Culture, Leadership, and Organizational Learning in California Community Colleges: Exploring the Potential for Second Order Change

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Culture, Leadership, and Organizational Learning in California Community Colleges:

Exploring the Potential for Second Order Change

A Dissertation by

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Brandman University
Irvine, California
School of Education

Submitted in partial fulfillment of the requirements for the degree of
Doctor of Education in Organizational Leadership

March 2018

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ACKNOWLEDGEMENTS

In a beautiful poem about the dissertation process, my friend and cohort member Larry Haggquist wrote that “mountains like these are not meant to be climbed alone.” I am deeply indebted to the many colleagues, friends, and family members – too many to name here – who have supported and encouraged me through the highs and lows of this climb. You supported me tirelessly and without complaint. In big and small ways, each of you helped me remember to stay open, curious, and realistic. Your words and gestures of encouragement have meant more to me than you realize; I always knew I was not alone in this pursuit.

To the 18 individuals interviewed for this study: I am so grateful for your time and insights. I learned so much from your observations and collective experience, and I cannot thank you enough for your hospitality and willingness to share. I especially want to thank the participants at College B, who made a special effort to keep our interviews in the midst of an unexpected campus closure. I remain profoundly humbled that you made time for me under incredibly stressful circumstances.

To my fellow Monterey Delta Cohort members – Nicole, Larry, Michelle, La Toshia, Marcie, Daisy, and Julianne: I love you, Ducks. Thank you for the inspiration, the encouragement, the celebrations, the commiserations, the group texts (yes, even the late night ones), and the bitmojis. I simply don’t want to imagine what this journey would have been like without each one of you. Dr. Kathleen Rose, as our cohort mentor, you were a steadfast and true guide and advisor. Thank you for modeling authentic, grounded, servant leadership. I continue to learn from your example, and I still want to be you when I grow up.
To my committee members, Dr. Tod Burnett and Dr. Sheila Lakshmi Steinberg: your feedback on this work has been invaluable. Thank you for your close reading of the drafts, and for your thoughtful comments and questions. I am extremely grateful for your time, experience, and expertise. Engaging in scholarly conversation with you on this topic has truly been an honor and privilege.

To my committee chair, Dr. Len Hightower: my friends and colleagues have often heard me say that I feel like I won the Committee Chair Lottery. Early on, I told you that I wanted to really challenge myself with this project, and find out what I was capable of. You somehow knew exactly when and how to push me, while still helping me stay realistic and Zen about the whole process. I have learned so much from you, and you have helped me cultivate a passion that I can explore for the rest of my professional lifespan. I am profoundly grateful for your guidance, wisdom, and experience. Thank you.

To my parents, Randy and Bertha Webb: I learned the importance and value of a college education by watching the two of you work your way through community college and transfer on to earn your four-year degrees. Seeing you graduate together remains one of my proudest memories, and it continues to inspire me professionally and personally. You have helped me internalize values of integrity, persistence, resilience, and faith. Thank you for always believing in me.

Last, but certainly not least, to Fred: thank you. There aren’t enough words to express my gratitude. You were with me every step of this journey, and it is no exaggeration to say that I could not have accomplished this without you. HtoH.
DEDICATION

This study is dedicated to the current and future students of the California Community Colleges system. May we – your instructors, support staff, and administrators – always be willing to learn, adapt, and even transform ourselves in order to serve you better.
ABSTRACT

Culture, Leadership, and Organizational Learning in California Community Colleges: Exploring the Potential for Second Order Change

by Catherine Ellen Webb

Purpose: The purpose of this study was to explore the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges. A secondary purpose of the study was to explore the role of organizational culture and campus leadership in facilitating second order change in California community colleges.

Methodology: This multiple case study used a design with embedded unit of analysis to understand the impact of organizational culture and campus leadership on the development of organizational learning practices and facilitation of second order change in California community colleges. Three colleges were selected as case sites and examined using Schein’s dimensions of organizational learning culture as a theoretical framework. Data from each case site were collected through semi-structured interviews with formal and informal campus leaders, as well as from documents, artifacts, and publicly available archival records.

Findings: Several elements of organizational culture and leadership were found to have an impact on organizational learning and play a role in the facilitation of second order change, including proactive, transparent communication; culturally resonant framing; alignment of internal and external expectations; an intentional learning mindset; and cultivation of relationships characterized by a high degree of trust and psychological safety.
**Conclusions:** Trust, psychological safety, and proactive communication serve as a foundation for intentional organizational learning and provide stability during times of disruption and change. Community colleges that develop an intentional learning mindset and take the time to frame second order changes using culturally resonant language will have more success managing disconfirming information and adapting to disruptive changes. Colleges with a shared perception that members have the capacity and resources to support learning are better able to decrease learning anxiety and increase confidence in the outcome of a change.

**Recommendations:** Community college leaders should actively cultivate trust and psychological safety within the culture before engaging in second order changes, and ensure that plans are in place for ensuring timely, transparent, culturally resonant communication throughout a change implementation. Community college leaders can increase capacity for organizational learning and change by expanding time, energy, and funding to support these activities.
# TABLE OF CONTENTS

## CHAPTER I: INTRODUCTION
- Background .................................................................................................................. 1
- Changing Expectations for Performance in US Higher Education ............................... 3
- Theoretical Perspectives on Organizational Learning and Culture ........................... 5
- Organizational Culture, Learning, and Change in Higher Education .......................... 8
- Organizational Leadership, Learning, and Change in Higher Education ..................... 9
- Expectations for Second Order Change in California Community Colleges .............. 11
- Statement of the Research Problem .............................................................................. 13
- Purpose Statement ....................................................................................................... 15
- Research Questions ..................................................................................................... 16
- Significance of the Problem .......................................................................................... 17
- Definitions .................................................................................................................... 19
  - Theoretical Definitions ............................................................................................... 19
  - Operational Definitions ............................................................................................. 21
- Delimitations .................................................................................................................. 23
- Organization of the Study ............................................................................................. 23

## CHAPTER II: REVIEW OF THE LITERATURE
- Expectations for Performance in U.S. Higher Education ............................................. 25
- Changing Context and Expectations for Community Colleges .................................... 28
- Changing Context and Expectations for California Community Colleges .................. 29
- Organizational Learning Theory .................................................................................. 30
  - Theories of Action ..................................................................................................... 33
- Defensive Routines ....................................................................................................... 34
- Single-Loop and Double-Loop Learning ....................................................................... 35
- Cultural Aspects of Organizational Learning ............................................................... 37
  - Cultural elements that impede learning .................................................................. 40
  - Cultural elements that support learning ................................................................ 41
- Leadership Aspects of Organizational Learning .......................................................... 42
- Second Order Change .................................................................................................. 44
- Theoretical Framework: Schein’s Dimensions of Learning Culture ............................ 45
- Organizational Culture, Learning, and Change in Higher Education .......................... 47
- Organizational Culture in Higher Education ................................................................ 48
  - Loosely coupled structures ...................................................................................... 51
  - Structural and cultural archetypes in higher education .......................................... 52
- Organizational Culture in Community Colleges ......................................................... 53
  - Organizational culture and performance ................................................................. 54
  - Organizational culture and mission ......................................................................... 55
- Organizational Leadership, Learning, and Change in Higher Education ................. 56
- Leadership Strategies Supportive of Learning and Change ........................................ 57
- Formal and Informal Leadership Roles in Higher Education .................................... 58
- Leadership, Learning, and Change in Community Colleges ...................................... 59
- Expectations for Second Order Change in California Community Colleges ............ 61
- Institutional Effectiveness Partnership Initiative ......................................................... 62
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gap in the Literature</td>
<td>63</td>
</tr>
<tr>
<td>Summary</td>
<td>65</td>
</tr>
<tr>
<td>CHAPTER III: METHODOLOGY</td>
<td>68</td>
</tr>
<tr>
<td>Purpose Statement</td>
<td>68</td>
</tr>
<tr>
<td>Research Questions</td>
<td>68</td>
</tr>
<tr>
<td>Research Design</td>
<td>70</td>
</tr>
<tr>
<td>Case Study Methodology</td>
<td>70</td>
</tr>
<tr>
<td>Multiple Case Design with Embedded Units of Analysis</td>
<td>72</td>
</tr>
<tr>
<td>Qualitative Methodology</td>
<td>75</td>
</tr>
<tr>
<td>Population</td>
<td>76</td>
</tr>
<tr>
<td>Target Population</td>
<td>77</td>
</tr>
<tr>
<td>Sample</td>
<td>79</td>
</tr>
<tr>
<td>Case Selection</td>
<td>79</td>
</tr>
<tr>
<td>Participant Selection</td>
<td>81</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>82</td>
</tr>
<tr>
<td>Validity</td>
<td>84</td>
</tr>
<tr>
<td>Pilot test</td>
<td>84</td>
</tr>
<tr>
<td>Reliability</td>
<td>85</td>
</tr>
<tr>
<td>Case study protocol</td>
<td>86</td>
</tr>
<tr>
<td>Triangulation</td>
<td>87</td>
</tr>
<tr>
<td>Interrater reliability</td>
<td>87</td>
</tr>
<tr>
<td>Data Collection</td>
<td>88</td>
</tr>
<tr>
<td>Human Subjects Considerations</td>
<td>89</td>
</tr>
<tr>
<td>Interview Procedures</td>
<td>90</td>
</tr>
<tr>
<td>Collection of Artifacts and Documents</td>
<td>91</td>
</tr>
<tr>
<td>Archival Data</td>
<td>91</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>92</td>
</tr>
<tr>
<td>Theoretical Propositions</td>
<td>93</td>
</tr>
<tr>
<td>Preliminary Coding and Categorization in Dedoose</td>
<td>94</td>
</tr>
<tr>
<td>Pattern Matching Analysis</td>
<td>96</td>
</tr>
<tr>
<td>Limitations</td>
<td>97</td>
</tr>
<tr>
<td>Summary</td>
<td>98</td>
</tr>
<tr>
<td>CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS</td>
<td>99</td>
</tr>
<tr>
<td>Purpose Statement</td>
<td>99</td>
</tr>
<tr>
<td>Research Questions</td>
<td>100</td>
</tr>
<tr>
<td>Research Methods and Data Collection Procedures</td>
<td>101</td>
</tr>
<tr>
<td>Population and Sample</td>
<td>103</td>
</tr>
<tr>
<td>Demographic Data</td>
<td>104</td>
</tr>
<tr>
<td>Presentation of the Data</td>
<td>107</td>
</tr>
<tr>
<td>College A: Research Question 1</td>
<td>107</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>109</td>
</tr>
<tr>
<td>Intentionality of learning</td>
<td>110</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>111</td>
</tr>
<tr>
<td>College A: Research Question 1a</td>
<td>113</td>
</tr>
<tr>
<td>College A: Research Question 1b</td>
<td>114</td>
</tr>
</tbody>
</table>


LIST OF TABLES

Table 1. Schein’s Dimensions of Learning Culture ..................................................46
Table 2. Strengths and Weaknesses of Evidence Sources Used in the Present Study ......72
Table 3. Initial Categories for Analysis Derived from Theoretical Propositions ..........94
Table 4. Participant Roles by Case Site: Formal vs. Informal Leaders .....................104
Table 5. Participant Demographics: Case Site and Gender ....................................105
Table 6. Participant Demographics: Case Site and Self-Identified Race/Ethnicity ......105
Table 7. Participant Demographics: Case Site and Age .........................................106
Table 8. Participant Demographics: Years Employed at Case Site ..........................106
Table 9. Participant Demographics: Years in Current Leadership Position ..............106
Table 10. Rank and Frequency of Themes Related to Organizational Learning:
          College A ........................................................................................................107
Table 11. Top Five Subthemes Related to Organizational Culture and Learning:
          College A ........................................................................................................113
Table 12. Top Five Subthemes Related to Campus Leaders and Learning: College
          A .....................................................................................................................115
Table 13. Rank and Frequency of Themes Related to Second Order Change:
          College A ........................................................................................................117
Table 14. Top Five Subthemes Related to Organizational Culture and Second
          Order Change: College A ...............................................................................123
Table 15. Top Five Subthemes Related to Campus Leaders and Second Order
          Change: College A ..........................................................................................125
Table 16. Rank and Frequency of Themes Related to Organizational Learning:
          College B ........................................................................................................128
Table 17. Top Five Subthemes Related to Organizational Culture and Learning:
          College B ........................................................................................................134
Table 18. Top Five Subthemes Related to Campus Leaders and Learning: College
          B .....................................................................................................................137
Table 19. Rank and Frequency of Themes Related to Second Order Change: College B .......................................................................................................................... 138

Table 20. Top Five Subthemes Related to Organizational Culture and Second Order Change: College B ................................................................................................................. 143

Table 21. Top Five Subthemes Related to Campus Leaders and Second Order Change: College B .................................................................................................................. 145

Table 22. Rank and Frequency of Themes Related to Organizational Learning: College C .......................................................................................................................... 148

Table 23. Top Five Subthemes Related to Organizational Culture and Learning: College C .......................................................................................................................... 156

Table 24. Top Five Subthemes Related to Campus Leader and Learning: College C .......................................................................................................................... 157

Table 25. Rank and Frequency of Themes Related to Second Order Change: College C .................................................................................................................. 159

Table 26. Top Five Subthemes Related to Organizational Culture and Second Order Change: College C ................................................................................................................. 165

Table 27. Top Five Subthemes Related to Campus Leaders and Second Order Change: College C .................................................................................................................. 167

Table 28. Rank and Frequency of Themes Related to Organizational Learning: All Cases .......................................................................................................................... 170

Table 29. Summary of Patterns: Impact of Culture and Leadership on Org Learning Across Cases ............................................................................................................. 172

Table 30. Rank and Frequency of Themes Related to Second Order Change: All Cases .......................................................................................................................... 179

Table 31. Summary of Patterns: Impact of Culture and Leadership on Change Across Cases ............................................................................................................. 181
LIST OF FIGURES

Figure 1. Single and double-loop learning processes.......................................................... 36
Figure 2. Schein’s Three Levels of Culture........................................................................... 38
Figure 3. Relationships between context, case, and units of analysis in a multi-case
design with embedded units of analysis............................................................................. 73
Figure 4. General process for data collection and analysis in a multi-case design
with embedded units of analysis....................................................................................... 74
Figure 5. Relationships between context, case, and embedded units of analysis for
the current study................................................................................................................. 74
Figure 6. Description of pattern matching process for data analysis. .............................. 96
Figure 7. Frequency and distribution of subthemes emerging from interview data
for College A, Research Question 1................................................................................... 108
Figure 8. Frequency and distribution of subthemes emerging from interview data
for College A, Research Question 2................................................................................... 118
Figure 9. Frequency and distribution of subthemes emerging from interview data
for College B, Research Question 1................................................................................... 129
Figure 10. Frequency and distribution of subthemes emerging from interview data
for College B, Research Question 2.................................................................................. 139
Figure 11. Frequency and distribution of subthemes emerging from interview data
for College C, Research Question 1................................................................................... 149
Figure 12. Frequency and distribution of subthemes emerging from interview data
for College C, Research Question 2.................................................................................. 160
Figure 13. Comparison of themes related to organizational learning emerging from
interest data at each case site. ............................................................................................. 170
Figure 14. Comparison of subthemes related to organizational learning emerging
from interview data at each case site. .................................................................................. 171
Figure 15. Patterns of congruity and incongruity related to the impact of
organizational culture on the development of organizational learning
practices. ................................................................................................................................. 175
Figure 16. Patterns of congruity and incongruity related to the impact of
organizational culture on the development of organizational learning
practices. ................................................................................................................................. 178
Figure 17. Comparison themes related to second order change emerging from interview data at each case site. .............................................................. 180

Figure 18. Comparison of subthemes related to organizational learning emerging from interview data at each case site. .............................................................. 180

Figure 19. Patterns of congruity and incongruity related to the role of organizational culture in the facilitation of second order change. ....................... 183

Figure 20. Patterns of congruity and incongruity related to the role of campus leadership in the facilitation of second order change................................. 185
CHAPTER I: INTRODUCTION

As rapid innovation, shifting political landscapes, and ongoing globalization drive economic and societal change in the United States, higher education institutions face increasing pressure to adapt quickly. Federal and state governments, employers, and the public all have a vested interest in how well colleges and universities prepare their students to enter the workforce. As a result, colleges and universities have experienced greater calls for accountability with regard to graduation and gainful employment rates (Ewell, 2011; Suskie, 2015; U.S. Department of Education, 2016a, 2016b). Community colleges, with their traditional focus on transfer preparation and workforce development, have been under particular scrutiny over the past two decades (Boggs, 2011; Phelan, 2016; Sydow & Alfred, 2013). California’s 114 community colleges have not been immune from calls for greater accountability and improved performance (Hom, 2008; Little Hoover Commission, 2012; State of California. Legislative Analyst’s Office, 2014). In California and across the country, college and university leaders are being pressed to respond to changing expectations and improve performance (Foundation for California Community Colleges, 2017; Phelan, 2016; Sydow & Alfred, 2013).

