,  
Dublin 9, Ireland

T +353 1 700 8000  
F +353 1 700 8002  
E [research@dcu.ie](mailto:research@dcu.ie)  
[www.dcu.ie](http://www.dcu.ie)



**Appendix I: ASU IRB Determination**



NOT HUMAN SUBJECTS RESEARCH DETERMINATION

[Sean Hobson](#)

[EdPlus](#)

480/884-1629

Sean.Hobson@asu.edu

Dear [Sean Hobson](#):

On 5/18/2021 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Learning Innovation Departments as Transformational Change Units in Higher Education
Investigator:	<a href="#">Sean Hobson</a>
IRB ID:	STUDY00013885
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	CITI Course Completion Certification, Category: Other; Consent Form 05.05.20, Category: Consent Form; Interview questions 05.17.21, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); Personal Data Protocol, Category: Other; Recruitment Letter 05.11.20, Category: Recruitment Materials; Sean Hobson IRB Protocol - 05.05.21.docx, Category: IRB Protocol;

The IRB determined that the proposed activity is not research involving human subjects as defined by DHHS and FDA regulations.

IRB review and approval by Arizona State University is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether the activities would change the determination, contact the IRB at [research.integrity@asu.edu](mailto:research.integrity@asu.edu) to determine the next steps.

Sincerely,

IRB Administrator

cc: Sean Hobson

**Appendix J: Document Collection Protocol**

Question 1: What organizational designs have LID leaders adopted, and why?

Documents: Organizational chart, presentations, EdPlus EMC Books.

Question 2: What key strategies and initiatives have LID leaders implemented, and why?

Documents: Press releases, strategic plans, project documents, EdPlus EMC Books.

Question 3: How do LID leaders measure and evaluate success?

Documents: Annual reports, internal comms, presidents award for innovation, EdPlus EMC Books.

**Appendix K: Interview Protocol**

The interview protocol was used for every interview with participants. For all, the following format was used in the order as shown in Table 29.

**Table 28:** *Interview Protocol*

Research Question	Interview Questions
Hello and background.	What is your name and role? How are you connected to EdPlus at ASU?
MM applicability	N/A
How do institutional leaders categorize EdPlus in terms of transformational change at ASU and within the literature?	How would you describe EdPlus’ role? Within the University? How has EdPlus helped the university change in a positive way? How has EdPlus helped the university change in a not-so-positive way?
What are the critical incidents that have shaped and evolved the design and role of EdPlus?	What are the critical events that have helped shape EdPlus? What are some of the major projects EdPlus is or has been responsible for advancing?
What strategies and processes were used in the planning, development, and implementation of the transformation initiatives?	How does EdPlus approach a new problem or project? Are there characteristics that make a project successful at ASU? What are the things you would change? How could EdPlus be more successful?
How has the organization changed over time to support transformation initiatives?	How has EdPlus evolved to take on new transformation projects at ASU? What are the critical or new jobs that are important for the work of EdPlus? What are the characteristics or traits for someone who works at an EdPlus?

---

<b>Research Question</b>	<b>Interview Questions</b>
What role does EdPlus play in changing the culture of the university?	How has the culture at ASU changed since you have been here? How has the culture at ASU changed since as a result of EdPlus?
Snowball Technique	Is there anyone else that you recommend I speak with?

### Appendix L: Research Activities by Phase

**Table 29:** *Research Activities by Phase*

<b>Phase</b>	<b>Activity</b>	<b>Dates</b>
Research Design	Developed RQs	6/2020-10/2021
Research Design	Determined case setting, population, sample	6/2020-10/2021
Research Design	Determined methods, instruments	6/2020-10/2021
Research Design	Memoing for initial ideas, thoughts, insights	6/2020-5/2021
Research Design	Drafting Chapters 1-3, with regular feedback from committee	6/2020-10/2023
Research Design	Peer debriefing with Dr. Joshua Kim and Dr. Eddie Maloney.	5/2021
Pilot Study	Conducted pilot interviews (N = 2)	6/2021
Pilot Study	Collected pilot documents (N = 10)	6/2021
Pilot Study	Memoing for ideas, thoughts, insights	6/2021-6/2022
Pilot Study	Member checking and Intercoder Reliability performed with Dr. Rachel Luchum.	6/2021