As in other industries, higher education leaders play an important role in their institutions’ performance (Cameron, 1986). Not only do leaders establish a vision and set the direction for institutional goals, they also translate demands or requirements from the external environment into their organizations’ internal cultures (Ewell & Ikenberry, 2015; B. N. McClenny, 2013; Tierney, 2006). Leaders must also manage internal organizational culture in order to sustain performance and navigate changes driven by the external environment (Dauber, Fink, & Yolles, 2012; Hogan & Coote, 2014; Schein,
2010). Research suggests that organizational cultures with espoused values and behaviors associated with organizational learning respond more easily to change (Argyris & Schôn, 1996; Cook & Yanow, 1993; Schein, 2010). For example, practices based on proactive inquiry and dialogue have been shown to contribute positively to organizational performance and innovation, and may indicate the presence of a learning culture within the organization (Friesenborg, 2013; Hogan & Coote, 2014; van Breda-Verduijn & Heijboer, 2016).

Although higher education has an overall focus on student learning, the question of how organizational learning occurs within colleges and universities has not been fully explored (Dee & Leišytë, 2016; Kezar, 2005; Maloney, 2008). However, studies of organizational learning that have been conducted in higher education have been consistent with studies conducted in other industries: institutions that value regular inquiry into the underlying assumptions of their culture appear to adapt and change more easily (Boyce, 2003; Maloney, 2008; Smart, Kuh, & Tierney, 1997). In complex educational settings, developing an organizational culture supportive of learning is critical for managing ongoing change, particularly when the change is deep or transformative (Maloney, 2008; Smart, 2003). Public community colleges, characterized by multiple missions, subcultures, and governance systems, are not only complex; they are under increasing pressure to transform and adapt. Developing an organizational learning culture may help community college leaders manage this complexity as they respond to changes driven by the external environment (Kezar, 2005; Phelan, 2016; Sydow & Alfred, 2013). Leaders in the California Community College system have begun to explore not only how better organizational learning could help colleges in the
system transform to better support students, but also the important role that college
leaders play in developing an organizational learning culture (Tena, Hope, Scroggins, &

**Background**

The following background section covers five main concepts central to this study.
First, changing expectations for organizational performance in US higher education are
reviewed. Second, concepts of organizational learning and organizational culture are
introduced as a theoretical framework, paying particular attention to the work of Argyris
and Schön (1996) and Schein (2010). The third section examines organizational culture,
learning, and change within the context of higher education and, more specifically, within
community colleges. In the fourth section, organizational leadership, learning, and
change are considered in the same higher education context. Finally, current expectations
for organizational performance, learning, and second order change are considered in the
specific context of the California Community College system.

**Changing Expectations for Performance in US Higher Education**

Expectations for performance outcomes in the US education system have been
shifting over the last several decades, as technological innovation, political and
demographic shifts, and globalization have driven societal and economic change (Bolman
& Gallos, 2011; Suskie, 2015). External entities including federal, state, and local
governments, employers, and the public at large, have a vested interest in understanding
and monitoring how well students have been prepared to enter the workforce (Kinzie,
Ikenberry, & Ewell, 2015 2015 ; Palmadessa, 2017). As a result, colleges and
universities are under increasing pressure to be accountable for outcomes related to the
completion, cost, and quality of their programs (Kinzie et al., 2015; U.S. Department of Education, 2016a), and to respond more quickly to changes in the external environment driven by technological and societal change (Blumenstyk, 2015; Phelan, 2016; Tierney, 2014). Accountability systems allowing the public to compare colleges based on specific outcomes such as graduation rates and gainful employment of graduates have emerged from both the federal government and individual states (Ewell, 2011; U.S. Department of Education, 2016b). Likewise, accreditation agencies have increased requirements for reporting on data related to student achievement and learning outcomes (Head & Johnson, 2011; Suskie, 2015). Non-profit organizations such as the Lumina Foundation and the Bill and Melinda Gates Foundation have also demonstrated increasing interest in higher education performance, through multiple initiatives focused on improving completion of college degrees (B. N. McClenney, 2013; Suskie, 2015).

Within this landscape of increasing accountability and interest, expectations for community college performance have also increased dramatically over the past two decades (Boggs, 2011; Ewell, 2011; Phelan, 2016). With their open-access mission, community colleges play a strong role in transfer preparation and workforce development, particularly for students who might be economically disadvantaged or underprepared for a four-year university (Cohen, Brawer, & Kisker, 2014 2014; Palmadessa, 2017). However, community colleges are beginning to focus less on students’ access to education and more towards their success (Barr & Tagg, 1995; Grossman, 2014). This shift in emphasis has led to greater calls for accountability with regard to learning outcomes and achievement metrics such as transfer, completion, and job placement (Hom, 2011). Recent federal initiatives such as Achieving the Dream and
America’s College Promise require community colleges to improve planning and outcomes as a condition of participation (David, Sivadon, Wood, & Stecher, 2015 & Stecher, 2015; K. M. McClennen, McClennen, & Peterson, 2007). Increasingly, colleges that do not meet federal and state performance expectations risk losing access to government funds, and may be subject to accreditation sanctions, as well (David et al., 2015; Morris, 2015).

California’s community colleges have not been immune from accountability trends, and the mission of the California Community College system has shifted to emphasize student success in the areas of transfer, Basic Skills (i.e., remedial education), and workforce development (Burdman, 2009; Friedel, Killacky, Katsinas, & Miller, 2014 & Miller, 2014; Little Hoover Commission, 2012). In the last decade, several accountability initiatives have emerged from the state legislature and the California Community Colleges Chancellor’s Office that require colleges to report on metrics such as completion, retention, progression from remedial to college-level courses, and job placement (California Community Colleges Chancellor’s Office, 2015; Hom, 2008; State of California. Legislative Analyst’s Office, 2014). In Unlike colleges in many other states, however, California’s community colleges have been slow to adopt evidence-based practices that facilitate inquiry into the meaning of these data as part of planning and change, leading to a perception that the California system as a whole is slow to respond to external expectations (Apigo, 2015; Buckley & Piland, 2012; Sodhi, 2016).

**Theoretical Perspectives on Organizational Learning and Culture**

Organizational learning refers to the study of how organizations learn about and adapt to their external environment, in order to improve performance and reach outcomes
more effectively (Argyris & Schön, 1996; Mahler, 1997; van Breda-Verduijn & Heijboer, 2016). The literature distinguishes between organizational learning and the concept of the learning organization, the scholarly study of how organizations learn and adapt, and the concept of the learning organization, a practice-based management approach commonly associated with the work of writers such as Schein (2010) and Senge (2006). Both approaches seek to understand the mental frames that shape how—and whether—an organization responds to a result that challenges previously held assumptions or expectations (Argyris & Schön, 1996; Kezar, 2005; Schein, 2010).

Organizational culture can be defined as the pattern of shared assumptions, beliefs, values, expectations, and norms of a group, observable in its artifacts and patterns of behavior (Cook & Yanow, 1993; Hogan & Coote, 2014; Schein, 2010). An organization’s culture affects how it approaches decision-making and task performance, and therefore contributes to overall organizational performance (Cook & Yanow, 1993; Schein, 2010). Organizational culture has also been shown to play a strong role in how well organizations evaluate and learn from past performance in order to improve and innovate (Hogan & Coote, 2014; Mahler, 1997). According to Schein (Schein, 1983, 2010), organizational culture and organizational leadership are inextricably connected, in that leaders have a primary role in creating and developing the culture of their organization. For non-founding leaders, including most leaders in higher education, understanding and working within an organization’s culture is an essential skill, particularly in times of transformational change (S. A. Brown, 2012; Schein, 2010; Springer, Clark, Strohfus, & Belcheir, 2012). Leaders have the ability to shape their organizations’ culture, both by helping followers understand and connect to specific,
idealized goals and values that may transcend their own individual self-interests and by enabling shared understanding of the value of those goals (Bass, 1985; S. A. Brown, 2012; Hogan & Coote, 2014; Schein, 2010).

Argyris and Schön (1996) described two learning processes that can be observed in organizational behavior and that help organizational members connect to specific goals and values. In single-loop learning, group members notice that they have not reached a desired outcome and change an action in order to reach the desired outcome. However, the values, beliefs, and assumptions underlying the action and outcome itself are not challenged. In contrast, when an organization is involved in double-loop learning, its members challenge the values and assumptions underlying the desired outcome and the actions they might take to reach it (Argyris & Schön, 1996). Thus, double-loop learning challenges established mindsets and leads to more transformative learning and change (Argyris & Schön, 1996; Friesenborg, 2013; Mahler, 1997). Values and behaviors associated with this type of organizational inquiry into existing assumptions include proactivity, curiosity about the source of mistakes, openness to disconfirming information, commitment to professional development and continuous learning, and positive beliefs about the intentions of others in the group (S. A. Brown, 2012; Friesenborg, 2013; Mahler, 1997). Schein (2017) describes these values and behaviors as dimensions of a learning culture, in which change is seen as normal. Schein’s (2017) dimensions of learning culture were used as a theoretical framework to situation the present study.
Organizational Culture, Learning, and Change in Higher Education

Although institutions of higher education focus their missions around student learning, there is little discussion of how organizational learning occurs within colleges and universities themselves (Bauman, 2005; Kezar, 2005). Past scholars have questioned whether colleges and universities lack the capacity for organizational learning, because they have appeared slow to apply new knowledge or ideas for the purposes of institutional improvement (Dill, 1982; Garvin, 1993). Paradoxically, higher education stakeholders expect continuous improvement, in overall educational quality from colleges and universities, which requires the application of new ideas (Head & Johnson, 2011; Suskie, 2015). Higher education institutions are loosely coupled systems with complex structures and cultures, and transmitting and implementing new ideas can be challenging (Birnbaum, 1988; Boyce, 2003; Weick, 1982). Institutions with organizational cultures that value regular inquiry into underlying assumptions and openness to change appear to meet these expectations more easily (Boyce, 2003; Maloney, 2008; McCaffrey, 2012). As in other industries, higher education leaders influence and shape their organizations’ capacity for developing an organizational culture that values learning behaviors (Bauman, 2005; Phelan, 2016; Ramaley & Holland, 2005).

Organizational culture in the community college setting is influenced and complicated by the multiple missions that those institutions seek to meet (Boggs, 2011; Boggs & McPhail, 2016; Maloney, 2008). Community colleges focus not only on transfer and degree completion, but also career training, remedial education, and lifelong learning (Cohen et al., 2014). Other structural and governance factors may add layers of cultural complexity. For example, the California Community College system has an
additional layer of structural complexity stemming from its 114 individual colleges, 77 districts, overarching system office, and Board of Governors (California Community Colleges Chancellor’s Office, n.d.-b; Friedel et al., 2014). In a complex educational setting, it may be more critical for leaders to develop an organizational culture supportive of learning in order to manage expectations for change (Maloney, 2008; Smart, 2003).

Organizational Leadership, Learning, and Change in Higher Education

As in private sector and non-profit industries, higher education leaders influence and shape their organizations’ capacity for innovation and change by managing culture and fostering behaviors that promote learning (Bauman, 2005; Phelan, 2016; Ramaley & Holland, 2005). Strategies from general management literature such as modeling the change, establishing a shared vision, developing collaborative planning and governance environments, and cultivating tolerance for risk-taking and failure can support academic leaders in change efforts (Craig, 2004; Kezar, 2014; Taylor, 2016). In addition, cultivating a cultural assumption that the organization should always be prepared for change can support more proactivity and resilience within the institution (Craig, 2004; Eckel, Green, & Hill, 2001; Kezar, 2014). Leaders can further cultivate a learning environment by building trust and psychological safety within the institution (Bertram-Elliott, 2015; Craig, 2004; Perfetti, 2015). Establishing formal structures that support evidence-based inquiry into institutional data can also help leaders strengthen openness to institutional inquiry and reflection (Dowd, 2005; Eckel et al., 2001; McDowell, 2015). These strategies have been shown to be effective in developing learning and capacity for change, when used by both formal and informal leaders and when used at both two-year and four-year institutions (Kezar, 2012, 2014).
Cameron (1983) found that the strategic orientation of higher education managers was a stronger predictor of a college or university’s effectiveness at reaching its outcomes than factors such as organizational structure, finances, or demographics. Educational leaders set the vision and tone for institutional performance (Ewell & Ikenberry, 2015; Ramaley & Holland, 2005). Culturally and structurally, community colleges have been viewed as more bureaucratic in nature than other types of academic institutions (Bergquist & Pawlak, 2008; Birnbaum, 1988). However, Bensimon (1989) demonstrated that, in spite of this perception of typical community college structure and culture, community college presidents do not operate strictly through a bureaucratic or managerial frame. Exemplary community college presidents have been shown to continue to construct and adjust their leadership practice as they interact with their organization’s culture over time (Eddy, 2005), suggesting that leadership itself can be viewed as a learning process (Amey, 2005; Maloney, 2008). During a change implementation, leadership behaviors that demonstrate a proactive commitment to personal self-reflection and learning how to learn set a model for the college at large, and frame expectations for collaborative learning (Amey, 2005; Eddy, 2010; Ramaley & Holland, 2005).

Leadership in community colleges is further complicated by rapid changes in the external environment. In 2013, the American Association of Community Colleges revised its core competencies for community college leaders to reflect the skills needed to manage environmental turbulence, including changing expectations for improved student success, decreases in public funding, rapidly changing community demographics, and new technological developments (American Association of Community Colleges, 2013).
AACC’s competencies emphasize the importance of organizational culture in a successful change effort. The competencies encourage new presidents in particular to develop a culture supportive of calculated risk-taking (American Association of Community Colleges, 2013). The competencies are consistent with findings in the higher education literature showing that organizational leadership, culture, and learning can be managed to support transformative change in the community college environment (Kezar, 2014; Maloney, 2008; Perfetti, 2015).

**Expectations for Second Order Change in California Community Colleges**

Calls for change and transformation in the California Community College system are not new. Over the past several decades, concerns about educational accountability, governance structures, and even the design of the system itself have driven questions about the effectiveness of the system (Burdman, 2009; Jones, 1996; Walters & Fetler, 1991). More recently, however, concerns about the impact of declining student performance have heightened the urgency for change (Oakley, 2017; Tierney & Rodriguez, 2014). The California legislature has typically responded to these calls for change by holding the system accountable through mandated reporting, sometimes tied to performance-based funding (Hom, 2008; Jones, 1996). The most recent call for transformative changes in the California community colleges system have included explicitly stated expectations about organizational culture, and a new funding model explicitly linking college performance to state apportionment funding been proposed for the 2018-19 state budget (Foundation for California Community Colleges, 2017; Zinshteyn & Gordon, 2018).
In July 2017, the Foundation for California Community Colleges published a strategic plan outlining broad system-wide goals for improved student performance (Foundation for California Community Colleges, 2017; Freedberg, 2017). In addition to establishing specific targets for student achievement metrics, the Vision for Success asks individual colleges to make several cultural commitments in support of the change. These commitments include increasing data-informed decision-making, adopting a more proactive mindset, setting and monitoring goals, taking calculated risks, and allowing for the possibility of failure (Foundation for California Community Colleges, 2017). The Vision for Success also suggests that system-wide support for the change effort be aligned with state-level initiatives already in operation, including the Institutional Effectiveness Partnership Initiative (IEPI), to ensure consistent expectations and professional development (Foundation for California Community Colleges, 2017).

The California Community Colleges Chancellor’s Office created the IEPI in response to 2014 legislation that sought improved accountability and oversight for system effectiveness and student performance (California Community Colleges Chancellor’s Office, 2015). To meet the accountability requirements of the legislation, the IEPI requires all colleges to set goals within a framework of performance indicators and report progress annually; some indicators require goals, and others are optional for colleges who want to use the framework as a tool for self-monitoring (Institutional Partnership Effectiveness Initiative, n.d.). In addition to the framework of indicators, the IEPI and provides professional learning opportunities and other support resources in order to help colleges improve performance (California Community Colleges Chancellor’s Office, 2015; Institutional Effectiveness Partnership Initiative, 2017). Recent professional
development workshops have included a leadership development component that
discusses the concepts of organizational culture and organizational learning and their
implications for improved performance at individual colleges and across the system
(Tena et al., 2017). As the IEPI expands its professional learning and leadership
development resources, further studies of how college leaders in California develop
organizational learning cultures may emerge.

Statement of the Research Problem

In California and across the country, colleges and universities are being pressed to
respond to performance expectations driven by changing economic factors and demands
for improved student success (Phelan, 2016; Sydow & Alfred, 2013). To meet these
expectations, college and university leaders must contextualize them in a way that
resonates with their organizations’ internal cultures, and when necessary, leads to
organizational change (Ewell & Ikenberry, 2015; B. N. McClenny, 2013; Tierney,
2006). Therefore, higher education leaders must be able to understand and manage
organizational culture in order to implement transformational change and ensure their
institutions’ continued success (Maloney, 2008; Smart, 2003). Organizational cultures
that value behaviors associated with organizational learning have been shown to adapt
more easily to change (Hogan & Coote, 2014; Mahler, 1997; van Breda-Verduijn &
Heijboer, 2016). This research suggests that an understanding of organizational learning
may also be important for leaders working to meet changing expectations, particularly in
complex organizational cultures (Kezar, 2005; Maloney, 2008; Smart, 2003).

Public community colleges have complex organizational cultures, due to their
multiple missions and systems of shared governance (Boggs, 2011; Boggs & McPhail,
California’s community college system is both culturally and structurally complex, with 114 individual colleges spread throughout 77 districts, a system Chancellor’s Office, and a Board of Governors accountable directly to the state legislature (California Community Colleges Chancellor’s Office, n.d.-b; Friedel et al., 2014). As legislative expectations for performance in California community colleges continue to increase, leaders in the system are beginning to discuss the importance of understanding organizational learning when implementing change, as well as the important role that college leaders play in developing organizational learning culture (California Community Colleges Chancellor’s Office, 2015; Tena et al., 2017).

However, few studies about the development of organizational learning culture in a higher education setting have been conducted to guide these conversations (Bauman, 2005; Kezar, 2005; Maloney, 2008). Existing studies of organizational learning conducted in a higher education setting have found that colleges and universities that value regular inquiry into the underlying assumptions of their culture appear to adapt and innovate more easily (Boyce, 2003; Maloney, 2008; Smart et al., 1997). In a quantitative case study of a two-year technical college in South Carolina, Maloney (2008) demonstrated a strong positive relationship between campus culture and improved learning and performance. However, researchers have yet to examine organizational learning culture in California’s community colleges, despite an emerging awareness of how organizational learning culture might help improve organizational performance and service to students throughout the California Community College system (Tena et al., 2017). Likewise, although community college presidents have been found to significantly influence the performance and culture of their
organization (Ball, 2008; Eddy, 2005; Kimmens, 2014; Ridguard, 2014), little research has been found that explores presidents’ role in developing organizational learning culture.

Several researchers have called for further exploration of how the phenomena of organizational learning, organizational culture, and leadership interact in a community college environment. Maloney (2008) suggested that qualitative studies of organizational learning processes in two-year colleges could lead to a better understanding of how to cultivate and manage the organizational learning environment. Perfetti (2015) noted that qualitative studies of organizational learning in community colleges could reveal barriers that leaders must address when seeking to develop an organizational learning culture. Similarly, Ridguard (2014) called for qualitative research further exploring the involvement of community college presidents in institutional practices that may affect colleges’ ability to improve metrics tied to student success, such as persistence, retention, and graduation rates.

**Purpose Statement**

The purpose of this multiple case study was to explore the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges. A secondary purpose of the study was to explore the role of organizational culture and campus leadership in facilitating second order change in California community colleges.
Research Questions

The following research questions guided this multiple case study:

1. What impact do organizational culture and campus leadership have on the development of organizational learning practices in California community colleges?
   a. What impact does organizational culture have on the development of organizational learning practices in California community colleges?
   b. What impact does campus leadership have on the development of organizational learning practices in California community colleges?

2. What role do organizational culture and campus leadership have in the facilitation of second order change in California community colleges?
   a. What role does organizational culture have in the facilitation of second order change in California community colleges?
   b. What role does campus leadership have in the facilitation of second order change in California community colleges?

3. What patterns of congruity or incongruity between cases can be identified with regard to the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges?
   a. What patterns of congruity or incongruity between cases can be identified with regard to the impact of organizational culture on the development of organizational learning practices in California community colleges?
   b. What patterns of congruity or incongruity between cases can be identified with regard to the impact of campus leadership on the development of organizational learning practices in California community colleges?
4. What patterns of congruity or incongruity between cases can be identified with regard to the role of organizational culture and campus leadership in the facilitation of second order change in California community colleges?

a. What patterns of congruity or incongruity between cases can be identified with regard to the role of organizational culture in the facilitation of second order change in California community colleges?

b. What patterns of congruity or incongruity between cases can be identified with regard to the role of campus leadership in the facilitation of second order change in California community colleges?

**Significance of the Problem**

Public colleges and universities in the United States are under continued pressure to improve student success and respond quickly to the changing needs of students. College and university leaders recognize that transformational changes will be necessary in order to meet performance expectations, and yet higher education culture is generally seen as mature, risk-averse, and difficult to change (Boyce, 2003; Sydow & Alfred, 2013). Studies of organizational culture conducted outside the higher education sector have found that behaviors associated with organizational learning support organizational change and innovation (Hogan & Coote, 2014; Mahler, 1997; van Breda-Verduijn & Heijboer, 2016). Leaders within the California Community College system are beginning to discuss organizational learning as a framework for implementing transformational change throughout the system, as well as the role that college leaders play in developing cultures where organizational learning behaviors are valued and practiced (California Community Colleges Chancellor’s Office, 2015; Tena et al., 2017).
As noted above, few studies about the development of organizational learning culture have been conducted in institutions of public higher education, despite evidence that behaviors associated with organizational learning have a positive impact on institutional effectiveness and capacity for change (Boyce, 2003; Maloney, 2008; Smart et al., 1997). Most studies related to culture and institutional effectiveness in community colleges have focused on establishing cultures around specific processes such as outcomes assessment or strategic planning (Apigo, 2015; Baker & Sax, 2012; Buckley & Piland, 2012), rather than on factors within organizational culture that influence how colleges use the results of these processes for ongoing learning and improvement. In addition, the role of academic leaders in developing an organizational learning culture has not been explored in detail, despite evidence that community college presidents have been found to significantly influence the culture and performance of their institutions (Ball, 2008; Eddy, 2005; Kimmens, 2014; Ridguard, 2014).

This study will contribute to the body of knowledge on organizational learning in higher education in several ways. First, the topic of organizational learning in higher education has not been thoroughly explored, particularly in the community college setting (Boyce, 2003; Kezar, 2005; Maloney, 2008; Perfetti, 2015). Second, higher education leaders’ role in developing organizational learning culture has not been thoroughly addressed in the literature (Maloney, 2008; Perfetti, 2015). Third, few studies have examined community college leaders’ perceptions of organizational learning culture or its relationship to organizational change and overall performance (Perfetti, 2015; Ridguard, 2014). This study will provide deeper understanding of the effect of both organizational
culture and leadership on organizational learning culture and capacity for second order change.

As students’ needs change, community college leaders must manage culture intentionally in order to help their organizations make sense of changing expectations for student success (Eddy, 2010). This study will deepen community college leaders’ understanding of the relationship between an organization’s culture and its ability to learn and improve as it responds to the external environment. In addition, this study will further understanding of the cultural factors that support or prohibit the development of an organizational learning culture. Community college leaders can use the findings of this study for leadership development programs such as those offered by California’s Institutional Effectiveness Partnership Initiative. Community college presidents in particular can use the findings to strengthen organizational learning cultures within their own colleges, districts, or systems.

Definitions

The following section provides a definition of concepts and terms relevant to the study.

Theoretical Definitions

**Double-loop learning.** A learning process that challenges and changes the values, beliefs, or assumptions underlying individual or organizational behavior and leads to transformational change (Argyris & Schön, 1996; Kezar, 2005, 2014).

**Institutional effectiveness.** The concept of how well an organization fulfills its mission, meets the expectations of its primary audience or stakeholders, sustains organizational health and quality, and responds to its external environment. In higher
education, institutional effectiveness practices may be linked to the systematic evaluation of organizational performance in key areas related to student achievement and fiscal accountability (Alfred, Shults, & Seybert, 2007; Bers, 2011; Cameron, 1978; Welsh & Metcalf, 2003).

**Leadership.** The process of influencing the values and behavior of others, in order to manage culture, facilitate change, and achieve shared goals (Kezar, 2014; Kotter, 2012; Northouse, 2015; Schein, 2010).

**Learning organization.** A practice-based, positively-oriented managerial framework focused on idealized concepts and behaviors such as adaptability, flexibility, risk-tolerance, and deep inquiry (Argyris & Schön, 1996; Garvin, 1993; Schein, 2010; Senge, 2006).

**Organizational culture.** The pattern of shared assumptions, beliefs, values, expectations, and norms of a group, observable in its artifacts and patterns of behavior (Cameron & Quinn, 2011; Cook & Yanow, 1993; Hogan & Coote, 2014; Schein, 2010).

**Organizational learning.** The process through which organizations learn about and adapt to their external environment, in order to improve performance and reach outcomes more effectively. Organizational learning is distinct from the concept of the learning organization, in that it is more value-neutral, and does not assume that all learning outcomes are productive or beneficial (Argyris & Schön, 1996; Kezar, 2005; Mahler, 1997).

**Organizational learning culture.** The dynamic cultural system of shared assumptions, values, beliefs, and norms that guides and directs collective learning within an organization (Schein, 2010; van Breda-Verduijn & Heijboer, 2016).
**Second order change.** A deeply significant shift in the behavior, values, assumptions, and beliefs of an organization that occurs as a result of double-loop learning, and is sustained over time. Second order change is also referred to in the literature as deep or transformational change (Kezar, 2014; Schein, 2010).

**Single-loop learning.** A learning process that detects and corrects errors within the environment or organization without challenging or changing underlying beliefs, values, or assumptions. Single-loop learning leads to incremental, or first-order change (Argyris & Schö́n, 1996; Kezar, 2005, 2014).

**Operational Definitions**

**California Community Colleges.** The system of 114 public community colleges in the state of California. A 17-member Board of Governors sets policy and direction for the system as a whole. The Board of Governors also appoints a single chancellor to oversee system operations, communication, and consultation with individual constituency groups within the system.

**Community College Reform Act (AB 1725).** State legislation passed in 1988 that established the California Community College system and many of its operational and governance procedures. AB 1725 established the expectation that local governing boards would be accountable for institutional performance through annual reporting on metrics related to student access and success.

**IEPI framework of indicators.** A framework of 32 performance metrics, i.e., “indicators,” developed by the Institutional Effectiveness Partnership Initiative and used by individual colleges in the California Community College system to set strategic goals related to institutional performance. Colleges are required to set 1-year and 6-year goals
for five mandated indicators, and may choose to set 1-year and/or 6-year goals for the remaining indicators in the framework.

**Institutional Effectiveness Partnership Initiative (IEPI).** An initiative of the California Community Colleges Chancellor’s Office launched in November 2014. The goal of the IEPI is to advance effective practices related to institutional performance within the California Community College system through collaborative assistance, professional development, and strategic goal-setting activities.

**Organizational learning practices.** The shared processes, procedures, actions, and/or behaviors through which organizations learn about and adapt to their external environment, in order to improve performance and reach outcomes more effectively. Practices may reflect single-loop learning, e.g., error detection and correction, double-loop learning, e.g., inquiry into underlying culture, or both. Learning practices may also include attributes of learning organizations (Schein, 2010; Senge, 2006), such as adaptability, flexibility, risk-tolerance, proactivity, curiosity, and future-oriented thinking.

**Single-college district.** A local educational district with an elected or appointed board of trustees that establishes policy and hires the president for a single community college. Single-college districts are distinct from multi-college or multi-unit districts, where a single board of trustees establishes policy and hires a president or chancellor to oversee multiple colleges within the district (Cohen et al., 2014).

**Student Success Act (SB 1456).** State legislation passed in 2012 with the stated goal of helping students reach goals related to obtaining a degree/certificate, career training, or transfer to a four-year institution. SB 1456 requires all California community
colleges to post institutional performance data related to completion and transfer rates in a publicly-accessible Student Success Scorecard.

**Delimitations**

This study was delimited to California community colleges operating in a single-college district. Although the majority of community college districts in California are multi-college districts (California Community Colleges Chancellor’s Office, n.d.-a), a multi-college organizational structure creates an additional layer of cultural and leadership complexity for each of the individual colleges within the district. In multi-college districts, a board of trustees establishes policy for all colleges, and a district president or chancellor sets the vision for the district and coordinates the leadership teams for each individual college (Cohen et al., 2014). This structure may produce an overall district culture, as well as distinct cultures at each individual college. Therefore, this study was delimited to include only colleges from single-college districts, in order to limit the layers of cultural and leadership complexity under consideration.