<b>Phase</b>	<b>Activity</b>	<b>Dates</b>
Pilot Study	Modified methods, instruments, from pilot interviews and documents	7/2021-9/2021
Pilot Study	Member checking performed	6/2022
Main Study	Conducted and recorded interviews ( <i>N</i> = 28)	10/2021-1/2023
Main Study	Collected documents	10/2021-1/2023
Main Study	Transcribed documents	10/2021-1/2023
Main Study	Triangulation through document comparison with participant interviews, member checking, peer debriefing	1/2023-7/2023
Main Study	Created case study database	2/2023
Main Study	Open-coded interviews, documents	3/2023
Main Study	Deductive / Axial coded interviews, documents	5/2023
Main Study	Thematic analysis from emergent patterns in codes. Constant comparison analysis performed.	6/2023
Main Study	Completed peer debriefing with qualitative researcher	6/2023
Main Study	Presented findings, Chapter 4, to committee	8/2023-1/2024

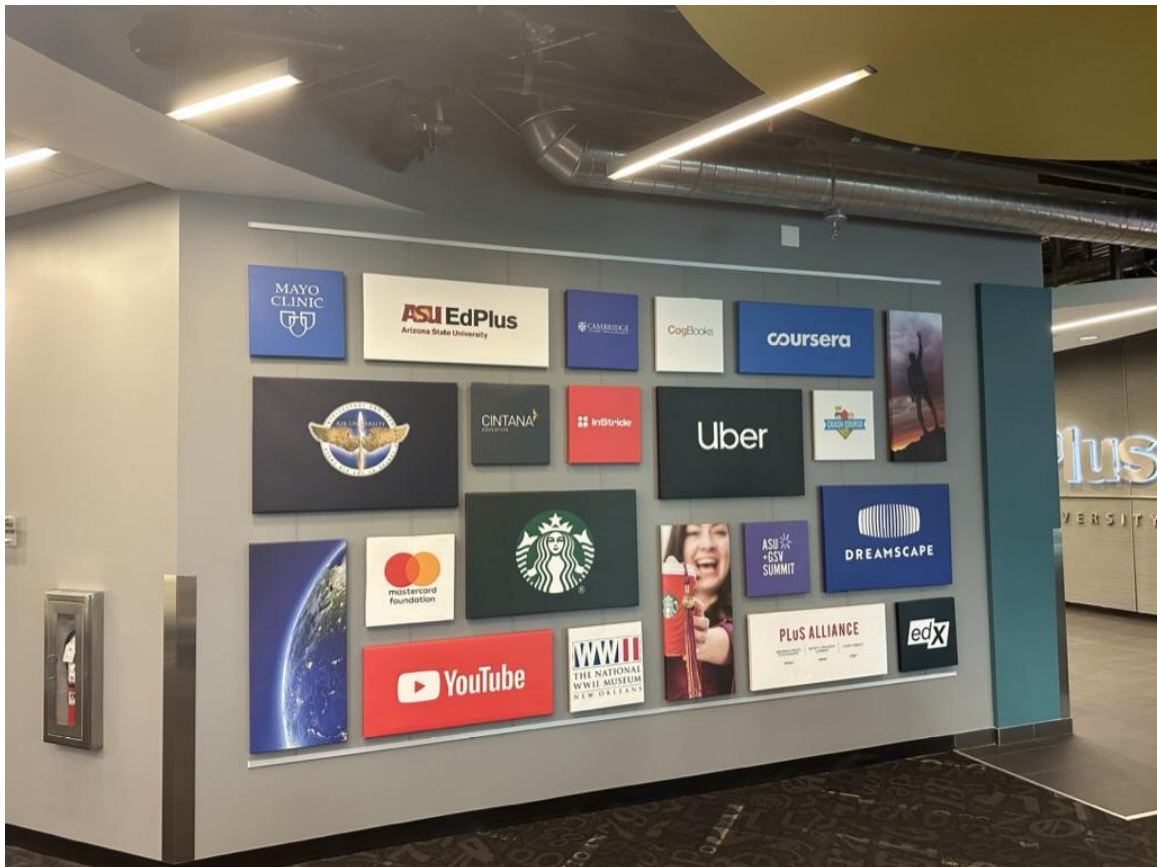
---

<b>Phase</b>	<b>Activity</b>	<b>Dates</b>
Main Study	Memoing for ideas, thoughts, insights	10/2021-1/2024
Main Study	Drafted Chapter 5, Discussion, and Chapter 6, Conclusion	12/2023 – 02/2024
Main Study	Submitted final draft V1	02/2024
Main Study	Submitted final draft V2	03/2024

---



### Appendix M: EdPlus Partnership Wall



## Appendix N: ASU Trifold Brochure with Goals

### ASU Charter

ASU is a comprehensive **public research university**, measured not by whom it excludes, but by **whom it includes** and **how they succeed**; **advancing research and discovery** of public value; and assuming **fundamental responsibility** for the economic, social, cultural and overall health of the **communities it serves**.