**Organization of the Study**

The remainder of this study is organized into four chapters, a reference list, and appendices. Chapter II reviews literature related to changing expectations for performance in higher education; organizational learning and organizational culture; and relationships between culture, learning, and second order change in higher education. Chapter III outlines the research design and methodology used in this study, including an overview of procedures and protocols used during case selection, data collection, and data analysis. Chapter IV presents the data that were gathered and reports on the key findings emerging from the analysis of data. Chapter V draws on a summary of the key
findings to make conclusions, identify implication for action, and propose recommendations for further research.
CHAPTER II: REVIEW OF THE LITERATURE

This chapter provides a review of the literature relevant to the topics of the present study. The literature review includes five main sections. The first section considers the broad context for the study by examining changing expectations for organizational performance within higher education in the United States. The second section considers theoretical perspectives related to organizational culture, organizational learning, and second order change. The third section examines organizational culture, learning, and change within the broad context of higher education and narrower context of community colleges. The fourth section considers organizational leadership, learning, and change within the context of higher education and community colleges. Finally, expectations for performance, learning, and second order change are considered in the specific context of the California Community College system.

Expectations for Performance in U.S. Higher Education

Although U.S. academic institutions have faced significant periods of instability and change throughout their history (Ford, 2017; Tierney, 2014), the current environment of change in higher education is multi-faceted and disruptive. Rapid technological developments, political and demographic shifts, and the effects of globalization have profound implications for the nation’s colleges and universities (Bruininks, Keeney, & Thorp, 2010; Kezar, 2014; Phelan, 2016). Additionally, an increasing number of private, for-profit, and online colleges have emerged in the educational marketplace to compete with traditional four and two-year institutions (Blumenstyk, 2014; Tierney, 2014). Due in part to the poor outcomes and performance of some private for-profit institutions, all colleges and universities face a higher degree of accountability and scrutiny at the
Federal level (Blumenstyk, 2014; Ewell & Ikenberry, 2015; Kinzie et al., 2015). The rapidly changing external environment and growing public awareness of educational outcomes require more innovation and change in order to adapt to the rapidly evolving expectations and needs of students and taxpayers (Kezar, 2014; Mills & Mehaffy, 2016; Tierney, 2014).

Between 2000 and 2015, undergraduate enrollment at postsecondary institutions increased by 30%, and additional increases are projected by 2026 (National Center for Education Statistics, 2017). Analysis conducted by the Pew Research Center in 2014 demonstrated that U.S. residents believe the social and economic benefits of a college degree outweigh the rising cost of attendance (Pew Research Center, 2014). Increasingly, the general public perceives that the purpose of higher education should be to prepare individuals to enter an evolving workplace and participate in a diverse, global society (Blumenstyk, 2014; Ford, 2017; Watson & Watson, 2013). However, public concerns over the affordability and quality of a college degree remain (Anderson, Boyles, & Rainie, 2012; Blumenstyk, 2014). As the labor market has shifted and available jobs require more education and training, policymakers have expressed increased concern about a return on the investment they have made in higher education (Kinzie et al., 2015; Palmadessa, 2017). Colleges and universities face increased calls for accountability and transparency related to graduation rates, cost, and quality of their programs (Kinzie et al., 2015; Tierney & Rodriguez, 2014; U.S. Department of Education, 2016a).

In response to the concerns of regulators and the general public, federal and state governments have developed accountability systems that allow comparison of individual colleges based on specific metrics related to value and quality. At the federal level,
systems such as the College Scorecard provide the public with a mechanism to compare how individual institutions perform on metrics such as cost, graduation rates, time to degree, and post-employment earnings (Kinzie et al., 2015; U.S. Department of Education, 2016b). Similarly, regional and programmatic accreditation agencies have increased requirements for reporting institutional data related to student achievement and learning outcomes (Head & Johnson, 2011; Suskie, 2015). Non-profit organizations such as the Lumina Foundation and the Bill and Melinda Gates Foundation also drive public interest in higher education performance through multiple initiatives focused on improving completion of college degrees (Blumenstyk, 2014; Kinzie et al., 2015; B. N. McClennen, 2013).

Leaders at both four-year and two-year institutions have reacted to this increased scrutiny and rapid societal change with calls to re-envision, re-design, or re-frame existing operational, curricular, and structural paradigms (Bailey, Jaggars, & Jenkins, 2015; Mills & Mehaffy, 2016; Watson & Watson, 2013). Many current observers of higher education believe that the disruptions of the early 21st century represent a “new normal,” rather than a storm that can be weathered (Blumenstyk, 2014; Bruininks et al., 2010; Tierney, 2014). Furthermore, as Ikenberry and Kuh (2015) point out, the disruptive developments “threaten some of the most basic assumptions on which the higher education enterprise rests” (p. 1). To adapt to the environment and respond to calls for increased performance, colleges and universities must be prepared to enact transformative, sustainable change to longstanding traditions and assumptions (Barr & Tagg, 1995; Tierney, 2014; Watson & Watson, 2013).
Changing Context and Expectations for Community Colleges

Within the context of increasing accountability and public interest, expectations for community colleges have also increased dramatically over the past two decades. With their open-access mission, community colleges play a strong role in transfer preparation and workforce development, particularly for populations of students who might be economically disadvantaged or underprepared for a four-year university (Cohen et al., 2014; Palmadessa, 2017). Community colleges have also become instrumental in the federal “completion agenda,” the Obama Administration’s goal of increasing the number college graduates to the highest in the world by 2020 (Clagett, 2013; Humphreys, 2012; O’Banion, 2010). Federal initiatives and funding connected to the completion agenda such as Achieving the Dream and America’s College Promise require community colleges to improve planning and outcomes as a condition of participation and funding (David et al., 2015; K. M. McClenny et al., 2007). Colleges that do not meet federal and state performance expectations risk losing access to government funds, and may be subject to accreditation sanctions, as well (David et al., 2015; Morris, 2015).

The increased stakeholder focus on completion metrics such as transfer, degree completion, and job placement has prompted a shift in the broader mission of community colleges, from one of access to one of success (Bailey et al., 2015; Barr & Tagg, 1995; O’Banion, 2010). Community colleges have begun to focus less on students’ access to education and more on how successfully they complete their goals (Barr & Tagg, 1995; Grossman, 2014; Hom, 2011). Notwithstanding concerns that the emphasis on completion metrics may sacrifice quality for quantity by emphasizing cost and speed over the tenets of liberal education (Humphreys, 2012; O’Banion, 2010), the emphasis on
success has been beneficial in some cases. For some community colleges, requirements for analyzing student performance metrics have led to better awareness of where students need additional support and improved performance for traditionally underrepresented groups of students (Bailey et al., 2015; Clagett, 2013; Jenkins, 2007).

**Changing Context and Expectations for California Community Colleges.**

California’s community colleges have not been immune from accountability trends and shifts in broad mission. In particular, the mission of the California Community College system has shifted to emphasize student success in the areas of transfer, Basic Skills (i.e., remedial education), and workforce development (Burdman, 2009; Friedel et al., 2014; Little Hoover Commission, 2012). In the past decade, several accountability initiatives have emerged from the California legislature and the California Community Colleges Chancellor’s Office that require the state’s community colleges to report on metrics such as completion, retention, progression from remedial to college-level courses, and job placement (California Community Colleges Chancellor’s Office, 2015; Hom, 2008; State of California. Legislative Analyst’s Office, 2014). Recent data suggest that the Student Success Act, a state-funded initiative aimed at improving degree/certificate completion and transfer rates, has not had a substantial impact (Gordon, 2017).

In July 2017, the Board of Governors for the California Community College system adopted a strategic vision for the state’s community colleges that prioritizes improvements in several student success metrics (Foundation for California Community Colleges, 2017). In addition to establishing system-wide performance goals for degree/certificate completion and transfer rates, the Vision for Success acknowledges that
broad organizational change will be required at the system office and at individual colleges within the system (Freedberg, 2017). In order to meet the goals defined in the Vision for Success, individual colleges are encouraged to make seven “core commitments” in support of the change, including participation in evidence-based inquiry, adopting a proactive, “solution-oriented” mindset, tracking internal goals, taking calculated risks, and allowing for the possibility of failure (Foundation for California Community Colleges, 2017, p. 3). These commitments are consistent with emerging system-wide dialogue around the topics of leadership, culture, organizational learning, and change (Oakley, 2017; Tena et al., 2017).

**Organizational Learning Theory**

Organizational learning refers to the study of how organizations learn about and adapt to experiences in order to shape future behavior. Organizational learning research emerged from the fields of organizational psychology and organizational science to clarify the similarities and differences between individual and collective learning processes (Dee & Leišytė, 2016; Sun & Scott, 2003). Organizational learning theory recognizes collective learning as distinct and different from the learning of a single individual. As Fiol and Lyles (1985) point out, “individual learning is important to organizational learning, [but] organizational learning is not simply the sum of each member’s learning” (p. 804). Organizations use learning processes to acquire and distribute institutional knowledge by encoding information into organizational memory, behaviors, and norms (Argyris & Schön, 1996; Huber, 1991; Levitt & March, 1988). In this way, the shared knowledge of the organization remains intact, even as individual members change (Dee & Leišytė, 2016).
Early literature on organizational learning diverged into two broad perspectives. Organizational learning theory was more traditionally academic and focused on value-neutral questions related to how organizations learn about and adapt to their environment, regardless of whether the adaptation was positive (e.g., Argyris & Schön, 1996; Huber, 1991; Levitt & March, 1988). From the perspective of these “learning skeptics,” learning was not assumed to be intentional or beneficial, nor was it assumed that any behavioral changes resulting from the learning would increase the effectiveness of the organization (Argyris & Schön, 1996; Huber, 1991; Popper & Lipshitz, 2000). Scholars writing from this perspective made no assumptions that learning—if it occurred—would be productive for the organization (Huber, 1991; Levitt & March, 1988). As Huber (1991) remarked, “Entities can incorrectly learn, and they can correctly learn that which is incorrect” (p. 89).

In contrast, a second body of literature focused on describing the ideal learning organization. This practice-based perspective assumed that learning processes would lead to positive changes for an organization, and was sometimes viewed as “messianic, and largely uncritical” by its critics (Argyris & Schön, 1996, p. xix). Those writing from the learning organization perspective focused largely on elements of an organizational environment that would enable learning and lead to improved organizational performance (e.g., Garvin, 1993; Schein, 2010; Senge, 2006). The learning organization perspective has also been criticized as having an overly simplistic treatment of the human dynamics involved in changing or improving organizational performance (Caldwell, 2012; Kezar, 2005; Sun & Scott, 2003). Despite the criticisms, however, the learning organization
literature provides organizational leaders with practical suggestions for improving learning and driving change, even if idealistic (Kezar, 2014).

While there are distinct differences between the two broad philosophical approaches and nuances of perspective within each approach, both bodies of literature seek to understand the mental and cultural framing that shapes how—and whether—an organization responds to a result that challenges previously held assumptions or expectations. In their seminal work on organizational learning, Argyris and Schön (1996) attempted to bridge the gap between the two philosophies by combining a “practice-oriented, values-committed stance with a skeptical attitude” toward the claims and assumptions made by advocates of the learning organization (p. xxi). Argyris and Schön (1996) argued that learning in itself is neither good nor bad, but that most organizations in practice seek productive learning – or learning that leads to improvement or change. Argyris and Schön also acknowledged that organizational threats to productive learning were extremely difficult to manage due to complex organizational cultures and political dynamics. Increasing the potential for productive organizational learning requires deep, reflective inquiry into organizational performance, behaviors, and values (Argyris, 1977; Bess & Dee, 2008; Lipshitz, Friedman, & Popper, 2007).

Argyris and Schön’s work has been criticized for being extremely difficult to implement in practice, and for not going far enough to address the political dynamics that exist within individual organizations (Bochman & Kroth, 2010; Lipshitz, 2000; Örtenblad, 2002). Argyris and Schön themselves acknowledged that productive organizational learning that leads to second order change is difficult and rare (Argyris, 1977; Argyris & Schön, 1996). However, their work has provided a common foundation
for discussing learning, barriers to learning, and the enmeshed relationships between
culture, leadership, learning, and change (Friesenborg, 2013; Mahler, 1997; Moynihan &
Landuyt, 2009). Several key concepts within the theoretical framework developed by
Argyris and Schön have persisted in the organizational learning literature. These
ccepts include theories of action, defensive routines, and single-loop and double-loop
learning (Chiva, 2017; McDowell, 2015; Simonin, 2017; Visser, 2007).

Theories of Action

Argyris and Schön describe the system of beliefs underlying organizational or
individual behavior as “theories of action” (Argyris, 1996; Argyris & Schön, 1996).
Similar to the mental models conceptualized by Senge (2006), theories of action help to
explain how organizations use internalized knowledge to develop a behavior in a given
situation (Argyris & Schön, 1996; Rook, 2013; Visser, 2007). Theories of action
therefore can explain strategies for action, the values underlying the choice of strategies,
and assumptions on which values and strategies are based.

There are two types of theory of action: espoused theories and theories-in-use.
Espoused theories are consciously held, explicitly stated beliefs or values, and are often
cited as explanations or justifications for individual or organizational action (Argyris,
1991; Bochman & Kroth, 2010; Lipshitz, 2000). In contrast, theories-in-use are the
implicit beliefs or values that actually guide action. Because they are implicit, theories-
in-use must be inferred by observing patterns of action or behavior (Argyris, 1991;
Argyris & Schön, 1996; Tagg, 2010). Often, observation will reveal a gap between an
organization’s espoused theory and its theory-in-use (Argyris & Schön, 1996; Bochman
& Kroth, 2010; Popper & Lipshitz, 2000). By engaging in deep inquiry into the
assumptions underlying the theory-in-use, organizations can close the gap – and ultimately, improve (Bochman & Kroth, 2010).

**Defensive Routines**

For productive learning to occur, organizations must openly address the assumptions underlying their theories-in-use and decision-making strategies. However, discussions of the underlying assumptions that guide behavior and decision-making can be perceived as a threat by individuals within the organization (Bochman & Kroth, 2010; Holmer, 2014). In response to perceived threat or embarrassment within the group, individuals enact defense mechanisms (Gibb, 1961; Holmer, 2014). Argyris and Schön (1996) described these individual defense mechanisms enacted in an organizational setting as defensive routines. Because the cognitive processes governing self-protection are so strong among individual members of the organization, defensive routines can become a fundamental barrier to productive learning at the organizational level, as well (Amitay, Popper, & Lipshitz, 2005; Holmer, 2014).

Defensive routines can also be self-reinforcing. Not only do defensive routines serve to protect an individual member of the organization from threat, they may also create an environment in which the causes of the threat or embarrassment cannot be openly discussed – even if there is general awareness of the causes among individual members of the group (Argyris, 2010; Lipshitz et al., 2007). Therefore, defensive routines may lead to organizational rigidity and inability to change, even when they stem from a well-intentioned desire to protect other group members from embarrassment. As defensive routines become embedded in patterns of behavior, individual members of the organization begin to believe that pointing out an issue would be “unrealistic or even
dangerous” to the stability and progress of the group (Argyris & Schön, 1996, p. 101). Successfully confronting defensive routines requires a high degree of trust, a strong climate of psychological safety, and a belief in the positive intentions of other organizational members (Lipshitz et al., 2007; Schein, 1993).

**Single-Loop and Double-Loop Learning**

Argyris and Schön (1996) described two learning processes that can be observed in organizational behavior, single-loop learning and double-loop learning. In each process, an organization monitors its behavior or performance and uses feedback from the monitoring process to make corrections in order to reach a desired outcome (Bess & Dee, 2008; Dee & Leišytė, 2016; Tagg, 2007). Although single-loop learning is a precursor for double-loop learning, the two processes often occur simultaneously rather than sequentially (Dauber et al., 2012; Simonin, 2017).

When an organization is engaged in single-loop learning, it may question the actions or strategies it uses to respond to its environment or reach an outcome, but it does not question the assumptions or beliefs underlying those strategies. Any decisions or actions it takes to address an unwelcome result lie within the organization’s existing routines, structures, strategies, and values (Argyris, 2003; Dauber et al., 2012; Simonin, 2017). In contrast, during a double-loop learning process, the organization collectively questions the appropriateness of the policies, norms, and assumptions behind its actions before determining its next steps (Bochman & Kroth, 2010; Chiva, 2017; Taylor, 2016) (see Figure 1). Therefore, organizations engaged in double-loop learning conduct inquiry not only into the effectiveness of a given action for reaching a desired outcome, but also
into whether the shared values and assumptions related to the desired outcome are appropriate (Argyris, 1994; Dee & Leišytė, 2016).


Single-loop learning is an important organizational learning process, as it allows organizations to make corrections and improvements to existing processes in order to reach identified goals or perform established tasks more efficiently and effectively (Carmeli & Sheaffer, 2008; Mayer, LeChasseur, Donaldson, & Cobb, 2013). However, as Chiva and Habib (2015) observe, single-loop learning seems most apparent in situations where organizational “goals, values, frameworks, and strategies are taken for granted” (p. 359). Because single-loop learning processes do not require the organization to question the values and beliefs guiding decisions and actions, any organizational changes that result from single-loop learning are likely to be incremental or transactional rather than second order or transformational (Argyris, 2010; Dee & Leišytė, 2016; Kezar, 2014). Double-loop learning process requires explicit discussion and dialogue about implicit beliefs, values, and assumptions, and as a result, can lead to transformational changes to cultural norms and paradigms (Dauber et al., 2012; Kezar, 2005; Levitt & March, 1988).
Both single and double-loop learning processes are important for organizational learning, but neither process guarantees improved organizational performance or productive change. A poorly formed organizational inquiry could lead to changes that do not reflect trends in the external environment (Dee & Leišytė, 2016). In addition, double-loop learning activities could lead to over-analysis: “If organizational members engage heavily in reflection and analysis, then thinking could displace action – a phenomenon commonly known as ‘paralysis by analysis’” (Dee & Leišytė, 2016, p. 296). Double-loop learning may also cause greater resistance to change within the organization, as disconfirming information enters the environment (Schein, 2017). Addressing disconfirming information may involve painful discussions or group conflict as values and beliefs are challenged (Argyris & Schön, 1996; Bochman & Kroth, 2010; Levitt & March, 1988). Regardless of whether the organization is engaged in a single or double-loop process, productive learning requires organizational inquiry supported by curiosity about the source of mistakes, openness to disconfirming information, commitment to professional development and continuous learning, and positive beliefs about the intentions of others in the group (S. A. Brown, 2012; Friesenborg, 2013; Mahler, 1997).

Cultural Aspects of Organizational Learning

Organizational learning is intrinsically connected to organizational culture. Productive double-loop learning results in an inquiry into the values, beliefs, and assumptions underlying and guiding an organization’s behaviors and actions (Argyris & Schön, 1996; Bochman & Kroth, 2010; Simonin, 2017). Organizational culture can be defined as the pattern of shared assumptions, beliefs, values, expectations, and norms of a group, observable in its artifacts and patterns of behavior (Cook & Yanow, 1993; Hogan
An organization’s culture affects how it approaches decision-making and task performance (Cook & Yanow, 1993; March, 1991; Schein, 2010). Culture also affects an organization’s ability to evaluate its environment and interpret its experiences in order to adapt, improve, and innovate (Cook & Yanow, 1993; Hogan & Coote, 2014; Mahler, 1997). Organizational culture both shapes learning processes and is changed by them: an organization’s shared assumptions are “invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration” (Schein, 1983, p. 14).

Models of organizational culture help to clarify the complex, abstract nature of organizational culture and illustrate relationships between culture and other structures and processes within an organization (Dauber et al., 2012). Schein was one of the first to view organizational culture as multi-layered, rather than as a single construct (Hatch, 1993; Hogan & Coote, 2014). Schein’s model identifies three distinct layers within an organization: artifacts, espoused beliefs and values, and basic underlying assumptions.

![Figure 2. Schein’s Three Levels of Culture. Adapted from Organizational culture and leadership, by E.H. Schein, 2017, 5th ed. (Hoboken, NJ: Wiley), p. 18.](image-url)
organization’s culture, as shown in Figure 2: artifacts, espoused beliefs and values, and basic underlying assumptions (Dauber et al., 2012; Hogan & Coote, 2014; Schein, 2010). Schein’s model acknowledges not only those domains of the organization that are explicitly observable, but the invisible, tacit elements, as well (Dauber et al., 2012; Hogan & Coote, 2014; Schein, 2010). Unconscious, underlying assumptions shape the behavior of the group, much in the way that theories-in-use shape organizational action in the theories of Argyris and Schön (Dauber et al., 2012; Hogan & Coote, 2014; Schein, 2010).

Observing an organization’s artifacts and behavior can provide insight into the cultural norms and assumptions that shape organizational learning conditions and drive organizational action (Dauber et al., 2012; Schein, 1993, 2010). Argyris and Schön (1996) suggest that organizational theories-in-use can be sometimes be inferred by observing the behavior and interactions of individuals who are governed by the same cultural norms. Similarly, Levitt and March (1988) note that inferences about learning can be seen in organizational documents, within ‘the social and physical geography of organizational structures and relationships ... and in shared perceptions of “the way things are done around here”’ (p. 327). However, Schein (2010) cautions that while visible behaviors and artifacts are the easiest elements of culture to observe, they are also the hardest to interpret. The theories-in-use governing organizational actions may be difficult to identify if they touch on implicit, “undiscussable” norms or tacit assumptions within the organization (Argyris & Schön, 1996, p. 14). Likewise, changes to theories-in-use resulting from successful double-loop learning processes may also be difficult to
identify if there is not an “immediate or evident effect on behavior” (March, 1991, p. 522).

**Cultural elements that impede learning.** Factors within an organization’s culture may impede productive organizational learning, including shared beliefs and values that drive patterns of organizational behavior. Groups within an organization have a strong desire to sustain the norms and strategies for action already embedded into the culture, particularly in times of environmental turbulence and change (Maloney, 2008; Schein, 2010). An organization’s investment in maintaining the status quo may manifest as resistance, visible through defensive routines, low levels of commitment to the organization’s goals, and even seemingly positive communication strategies that attempt to protect individual members of the organization from threat or embarrassment (Argyris, 1994, 2010; Bochman & Kroth, 2010). In these cases, single-loop learning may occur, but second order change is unlikely, as deeper inquiry into cultural assumptions does not occur (Argyris, 1994; Argyris & Schön, 1996).

An organization with a change-resistant culture may also display zero-loop learning or zero learning. In zero-loop learning, an organization is aware of a problem or undesirable outcome, but takes no corrective response (Chiva, 2017; Simonin, 2017). The intentional disregard for addressing an issue represents a broader dysfunction in an organization’s learning environment, which Simonin (2017) has described as “a certain pathology of non-learning” or a “symptom of unlearning” (Simonin, 2017, p. 176). Learning is therefore impeded when the organization’s culture does not support inquiry into the deeper assumptions underneath patterns of behavior and decision-making or
enable organizational members to be accountable for their patterns of behavior (Argyris, 1994; Lipshitz et al., 2007).

**Cultural elements that support learning.** The literature describes several broad categories of shared values and behaviors that appear to support organizational learning. Organizations have been shown to learn from experience, either their own or that of others (Garvin, 1993; Levitt & March, 1988). Likewise, cultures that value inquiry have been found to support organizational learning, particularly when inquiry into failures, errors, and mistakes can be done without blame or punishment (Argyris & Schön, 1996; Mahler, 1997). For open, non-judgmental inquiry into past experiences and failures to occur, organizations must maintain shared norms around the assumption of positive intent of others in the group (Friesenborg, 2013; Schein, 2010). The organization must also value ongoing learning, and remain committed to engaging in processes that will help them learn more effectively (Friesenborg, 2013; Schein, 2010). Goal-oriented, proactive organizations appear to maintain this cultural commitment to both learning and learning how to learn (Mahler, 1997; Schein, 2010).

Lipshitz et al. (2007) identify five specific norms that further support a commitment to productive learning: inquiry, issues orientation, transparency, integrity, and accountability. These norms are also closely tied with the psychological climate of an organization. For productive learning to occur, the culture must support a climate of psychological safety and trust, which in turn enables organizational members to face the risks associated with inquiry, transparency, and accountability (Argyris & Schön, 1996; Lipshitz et al., 2007; Schein, 2010).
Leadership Aspects of Organizational Learning

Leadership is broadly defined in the literature as the process of influencing the values and behavior of others, in order to manage culture, facilitate change, and achieve shared goals (Kezar, 2014; Kotter, 2012; Northouse, 2015; Schein, 2010). Organizational leaders, including both those with formal and informal leadership roles, have the potential to shape the organizational learning environment as they interact with organization’s culture. According to Schein (1983, 2010), organizational culture and organizational leadership are inextricably connected, in that leaders have a primary role in creating and developing the culture of their organization. For leaders who enter an organization with an established culture, such as that of a college or university, the ability to understand and work within the established culture is an essential skill, particularly when attempting to enact transformational or second order change (S. A. Brown, 2012; Schein, 2010; Springer et al., 2012). Even though second order change requires a shift of the existing organizational norms, assumptions, and beliefs, change initiatives that are not situated within the context of the existing organizational culture are more likely to fail (Balthazard, Cooke, & Potter, 2006; Kezar & Eckel, 2002). By promoting and modeling organizational learning processes that are aligned with the existing culture and structure of the organization, leaders can support inquiry and reflection into established assumptions, theories of action, and defensive routines from within the existing culture (Argyris, 1991, 2010; Moynihan & Landuyt, 2009).

Leaders promote productive organizational learning through a variety of supportive behaviors. Argyris suggested that the main role of leaders in the organizational learning process was to create an environment of dialogue, psychological
safety, and trust in which organizational members could work through defensive routines (Argyris, 1994, 2010; Argyris & Schön, 1996). The development of trust and psychological safety are particularly critical for organizational learning, as they enable organizational members to address defensive routines (Argyris, 2010; Lipshitz et al., 2007; Lipshitz, Popper, & Friedman, 2002). Trust and psychological safety, in turn, support the strengthening of shared values related to transparency, integrity, inquiry, and accountability. Leaders build trust and psychological safety, in part, through consistency of action and by demonstrating a tolerance for error in both policy and practice (Lipshitz et al., 2007; Lipshitz et al., 2002).

The development of psychological safety and trust requires leaders to establish a culture that values accountability, promotes transparency, and tolerates failure and risk (Lipshitz et al., 2007; Popper & Lipshitz, 2000). To establish such a culture, leaders can authentically model the behaviors they wish to instill (Ramaley & Holland, 2005; Stewart, 2006). For example, a leader may publicly test or question an organizational assumption or behavior in a curious rather than defensive manner to engage organizational members in inquiry (Argyris, 1994; Argyris & Schön, 1996). Similarly, leaders may encourage risk-taking, and emphasize lessons learned when mistakes or failures occur (Carmeli & Sheaffer, 2008; Lipshitz et al., 2007; Popper & Lipshitz, 2000). These leadership behaviors not only improve the potential for productive organizational learning, but have also been shown to increase overall organizational commitment (Amitay et al., 2005; Bochman & Kroth, 2010).

Multiple studies suggest that transformational leadership styles are effective in establishing and supporting these cultural values in the organization (Abbasi
& Zamani-Miandashti, 2013; Amitay et al., 2005; Dix, 2013). Transformational leadership practices such as creating a shared vision, fostering intellectual stimulation, and encouraging team creativity were found to be beneficial not only for organizational learning, but also for innovation and performance (S. A. Brown, 2012; García-Morales, Jiménez-Barrionuevo, & Gutiérrez-Gutiérrez, 2012; Stewart, 2006).

**Second Order Change**

Transformational or second order change results in a profound shift in an organization’s culture that becomes sustained over time. Such a change is pervasive throughout an organization, altering the fundamental assumptions underlying organizational behavior, structure, and action (Eckel et al., 2001; Kezar, 2014). Reflective organizational learning processes provide a framework for understanding how these changes occur (Dee & Leišytė, 2016; Tagg, 2010): organizational members question and test an organizational theory-in-use through a process of double-loop learning, which may result in changes to both organizational culture and strategy (Boyce, 2003; Dee & Leišytė, 2016; Tagg, 2010). Second order change requires “rigorous organizational inquiry,” characterized by a continuous cycle of “examining assumptions, surfacing and challenging mental models, and acting on what is learned.” (Boyce, 2003, p. 128). Maintaining this cycle of organizational inquiry requires a cultural norm of self-reflection and self-examination, as well as a recognition that resistance to change can help to surface previously tacit assumptions and beliefs within the organizational culture and subcultures (Argyris, 2010; Awbrey, 2005; Bochman & Kroth, 2010).

As with organizational learning processes, an organization’s culture may support or impede the successful second order change. Leaders attempting to enact second order
change must therefore understand and engage the organization’s culture in order to be successful (Tierney, 2008). Leader behaviors with a positive impact on productive organizational learning, including trust building, creating shared visions, encouraging risk taking, and fostering frank dialogue, have also been shown to support second order change efforts (Cejda & Leist, 2013; Craig, 2004; Maloney, 2008). During successful second order change efforts, leaders must be attentive to individuals who may resist or struggle with the change, and provide opportunities for organizational members to let go of old behaviors and beliefs through a process of “unlearning” as a new shared vision is created (Argyris & Schön, 1996; Ramaley & Holland, 2005; Visser, 2017).

**Theoretical Framework: Schein’s Dimensions of Learning Culture**

Most higher education studies have been situated within functionalist frameworks such as Argyris and Schön’s concept of single- and double-loop learning (Örtenblad & Koris, 2014). Functionalist perspectives presume that organizations have an objective reality that can be measured, managed, and enhanced in order to improve overall organizational effectiveness (Bess & Dee, 2008; Dee & Leišytė, 2016). However, several scholars have suggested that functionalist approaches fail to account for sociocultural aspects of learning, including the ways that culture is socially constructed (J. S. Brown & Duguid, 1991; Cook & Yanow, 1993; Lipshitz, 2000). Although functionalist frameworks acknowledge the relationship between organizational learning, culture, and leadership, their primary focus is on learning processes, rather than on the specific social elements of culture and leadership that affect the organization’s learning environment (Lipshitz et al., 2007; Lipshitz et al., 2002).
Culture helps individuals within a group assign meaning and sense to the world around them. In times of environmental turbulence and change in the external environment, culture becomes a stabilizing force (Schein, 2010; Tierney, 2008). Therefore, in strong cultures, change becomes difficult (Schein, 2010). To survive in a climate of perpetual change, cultures must “stabilize perpetual learning and change” so that the expectation of change becomes the norm (Schein, 2017, p. 343). Writing on the interconnected nature of organizational culture, leadership, and learning, Schein (2017) identified ten cultural dimensions that indicate an organization has begun to embed learning-oriented values, norms, and assumptions into its social interactions (Table 1).