Nine **design aspirations** guide ASU's ongoing evolution as a **New American University**. ASU integrates these institutional objectives in innovative ways to demonstrate excellence, access and impact.

**Leverage Our Place**

ASU embraces its cultural, socioeconomic and physical setting.

**Transform Society**

ASU catalyzes social change by being connected to social needs.

**Value Entrepreneurship**

ASU uses its knowledge and encourages innovation.

**Conduct Use-Inspired Research**

ASU research has purpose and impact.

**Enable Student Success**

ASU is committed to the success of each unique student.

**Fuse Intellectual Disciplines**

ASU creates knowledge by transcending academic disciplines.

**Be Socially Embedded**

ASU connects with communities through mutually beneficial partnerships.

**Engage Globally**

ASU engages with people and issues locally, nationally and internationally.

**Practice Principled Innovation**

ASU places character and values at the center of decisions and actions.

Learn more: [president.asu.edu](http://president.asu.edu)  
 Twitter: @michaelscrow  
 Facebook: presidentcrow  
 LinkedIn: michaelscrow  
 Instagram: @asuprescrow  
 YouTube: DrMichaelMCrow

Revised January 2023

PL 21075 010223 0000

# New American University

Toward 2028 and Beyond



Arizona State University has become the foundational model for the **New American University**, a new paradigm for the public research university that transforms higher education. ASU is committed to **excellence, access and impact** in everything that it does.

No. 1 university for innovation (ahead of MIT and Stanford)  
 — *U.S. News & World Report* (2016-2023)

No. 1 in the U.S. (ahead of Michigan State and Penn State) and No. 2 in the world for global impact in research, outreach and stewardship  
 — *Times Higher Education* (2022)

No. 6 in the U.S. for total research expenditures among universities without a medical school (ahead of Caltech and Carnegie Mellon University)  
 — *National Science Foundation HERD Survey* (FY2021)

Top 10 'Best Buy' college in the U.S. (ahead of Purdue and UNC-Chapel Hill)  
 — *The Fiske Guide to Colleges* (2023)

No. 1 U.S. public university of choice for international students (ahead of University of Illinois at Urbana-Champaign, Purdue and UCLA)  
 — *Institute for International Education* (2021/2022)

### Mission & Goals



**Demonstrate leadership in enabling academic excellence and accessibility at scale**

- Maintain the fundamental principle of accessibility to all students qualified to study at a research university.
- Maintain university accessibility to match Arizona's socioeconomic diversity, with undifferentiated outcomes for success.
- Ensure that **more than 90%** of students continue studies beyond their first year.
- Enhance the university graduation rate to **greater than 85%** and more than **40,000** graduates.
- Continuously enhance quality while maintaining affordability.
- Overcome geographic and financial barriers to education by enrolling **150,000** online degree-seeking students.
- Continuously increase measured student development and learning outcomes.
- Engage learners of all socioeconomic, geographic and demographic backgrounds.



**Establish national standing in academic quality and impact of colleges and schools in every field**

- Advance and maintain national standing in academic quality for each college and school.
- Attain national standing in learning and post-graduation outcomes for students in all colleges and schools.
- Become the leading university academically (faculty, discovery, research, creativity) in at least one department or school within each college and school.



**Expand ASU's role as the leading global center for interdisciplinary research, discovery and development by 2028**

- Launch the prototype medical center for the planet.
- Become the leading American center for discovery and scholarship in the integrated social sciences and comprehensive arts and sciences.
- Enhance research competitiveness to more than **\$1 billion** in annual research expenditures.
- Drive regional economic competitiveness through research, discovery and socioeconomically integrated programs.
- Serve as a leading American center for innovation and entrepreneurship.
- Create the leading global center for education and learning technology.



**Enhance our local impact and social embeddedness**

- Leverage ASU as a public enterprise to strengthen Arizona's interactive network of teaching, learning and discovery resources.
- Co-develop solutions to the critical social, technical, cultural and environmental issues facing 21st-century Arizona, ensuring sustainability and resilience.
- Meet the needs of 21st-century Universal Learners through personalized learning pathways that promote adaptability to emergent social and technological changes.