Table 1

Schein’s Dimensions of Learning Culture

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Shared Belief or Assumption</th>
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<tbody>
<tr>
<td>Proactivity</td>
<td>Proactive, inclusive problem-solving and learning supports responsive decision-making processes</td>
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<tr>
<td>Commitment to “learning to learn”</td>
<td>Learning is a skill to be mastered; Error and failure provide learning opportunities</td>
</tr>
<tr>
<td>Positive assumptions about human nature</td>
<td>Individuals can and will learn if provided the necessary resources and psychological safety</td>
</tr>
<tr>
<td>Environmental management</td>
<td>Turbulence in the environment can be managed to a degree</td>
</tr>
<tr>
<td>Commitment to inquiry and dialogue</td>
<td>Solutions to problems derive from flexible inquiry and dialogue that leads to better understanding between subcultures; multiple solutions or “truths” may exist for any given problem</td>
</tr>
<tr>
<td>Positive orientation toward the future</td>
<td>Preferred time orientation is between the near future and far future, which allows for assessment and course-correction</td>
</tr>
<tr>
<td>Commitment to full and open task-relevant communication</td>
<td>Open communication and information related to a specific task or decision supports organizational well-being and promotes effective problem solving; open communication requires trust, integrity (i.e., truth-telling), and psychological safety</td>
</tr>
<tr>
<td>Commitment to cultural diversity</td>
<td>Cultural diversity expands the organization’s capacity to manage unpredicted events</td>
</tr>
<tr>
<td>Commitment to systems thinking</td>
<td>Issues and events are increasingly complex, interdependent, and nonlinear, often with multiple causes or effects</td>
</tr>
<tr>
<td>Commitment to internal cultural analysis</td>
<td>Analyzing and reflecting on organizational culture is a necessary part of the learning process</td>
</tr>
</tbody>
</table>

The present study investigated the impact of organizational culture and leadership on organizational learning practices and second order change, using Schein’s Dimensions of Learning Culture as a theoretical frame. This framework was suited to the research questions guiding this study for several reasons. First, it highlights the importance of deep inquiry and reflection as practices necessary for organizational learning (Argyris & Schön, 1996), and acknowledges the importance of dialogue between diverse institutional subcultures for problem solving and for the construction of culture itself (Cook & Yanow, 1993; Locke & Guglielmino, 2006; Schein, 1993). Second, Schein’s dimensions emphasize that trust, integrity, and psychological safety must be present in order for learning and change to take place (Bochman & Kroth, 2010; Lipshitz et al., 2007; Popper & Lipshitz, 2000). Each dimension underscores the role of organizational leaders in the formation and transmission of culture: leaders both interpret the external environment and model the cultural norms (Dauber et al., 2012; Schein, 2010). Finally, the framework simplifies the values, norms, and assumptions that are most critical for organizations attempting to sustain themselves in a time of disruptive change (Schein, 2017).

**Organizational Culture, Learning, and Change in Higher Education**

Although institutions of higher education focus their missions around student learning, it is only relatively recently that scholars began to examine how collective learning occurs within colleges and universities themselves (Dee & Leišytė, 2016; Örtenblad & Koris, 2014). Some organizational development scholars have questioned whether colleges and universities have the capacity for organizational learning, because these institutions often appear slow to apply new knowledge or ideas for the purpose of improvement (Dill, 1982; Garvin, 1993). Higher education leaders and scholars,
however, have increasingly begun to examine the applicability of organizational learning concepts as a framework for responding to increased stakeholder expectations for improvement and accountability (Bensimon, 2005; Finch, Burrell, Walker, Rahim, & Dawson, 2010; White & Weathersby, 2005). The literature on organizational learning in higher education is consistent with general organizational learning theory, which suggests that colleges and universities with organizational cultures supportive of regular inquiry into underlying assumptions and behaviors appear to meet external expectations more easily (Boyce, 2003; Maloney, 2008; McCaffrey, 2012).

**Organizational Culture in Higher Education**

Organizational culture reflects the manner in which individual members of a college or university community define their reality as they interact with each other and interpret the external environment (Bergquist & Pawlak, 2008; Birnbaum, 1988; Tierney, 2008). As in other types of organizations, culture provides stability for institutions of higher education, and allows members to predict the range of likely behaviors or responses in any given circumstance (Birnbaum, 1988; Schein, 2010). Notwithstanding the views of individual members or subcultures within the institution, the organization’s general approach to developing strategies and preferences for decision-making can be understood from a cultural perspective (Eckel et al., 2001; Smart et al., 1997; Smerek, 2010). However, studies have shown that these preferences are constructed through social processes, including processes related to organizational learning (Finch et al., 2010; Maloney, 2008; Regjo, 2014) and second order change (Cejda & Leist, 2013; Craig, 2004; Springer et al., 2012). As with organizational learning processes, organizational culture both shapes, and is shaped by, the interactions of individual
members and subcultures within the institution and therefore affects organizational performance and change (Kezar & Eckel, 2002; Kuh & Whitt, 1988; Smart et al., 1997).

Cultural interactions within higher education institutions are distinctly complex. The culture of any given institution may be shaped by the values, beliefs, and assumptions stemming from the cultures of the national educational system, the academic profession, and individual academic disciplines of the faculty (Birnbaum, 1988; Dill, 1982; Kuh & Whitt, 1988). The organizational cultures of individual institutions are also affected by the cultures of any superordinate state or district systems, as well as by the cultures of the multiple subgroups within the institution (Birnbaum, 1988; Locke & Guglielmino, 2006; Tierney, 2008). Although these broad cultural forces may serve as a common frame of reference for academic culture, cultures of individual institutions vary, based on their specific missions and values and the unique ways that organizational members interpret and interact with their external environments (Birnbaum, 1988; Tierney, 2008).

Internal dynamics add another layer of cultural complexity to higher education institutions. Academic institutions typically employ large numbers of highly educated professionals – faculty – to carry out their core mission of instruction (Bolman & Deal, 2013). Faculty, administrators, and support staff each have their own distinctly defined subcultures, each with their own values, beliefs, and assumptions (Kuh & Whitt, 1988; Smerek, 2010). The interaction between subcultures has implications for both organizational culture and organizational learning processes, particularly in institutions where the faculty subgroup is significantly larger than others (Birnbaum, 1988; Bolman & Deal, 2013; Dill, 1982). Dill (1982) suggests that organizations dominated by
professionals such as faculty are “value-rational” in that their members must have
“absolute belief in the values of the organization … independent of their prospects for
success” (p. 308). When professional ideologies conflict with the rules or goals of the
organization, commitment to the professional ideology will generally win and
organizational mandates will be ignored (Dill, 1982). Therefore, processes designed to
promote organizational learning and second order change are more likely to be
productive when the organization’s culture supports trust and dialogue between
subcultures, as well as clearly stated shared values (Cejda & Leist, 2013; Corry, 2016;
Maloney, 2008).

Because of the complex and individual nature of a given college or university,
organizational leaders must have strong knowledge of the specific dynamics and
culture(s) operating within an institution in order to successfully manage change
processes (Cejda & Leist, 2013), including those involved with organizational learning
(Kezar & Eckel, 2002; Tierney, 1988). Rather than waiting to consider culture when
there is a problem or dysfunction within the institution, Tierney (1988) recommends that
academic leaders work to understand their organizations’ cultures prior to times of crisis,
to increase the potential for “reasoned reflection and consensual change” (p. 4). From
this perspective, organizational culture can reduce internal conflict and foster the
development of shared goals during decision-making and learning processes, rather than
serve as a barrier to learning and change (Boyce, 2003; Tierney, 1988, 2008). An
understanding of organizational structures and cultural archetypes can help academic
leaders understand and manage organizational cultures within their institutions (Bergquist
& Pawlak, 2008; Birnbaum, 1988; Tierney, 2008).
**Loosely coupled structures.** The structure of an organization affects its culture, in that structure determines the manner in which individuals and subgroups can interact with each other (Bolman & Deal, 2013; Kuh & Whitt, 1988). The literature describes academic institutions as loosely coupled systems, or structures in which individual subsystems may be responsive to each other, but simultaneously maintain their individual identity and sense of separateness (Birnbaum, 1988; Weick, 1976). Loose coupling may also describe subsystems whose connections to each other may be “infrequent, weak in its mutual effects, and/or slow to respond” (Weick, 1976, p. 3). Changes to or actions by one subsystem may or may not lead have an immediately obvious affect on a connected subsystem, which may make the system as a whole appear unresponsive, ineffective, and uncoordinated (Birnbaum, 1988). This structure therefore has a negative effect on the productivity of organizational learning processes, as loose coupling makes it more difficult to disseminate new information, facilitate effective group inquiry across subcultures, and implement change (Birnbaum, 1988; Boyce, 2003).

Despite the challenges that a loosely coupled structure creates for learning processes, loose coupling may have some advantages for organizations navigating an increasingly complex external environment. Individual departments, services, and programs in an academic institution may be able to draw on their specialized knowledge and partial independence to sense changes in the environment, allowing them to react more quickly than the rest of the institution if necessary (Birnbaum, 1988; Boyce, 2003; Weick, 1982). Differentiation and specialization of individual academic departments, programs, or administrative services allows an institution to respond effectively to increasing levels of external complexity, and also ensures that diverse and differentiated
perspectives are represented in institutional processes (Smerek, 2010). However, loose coupling may also serve to create and reinforce the identity of subcultures and silos within the broader structure of the institution (Kuh & Whitt, 1988).

**Structural and cultural archetypes in higher education.** Birnbaum (1988) identified four models of institutional structure that describe broad generalities of governance, leadership, and subgroup interaction within four different types of colleges and universities. Although not strictly a cultural analysis, Birnbaum’s work has strong implications for studies of higher education culture (Bergquist & Pawlak, 2008). Variations in assumptions, beliefs, and norms underlie the structural differences between research universities, liberal arts colleges, large public universities, and community colleges and help to explain why each type of institution operates differently (Bergquist & Pawlak, 2008; Birnbaum, 1988). Birnbaum’s analysis described institutions of higher education as collegial, bureaucratic, political, or anarchical. Although any individual institution will contain elements of each model, each model reflects the typical structure of a different type of academic institution (Birnbaum, 1988). Therefore, Birnbaum’s analysis provides a useful set of cognitive frames for leaders as they seek to understand the organizational culture at a given institution (Bensimon, 1989; Bergquist & Pawlak, 2008; Bolman & Deal, 2013).

Cultural archetypes also provide helpful cognitive frames for understanding the shared values and assumptions of academic institutions that affect the potential for organizational learning and second order change. Drawing on Birnbaum’s (1988) structural analysis, Bergquist and Pawlak (2008) identify six distinct, but interrelated cultural archetypes that can be found among higher education institutions: collegial,
managerial, developmental, advocacy, virtual, and tangible. As with other frame analyses, the cultures of individual institutions may reflect elements of any or all of the archetypes to a certain extent (Bergquist, 1992; Bergquist & Pawlak, 2008).

The six archetypes highlight the typical values, beliefs, and assumptions that different types of institutions hold about their mission, operational procedures, and interpersonal interactions (Bergquist, 1992; Bergquist & Pawlak, 2008). By examining institutions through this cultural frame, leaders may develop a better understanding of the potential for organizational learning and change (Bergquist & Pawlak, 2008; Thomas, 2016). For example, Holyoke, Sturko, Wood, and Wu (2012) demonstrated that institutions with strong aspects of the developmental archetype were more likely to be predisposed to productive organizational learning, due to the value placed on mission and belief in a collective vision for the institution. Similarly, Kezar and Eckel (2002) found that successful change efforts within developmental, managerial, and collegial institutions depended on aligning strategies for change with the norms and values of the organizational culture.

**Organizational Culture in Community Colleges**

Within the broad cultural and structural archetypes of higher education, community colleges are generally described in the literature as bureaucratic or managerial in nature. Both Birnbaum (1988) and Bergquist and Pawlak (2008) cite the community college as a typical example of their respective structural and cultural models. Structurally, Birnbaum (1988) describes the bureaucratic institution as one that has been established to “efficiently relate organizational programs to the achievement of specified goals” (p. 107). Bergquist and Pawlak (2008) use similar terms to define the managerial
culture archetype. Institutions with managerial cultures find meaning in work directed
toward a specific goal or purpose, value fiscal responsibility and organizational
efficiency, and hold assumptions about “the capacity of the institution to define and
measure its goals and objectives clearly” (Bergquist & Pawlak, 2008, p. 43). Perhaps
because of this characterization, many recent studies of community college culture are
situated within a context of institutions’ effectiveness in meeting specific mission-driven
goals or outcomes.

**Organizational culture and performance.** Several recent studies have
highlighted cultural factors of high-performing community colleges that appear to lead to
improved performance and innovation (Cejda & Leist, 2013; Kish, 2016; Tharp, 2012),
or demonstrate problematic or dysfunctional cultural factors that serve as barriers to
improvement and change (Apigo, 2015; Corry, 2016; Tharp, 2012). In separate studies,
both Kish (2016) and Tharp (2012) found that cultures at high-performing colleges
supported a proactive approach towards accomplishing goals and tasks. Further, Kish
(2016) reported that high-performing colleges maintained cultures that supported
openness towards new ideas, courageous discussions about institutional data, and positive
attitudes about institutional members. In contrast, Corry’s (2016) in-depth study of a
college that was not meeting external performance expectations revealed a dysfunctional
culture characterized by mistrust, insularity, normalization of deviance, and defensive
routines. These findings are consistent with studies of organizational learning that
suggest that cultures supportive of proactivity, trust, engagement with the external
environment, and positive assumptions about others have a positive affect on
organizational learning and change (Friesenborg, 2013; Mahler, 1997; Schein, 2017).
High-performing colleges have also been shown to have cultures supportive of reflection and inquiry. Several recent studies of community college culture focus specifically on the development of cultures of inquiry or evidence-based decision making through structures such as outcome assessment or program review (Apigo, 2015; Dowd, 2005; Manning, 2011). In community colleges with established inquiry practices for assessment or program review, organizational members had ample opportunity for open and safe discussion of data and results (Apigo, 2015; Cejda & Leist, 2013; Kish, 2016). A cultural norm emphasizing inquiry over compliance is particularly important for successfully engaging faculty in activities with external mandates or expectations (Apigo, 2015; Baker & Sax, 2012; Manning, 2011). As a culture of inquiry is developed, institutional structures such as a research office can serve the values of both administrative and faculty subcultures by both measuring institutional performance and supporting practitioner-based inquiry projects (Dowd, 2005; Goomas & Isbell, 2015; Manning, 2011). By shifting the institution’s approach to inquiry into its data and creating safety for questioning past practice and results, leaders can begin to shift values and assumptions, increasing the potential for improved organizational learning and successful change (Bauman, 2005; Boyce, 2003; Tagg, 2007).

**Organizational culture and mission.** The culture of an organization has a strong effect on how its mission is translated into action for both internal and external audiences. Organizations with a clear, shared mission and purpose have been shown to be more adaptable to change (Cejda & Leist, 2013; Craig, 2004; Stephens, 2013). Further, Stephens (2013) found that strong alignment between mission and culture was a marker of organizational effectiveness in the community colleges. A clear sense of mission
within an organization’s culture can nurture an organizational learning environment by providing shared purpose, direction and motivation towards shared goals, and an increased sense of control over the external environment (Maloney, 2008; Perfetti, 2015).

However, alignment between culture and mission in the community college setting is complicated, due to the multiple missions that those institutions seek to meet (Boggs, 2011; Boggs & McPhail, 2016; Maloney, 2008). Community colleges focus not only on transfer and degree preparation, but also career training, remedial education, and lifelong learning; the needs of the students pursuing each of these broad educational goals are different (Boggs, 2011; Cohen et al., 2014). Having multiple missions not only makes it difficult to measure institutional performance, the different missions may also actually compete with each other for institutional resources and attention from faculty (Boggs, 2011; Hom, 2008). Successful management of culture and change in the community college environment, then, requires focusing and clarifying intertwined missions around a culturally meaningful purpose.

Organizational Leadership, Learning, and Change in Higher Education

As in private sector and non-profit industries, higher education leaders influence and shape their organizations’ capacity for innovation and change by managing culture and fostering behaviors that promote learning (Bauman, 2005; Phelan, 2016; Ramaley & Holland, 2005). Kezar (2014) observed that leadership was “perhaps the most important facilitator” of change to emerge from the research on higher education change management (p. 108). However, in order to successfully implement second order change in higher education, leaders must be attuned to the elements of higher education systems that are distinct from other industries (Birnbaum, 1988; Bolman & Gallos, 2011; Boyce,
Although higher education leaders can learn from management and leadership theory outside higher education, the unique combination of educational mission, governance structures, and a large professional employee group present a leadership challenge and may require different skillsets in order to support organizational learning and change (Birnbaum, 1988; Bolman & Gallos, 2011; Eddy, 2010).

Leadership Strategies Supportive of Learning and Change

The literature suggests several strategies that higher education leaders can take to effectively lead and support learning and change at their colleges and universities. Many of these suggestions overlap with strategies in general management literature, such as modeling the change, establishing a shared vision, developing collaborative planning and governance environments, and cultivating tolerance for risk-taking and failure (Craig, 2004; Kezar, 2014; Taylor, 2016). Understanding the organizational culture is also shown to be a critical factor for higher education leaders (Craig, 2004; Eckel et al., 2001; Kezar, 2014). Craig (2004) observes that organizations that manage change most effectively have a shared cultural assumption that they should always be prepared for change. These suggestions are consistent with Schein’s (2017) descriptions of a learning culture.

Within the context of generally accepted change management techniques, the higher education literature emphasizes the critical importance of open communication and modeling a positive orientation towards members of other organizational subcultures (Bertram-Elliott, 2015; Craig, 2004; Perfetti, 2015). Both of these strategies help to build trust and psychological safety, which have been shown to be critical for both organizational change and learning. In addition, structures and processes that support
evidence-based decision-making can help leaders strengthen openness to institutional inquiry and reflection (Dowd, 2005; Eckel et al., 2001; McDowell, 2015). In particular, formal structures for institutional research have been shown to help build capacity for organizational learning in both four-year and two-year institutions (Borden & Kezar, 2012; Goomas & Isbell, 2015; Leimer, 2012).

**Formal and Informal Leadership Roles in Higher Education**

The majority of literature on higher education leaders’ role in organizational learning and change has largely concentrated on the role of leaders with formal authority or positional power, such as presidents and senior administrators. Effective administrative leadership in academic institutions requires a higher degree of cultural interpretation and contextualization for followers, particularly among faculty constituents (Birnbaum, 1992; Neumann, 1995). Due to the structural and cultural challenges of the higher education environment, a participatory approach to leadership is critical for academic leaders with formal leadership roles (Bensimon, Neumann, & Birnbaum, 1989; Grasmick, Davies, & Harbour, 2012). In particular, presidents who use multiple cognitive frames to examine differing perspectives and sources of evidence develop a more holistic view of their institution and its culture (Birnbaum, 1992; Kezar, Carducci, & Contreras-McGavin, 2006). Multi-frame approaches may enable leaders to see their role as facilitating rather than directing the work of faculty and staff and support better exchange of ideas between institutional subcultures (Bensimon et al., 1989; Birnbaum, 1992). Developing a multi-frame, participative approach to leadership can therefore help formal leaders build trust and increase their influence on organizational learning and change (Grasmick et al., 2012; Kezar et al., 2006). As Birnbaum (1999) notes, “the
effectiveness of an academic leader may depend less on getting the community to follow the leader’s vision and more on influencing the community to face its problems” (p. 17).

Although presidents and senior academic administrators have been shown to have a strong influence on organizational culture, learning, and change, a growing body of more recent research has begun to address the importance of individuals with informal, non-positional leadership roles, such as grassroots leaders among faculty and classified staff. Examination of the similarities and differences between “top-down” and “bottom-up” leadership in academic institutions suggest that both formal and informal leaders use similar strategies to effect change within the institution (Kezar, 2014). However, informal processes and grassroots networks that exist outside formal governance committees or roles may be more diverse and participatory (Brinkhurst, Rose, Maurice, & Ackerman, 2011; Ferren, Dolinsky, & McCambly, 2014). Ultimately, convergence between formal and informal leadership builds organizational capacity for change (Brinkhurst et al., 2011; Kezar, 2012; Watson & Watson, 2013). These findings are consistent with Schein’s (2017) dimensions of learning culture, which suggest that systems thinking, open communication, and commitment to diverse ideas promote learning and change.

**Leadership, Learning, and Change in Community Colleges**

Community college leaders, like leaders of other types of academic institutions, promote institutional capacity for learning and change as they interact with and interpret institutional culture. Community colleges are typically viewed as more bureaucratic than other types of higher education institutions (Bergquist & Pawlak, 2008; Birnbaum, 1988). However, Bensimon (1989) demonstrated that in spite of this perception of typical
community college structure and culture, the espoused theories of community college presidents do not reside solely in bureaucratic or managerial frame. Further, community college presidents appear to develop more nuanced, multi-frame perspectives as they gain experience in their role (Bensimon, 1989; Eddy, 2005). Exemplary community college presidents have been shown to continue to construct and adjust their leadership practice as they interact with their organization’s culture over time (Eddy, 2005). These findings suggest leadership itself can be viewed as a learning process (Amey, 2005; Maloney, 2008). During a change implementation, leadership behaviors that demonstrate a proactive commitment to personal self-reflection and learning how to learn set a model for the college at large, and frame expectations for collaborative learning (Amey, 2005; Eddy, 2010; Ramaley & Holland, 2005).

Leadership in community colleges is further complicated by rapid changes in the external environment. Increased external expectations for improved student success, decreases in public funding, rapidly changing community demographics, and new technological developments not only create shifts in institutional mission, but also create internal governance challenges, as well (Boggs & McPhail, 2016; Sydow & Alfred, 2013). In 2013, the American Association of Community Colleges revised its core competencies for community college leaders to reflect these environmental trends (American Association of Community Colleges, 2013). The updated competencies suggest the importance of understanding organizational culture prior to making significant changes, and encourage new presidents in particular to develop a culture that empowers faculty and staff to take calculated risks (American Association of Community Colleges, 2013). Although not specifically focused on developing organizational
learning, the updated competencies are consistent with findings in the higher education literature that demonstrate links between organizational leadership, culture, learning, and change in the community college environment (Kezar, 2014; Maloney, 2008; Perfetti, 2015).

**Expectations for Second Order Change in California Community Colleges**

Leaders in the California community college system have begun efforts towards large-scale changes to the structure and practices of the system. Calls for change in the California system are not new; over the past several decades, researchers have expressed concerns about educational accountability, governance structures, and even the design of the system itself (Burdman, 2009; Jones, 1996; Walters & Fetler, 1991). More recently, however, concerns about the impact of declining student performance on workforce preparation and economic development in California have added a heightened sense of urgency to calls for change (Tierney & Rodriguez, 2014). The California legislature has typically responded to these calls for change by holding the system accountable through mandated reporting, sometimes tied to performance-based funding (Hom, 2008; Jones, 1996). For example, the 2012 Student Success Act (SB 1456) established explicit expectations for student performance and outcomes, and created mechanisms for funding tied to how well colleges achieved those expectations (State of California. Legislative Analyst’s Office, 2014; Whissemore, 2012). In the proposed budget for the 2018-2019 fiscal year, Governor Brown took these expectations a step further, by proposing the implementation of a new funding model for California community colleges that incentivizes outcomes such as degree/certificate completion and transfer (California Department of Finance, 2018; Zinshteyn & Gordon, 2018).
The most recent call for transformative changes in the California community colleges system have included explicitly stated expectations about organizational culture. In July 2017, the Foundation for California Community Colleges published its Vision for Success, a strategic plan outlining broad system-wide goals for improved student performance and calling for broad, transformative changes in the structure of both the system and its individual colleges (Foundation for California Community Colleges, 2017; Freedberg, 2017). The Vision for Success encourages colleges to make several cultural commitments in support of the change that are consistent with Schein’s (2017) dimensions of learning culture. These include increasing data-informed decision-making, adopting a more proactive mindset, setting and monitoring goals, taking calculated risks, and allowing for the possibility of failure (Foundation for California Community Colleges, 2017). Vision for Success suggests that as these commitments are operationalized, they can be aligned with state-level initiatives already in place throughout the system in order to ensure consistent expectations and professional development (Foundation for California Community Colleges, 2017).

**Institutional Effectiveness Partnership Initiative**

The Institutional Effectiveness Partnership Initiative (IEPI) was created to meet the accountability and performance goals of the state legislature, while simultaneously providing professional development and peer support to individual California community colleges. The California Community Colleges Chancellor’s Office created the IEPI in response to 2014 legislation that explicitly sought accountability from the Chancellor’s Office regarding system effectiveness and student performance (California Community Colleges Chancellor’s Office, 2015). To meet the accountability requirements of the
legislation, the IEPI established a framework of performance indicators related to four broad categories. All colleges were required to set short and long term goals for specific indicators in the framework and file an annual performance report on progress towards the goals. The framework also includes optional indicators; colleges may choose to set goals for these indicators if they wish to use the framework as a tool for self-monitoring (Institutional Partnership Effectiveness Initiative, n.d.). By design, no sanctions are imposed when colleges do not meet their goals. Instead, the IEPI encourages colleges to recognize that not every effort will succeed, and notes that “the most important changes arguably are the ones with the greatest risk and will require colleges to stretch the most” (Institutional Effectiveness Partnership Initiative, 2017).

In addition to the framework of indicators, the IEPI also provides professional development opportunities and peer support teams to help colleges improve performance with specific tasks or issues (California Community Colleges Chancellor’s Office, 2015; Institutional Effectiveness Partnership Initiative, 2017). Professional development events often include a leadership development component that discusses the concepts of organizational culture and organizational learning and their implications for improved performance at individual colleges and across the system (Tena et al., 2017). As the IEPI expands its professional learning and leadership development resources, further studies of how college leaders in California develop organizational learning cultures may emerge.

**Gap in the Literature**

Within the California Community College system, there is both a call for structural and cultural change, and a growing awareness of the ways leaders can engage organizational learning practices in order to improve service to students (Oakley, 2017;
Tena et al., 2017). Researchers have examined how specific cultural practices, such as culture of evidence (Baker & Sax, 2012) or cultures of inquiry (Apigo, 2015) have been created in a California community college setting. Other studies have explored how organizational learning might affect overall equity of educational outcomes for California community college students (Gonzalez, 2009). More recently, Pratt (2015) demonstrated that organizational culture and mindset were key factors in a California community college’s ability to develop entrepreneurial strategies and introduce new forms of revenue. However, there are few studies that demonstrate the effect of organizational culture and leadership on organizational learning practices and second order change within California community colleges.

Existing studies of organizational learning conducted in a higher education setting have found that colleges and universities that value regular inquiry into the underlying assumptions of their culture appear to meet performance expectations more easily (Boyce, 2003; Maloney, 2008; Smart et al., 1997). In a quantitative case study of a two-year technical college in South Carolina, Maloney (2008) demonstrated a strong positive relationship between campus culture and improved learning and performance. However, researchers have yet to examine organizational learning culture in California’s community colleges, despite an emerging awareness of how organizational learning culture might help improve organizational performance and service to students throughout the California Community College system (Tena et al., 2017). Likewise, although community college presidents have been found to significantly influence the performance and culture of their organization (Ball, 2008; Eddy, 2005; Kimmens, 2014;
Ridguard, 2014), little research has been found that explores presidents’ role in developing organizational learning culture.

Several researchers have called for further exploration of how organizational learning, organizational culture, and leadership affect community college performance. Maloney (2008) suggested that qualitative studies of organizational learning processes in two-year colleges could lead to a better understanding of how to cultivate and manage the organizational learning environment. Perfetti (2015) noted that qualitative studies of organizational learning in community colleges could reveal barriers that leaders must address when seeking to develop an organizational learning culture. Similarly, Ridguard (2014) called for qualitative research further exploring the involvement of community college presidents in any institutional practices that may affect colleges’ ability to improve metrics tied to student success, such as persistence, retention, and graduation rates. Further, Thomas (2016) suggests that additional studies are needed to understand how public colleges adapt when their existing values and beliefs are challenged or become less relevant to the external environment. The present study addressed these gaps by investigating the effect of organizational culture and leadership on organizational learning practices and second order change in California community colleges.

**Summary**

The review of the literature reveals that higher education exists in an environment of increasingly rapid change. Although change in higher education is not new, the current environment differs in that the changes are multi-faceted and disruptive. In addition to changing technologies and shifting demographics, higher education institutions face increased scrutiny stemming from public concerns over quality and
affordability of college degrees. These concerns have led to an increase in accountability reporting with regard to degree completion and gainful employment rates. Concerns over student success and degree completion are particularly challenging to address in the community college environment, which serve traditionally underrepresented (and often underprepared) populations of students.

Adapting to an environment and meeting public expectations requires colleges and universities to enact transformative, sustainable changes to longstanding traditions and assumptions. However, higher education institutions have been characterized as slow to adapt and improve, in part because of the longstanding traditions and deeply established underlying assumptions of academic culture. Organizational learning theory explores how organizations respond when their assumptions or expectations are challenged, or when an action does not produce an expected result. Increasing the potential for productive organizational learning that leads to transformative change requires deep, reflective inquiry into organizational performance, behaviors, and values, as well as courageous discussions of underlying assumptions. Organizational leaders, including leaders in higher education, can promote productive organizational learning by creating an environment supportive of dialogue, psychological safety, and trust.

The literature review also revealed that culture and learning are interdependent: organizational culture influences learning processes, which in turn may change culture. Culturally and structurally, higher education is a complex environment for learning and change. Community colleges generally reflect a bureaucratic/managerial culture and structure, with an emphasis on mission-driven goals and objectives. Therefore, successful learning and change in the community college environment requires focusing
and clarifying mission(s) and vision around a culturally meaningful purpose, even as the urgency for change increases.

Organizational learning concepts have a high degree of relevance for community college leaders. Recent concerns about flat or declining student success rates in the California Community College system have created a sense of urgency and calls for transformative change, both at the system level and within the 114 individual colleges around the state. In order to address these concerns and provide improved success for students as the environment continues to change, productive organizational learning practices and barriers to organizational learning must be identified and addressed.
CHAPTER III: METHODOLOGY

This chapter provides a detailed description of the methodology used for the study. This comparative case study used a multiple case design with embedded unit of analysis to understand the impact of organizational culture and campus leadership on the development of organizational learning practices and facilitation of second order change in California community colleges. Chapter III includes the purpose statement and research questions as rationale for the research design. This chapter also provides information about the population and sample for the study, and describes the procedures and protocols used during case selection, data collection, and data analysis. Finally, the chapter addresses the study’s limitations and concludes with a summary.

Purpose Statement

The purpose of this multiple case study was to explore the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges. A secondary purpose of the study was to explore the role of organizational culture and campus leadership in facilitating second order change in California community colleges.

Research Questions

The following four research questions guided this multiple case study:

1. What impact do organizational culture and campus leadership have on the development of organizational learning practices in California community colleges?
   a. What impact does organizational culture have on the development of organizational learning practices in California community colleges?
b. What impact does campus leadership have on the development of organizational learning practices in California community colleges?

2. What role do organizational culture and campus leadership have in the facilitation of second order change in California community colleges?
   a. What role does organizational culture have in the facilitation of second order change in California community colleges?
   b. What role does campus leadership have in the facilitation of second order change in California community colleges?

3. What patterns of congruity or incongruity between cases can be identified with regard to the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges?
   a. What patterns of congruity or incongruity between cases can be identified with regard to the impact of organizational culture on the development of organizational learning practices in California community colleges?
   b. What patterns of congruity or incongruity between cases can be identified with regard to the impact of campus leadership on the development of organizational learning practices in California community colleges?

4. What patterns of congruity or incongruity between cases can be identified with regard to the role of organizational culture and campus leadership in the facilitation of second order change in California community colleges?
   a. What patterns of congruity or incongruity between cases can be identified with regard to the role of organizational culture in the facilitation of second order change in California community colleges?
b. What patterns of congruity or incongruity between cases can be identified with regard to the role of campus leadership in the facilitation of second order change in California community colleges?

Research Design

A research design is a structured, logical plan that outlines how the researcher will collect, analyze, and interpret data in order to address specific research questions (Patton, 2015; Yin, 2014). This study used a multiple case study design with embedded units of analysis to explore how organizational culture and campus leadership impact the development of organizational learning practices and facilitate second order change at California community colleges. This section outlines the rationale for each aspect of this design, and demonstrates alignment between the design and the study’s purpose statement and research questions.

Case Study Methodology

Case study is a method of empirical inquiry through which an individual, group, organization, process, or practice can be examined deeply, holistically, and in context, using a variety of data collection procedures (Patton, 2015; Yin, 2014). Case study designs are appropriate when attempting to address “how” or “why” questions related to a contemporary phenomenon and the real-world context in which it exists, and when the researcher has little or no control over the case being studied (Yin, 2014). The research questions underpinning this study ultimately seek to understand a broader “how” question – specifically, how organizational culture and campus leadership impact organizational learning and second order change within the context of California community colleges. The underlying inquiry situates organizational culture, campus leadership, and
organizational learning in the real-world context of the California community college system. Therefore, case study methodology is appropriate.

Yin (2014) also suggests that case study is an appropriate methodology for inquiries where the boundaries between a phenomenon and its context are not “clearly evident” (p. 16). The boundary between phenomenon and context may be indistinct in a real-world setting. For example, an organization’s learning practices may be expressions of a shared value in the organizational culture. Likewise, the boundary between an organization’s culture and the organization itself may be indistinct (Schein, 2010). The lack of clear boundaries between phenomena and context may lead to situations where there may be more variables than data points (Yin, 2014).

To address this issue, case study designs require the use of multiple sources of data and evidence. Case study researchers may collect data from documents, archival records, interviews, direct observations, and/or physical artifacts as appropriate to answer the research questions (Yin, 2014). During data analysis, strategies such as triangulation and theory testing can be used to seek convergence or non-convergence of results emerging from multiple sources (Yin, 2014). The present study, which sought to answer questions related to organizational culture, leadership, and organizational learning practices, relied primarily on documentation, interviews, archival records, and observation of physical artifacts related to organizational culture (e.g., campus layout, meeting spaces, etc.). Table 2 outlines the strengths and weaknesses of these sources.
Table 2

**Strengths and Weaknesses of Evidence Sources Used in the Present Study**

<table>
<thead>
<tr>
<th>Source Type</th>
<th>Source Item</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
</table>
| Documentation | • Governance and decision-making handbooks  
• Committee minutes and discussion items  
• Official policies and procedures  
• Formal evaluations, including self-evaluations | • Stable  
• Unobtrusive  
• May include specific details  
• Provides breadth of coverage (e.g., timespan, multiple events, settings) | • Difficult to find and/or retrieve  
• Potential for selection bias  
• May reflect biases of the author  
• Can be withheld deliberately |
| Archival records | • Organizational records  
• Performance data available from the Chancellor’s Office  
• Maps and charts | • Same as for documentation  
• Precise  
• Usually quantitative | • Same as for documentation  
• May not be accessible due to privacy concerns |
| Interviews | • Semi-structured interviews with formal leaders  
• Semi-structured interviews with informal leaders | • Targeted directly on case study inquiry  
• Provides explanations of events and insight into perceptions, attitudes, & meaning | • Subject to bias from poorly formed questions  
• Response bias  
• Inaccuracies due to poor recall  
• Interviewee may provide what interviewer wants to hear |
| Physical objects | • Buildings, layout of space  
• Signage, works of art  
• Technological equipment & tools | • May provide insight into cultural features  
• May provide insight into technical operations | • Selectivity  
• Availability |


**Multiple Case Design with Embedded Units of Analysis**

Yin (2014) describes four primary case study designs, based on the number of cases in the study and whether there are sub-units of analysis within the case. A single case study design features an in-depth focus on a single unique or exceptional case, while a multiple case study design allows for in-depth focus on several cases as well as
comparison of patterns across cases. Multiple case designs also allow for the possibility of direct replication of results, which can lead to stronger findings and conclusions. Although case studies do not seek to generalize their results, conclusions arising independently from multiple cases are considered to be more powerful than conclusions arising from a single case alone (Yin, 2014).

Both single and multiple case designs can be used with either holistic or embedded analysis approaches. In a holistic case study design, the global nature of each case is considered. In contrast, embedded case study designs allow researchers to consider and analyze data from subunits or sublevels within the same case to gain deeper insights into operational relationships in each case (Yin, 2014). The relationship between the case and embedded units of analysis in a multi-case embedded design are shown in Figure 3.

![Figure 3](image)

**Figure 3.** Relationships between context, case, and units of analysis in a multi-case design with embedded units of analysis. Adapted from *Case study research*, by R.K. Yin, 2014, 5th ed. (Los Angeles, CA: Sage).

Embedded designs address research questions by collecting data at the level of the embedded units within each individual case, returning these results back to the individual case, and then proceeding to cross-case analysis, as shown in Figure 4. When used with multiple cases, an embedded analysis approach also allows researchers to collect both qualitative and quantitative data from each case for individual analysis and comparison
across cases, as long as results from the embedded units of analysis are not pooled across cases (Yin, 2014).

**Figure 4.** General process for data collection and analysis in a multi-case design with embedded units of analysis. Data collected from embedded units of analysis are considered within their case, rather than pooled across cases. Adapted from *Case study research*, by R.K. Yin, 2014, 5th ed. (Los Angeles, CA: Sage).

This study used a multiple case study design with embedded units of analysis to explore how organizational culture and campus leadership impact the development of organizational learning practices and facilitate second order change at California community colleges. Embedded analysis allowed for examination of each case from differing levels, as shown in Figure 5.

**Figure 5.** Relationships between context, case, and embedded units of analysis for the current study. Adapted from *Case study research*, by R.K. Yin, 2014, 5th ed. (Los Angeles, CA: Sage).
Qualitative Methodology

Effective research designs are driven by the study’s research questions, in order to ensure that data and evidence gathered during the study align with the study’s underlying purpose (Yin, 2014). Unlike quantitative designs that seek to identify or measure relationships between variables using statistical tests of numerical data, qualitative designs allow researchers to explore phenomena from the perspective of participants by asking open-ended questions and using thematic analysis (McMillan & Schumacher, 2010; Patton, 2015). Qualitative research features sensitivity to context and participant perspectives, allows for emergent design, and acknowledges complexity through rich narrative description (McMillan & Schumacher, 2010). As this study asks open-ended questions about the concepts of organizational culture, campus leadership, and organizational learning practices, a qualitative orientation is appropriate.

The specific theoretical and methodological approach used within a qualitative inquiry depends on the nature of the core research questions framing the study (McMillan & Schumacher, 2010; Patton, 2015). As defined by Yin (2014), case studies seek to investigate “a contemporary phenomenon (the case) in depth and within its real-world context” (p. 16). Phenomenological methods are used to understand, describe, and interpret the lived experiences of an individual or group with regard to a specific event or phenomenon, in order to understand the shared essence of phenomenon, as well as the meaning and structure that is ascribed to it (McMillan & Schumacher, 2010; Patton, 2015). In phenomenological studies, researchers not only seek to understand how people experience and interpret the world, they also assume that common or shared experiences have an underlying essence that give rise to the phenomenon’s core meaning (Patton,
The case study and phenomenological methodologies can complement each other, as they both seek an in-depth understanding of the contextual meaning of a specific phenomenon or event.

The current study focuses on understanding college leaders’ perspectives regarding the impact of organizational culture and leadership on organizational learning practices and second order change. In order to better understand organizational culture, campus leadership, organizational learning practices, and second order change, phenomenological methods were used to gather and analyze data related to the lived experiences of the formal and informal leaders at each case site. The shared experiences of the participants comprise the essence of these phenomena at each college, and may shed light on congruities between colleges, as well. Data related to participant experiences were gathered from in-depth in-person interviews and relevant documents produced by each college.

**Population**

A population is defined as a representative group from which a small number of information-rich cases can be drawn, in order to deepen understanding of the phenomena being studied (Patton, 2015). Unlike quantitative studies, studies with a qualitative orientation draw purposefully and selectively from a population in order to expand and deepen understanding of a phenomenon rather than generalize results back to the whole (Patton, 2015; Yin, 2014). In order to expand on theoretical propositions related to the phenomena of organizational culture, campus leadership, and organizational learning in California community colleges, this qualitatively oriented case study drew information-
rich cases from the general population of 114 colleges in the California Community College system.

**Target Population**

Individual cases in a multi-case study must be selected purposefully, in order to ensure that they yield data that relevant for the specific theoretical proposition or research questions at hand. Yin (2014) suggests that a two-phase approach to site selection can be used when there are a large number of candidates for potential cases. In the first phase of this approach, relevant quantitative and/or descriptive data are gathered from publicly available sources. These data are then used to develop operational criteria to screen potential candidates down to a more manageable target population from which to draw sample cases (Yin, 2014). In order to address the research questions and theoretical propositions of the study, two primary criteria were used to identify the target population:

1. Colleges in the target population were from single-college districts.
2. Colleges in the target population set a long-term goal for at least one optional indicator in the IEPI’s Year 3 framework of indicators.

As noted in Chapter I, this study was delimited to include only colleges from single-college districts in order to limit the additional layers of cultural and leadership complexity associated with multi-college districts. As of June 2017, the California Community College system included 48 colleges in single-college districts (California Community Colleges Chancellor’s Office, n.d.-a). Although the majority of community college districts in California are multi-college districts (California Community Colleges Chancellor’s Office, n.d.-a), a multi-college organizational structure creates an additional layer of cultural and leadership complexity for each of the individual colleges within the
district. In multi-college districts, a board of trustees establishes policy for all colleges, and a district president or chancellor sets the vision for the district and coordinates the leadership teams for each individual college (Cohen et al., 2014). This structure may produce an overall district culture, as well as distinct cultures at each individual college. Therefore, the target population for the study included only single-college districts, in order to limit confounding variables associated with district culture and leadership.

The 48 single-district colleges had several other organizational similarities. Each college had a Chief Executive Officer – generally a Superintendent/President, although in one case the CEO was a Chancellor. All 48 colleges had formal leadership roles for faculty through an Academic Senate, and for classified staff through either a Classified Senate, Classified Council, or Classified Service Employees Association (CSEA) chapter. In addition, all 48 colleges set goals for a minimum of four indicators in the IEPI framework, as mandated by California Education Code. However, data from the California Community Colleges Chancellor’s Office indicated that only some of the single-district colleges chose to set a long-term goal for at least one optional indicator in the IEPI’s Year 3 framework of indicators. To directly address the research questions and theoretical propositions for the study, only the colleges that set optional long-term goals were included in the target population. There were 36 single-district colleges that met this criterion.

Other descriptive characteristics of colleges in the target population varied, particularly with regard to location, college age, and enrollment. Of the 36 colleges in the target population, three were located in the Bay area, four in the Central region, nine in the Northern region, and the remaining 20 in the Southern region. The oldest college
in the target population was established in 1915 and the newest in 1999. Enrollment also varied greatly: among the target population colleges, the average annual full-time equivalent students (FTES) for both credit and non-credit for the last three academic years (13/14 – 15/16) ranged from 1,483 to 25,786.

**Sample**

A sample can be defined as the group of subjects, representative of a target population, from whom data are collected (McMillan & Schumacher, 2010). In qualitative studies that do not seek to generalize to a broader population, purposeful methods are used to identify small, information-rich samples that support an in-depth focus on the topic (Patton, 2015). In order to gather rich data and evidence about the impact of organizational culture and campus leadership on organizational learning practices in California community colleges, purposeful sampling methods were used to select case colleges from the target population. Purposeful sampling was also used to identify participants for semi-structured interviews at each case site and select other data sources, including documents, cultural artifacts, and archival records. Rationale for the sampling methods is discussed below.

**Case Selection**

For multiple case study designs, Yin (2014) advises that individual cases be selected using replication logic, so that each case “either (a) predict similar results (a *literal replication*) or (b) predicts contrasting results but for anticipatable reasons (a *theoretical replication*)” (p. 57) in order to test a theoretical proposition. A theoretical proposition is a simple hypothesis about why or how events or behaviors occur, drawn from research literature and/or practical experience relevant to the topic of the case study.
An understanding of the proposition being tested in the case study not only helps to establish the boundaries of the study, but also influences the selection of cases. Data and evidence gathered from selected cases must provide literal or theoretical replications of results in order to test the propositions underpinning the design of the study (Yin, 2014).

To determine the appropriate number of cases for a multi-case study, researchers must use discretionary judgment to determine the number of literal and/or theoretical replications required to establish the degree of certainty needed to address the theoretical proposition (Yin, 2014). In cases where the theory under consideration does not require excessive certainty, two or three literal replications may be appropriate (Yin, 2014). To address the theoretical propositions and provide opportunities for testing rival explanations in the current study, three cases were selected from the target population to serve as the sample.

Individual cases in a multi-case study must be selected purposefully, in order to ensure that they yield data that relevant for the specific theoretical proposition or research questions at hand (Yin, 2014). Snowball sampling is a purposive sampling method that allows researchers to ask existing interviewees or informants to identify other potential subjects who could provide differing or reinforcing perspectives on the topic under consideration (McMillan & Schumacher, 2010; Patton, 2015). Similarly, Yin (2014) suggests that querying individuals with knowledge about each potential case candidate can be used as a screening mechanism.

In the present study, the CEO of one of the candidate colleges agreed to assist the researcher by serving as the pilot case and sharing information about the other candidates.
In this case, the CEO of the college where the pilot test was conducted provided suggestions for five colleges within the target population that could provide valuable perspectives on the research questions. With sponsorship from the pilot CEO, the researcher sent a letter of introduction to the CEOs to explain the study and invite participation as a case site (Appendix A). The final three cases were selected based on each CEO’s willingness for his or her college to participate and relative ease with which the researcher could travel to the college in person.

**Participant Selection**

The research questions for the study seek to explore how campus leaders impact organizational learning practices and facilitate second order change. Therefore, semi-structured interviews with formal and informal leaders at each case site provided important data and evidence. Criterion-based sampling was used to select participants who had held one of the following four formal leadership roles for a minimum of one semester:

1. Chief Executive Officer of the college
2. Lead administrator/manager for the college’s institutional research office
3. President of the Academic Senate
4. President of the Classified senate (or equivalent)

The researcher also asked formal leaders at each site to identify individuals outside of these four formal leadership roles who could provide rich information and context about the college’s organizational culture and/or organizational learning practices. Interviews with these informal leaders provided a more rounded perspective of
the organizational culture and organizational learning practices for each case. Four to eight interviews were conducted with participants from each individual case site.

**Instrumentation**

In qualitative research, the researcher serves as the primary instrument for gathering data and driving inquiry into the research questions (McMillan & Schumacher, 2010; Patton, 2015). Therefore, the potential bias or subjectivity of the researcher is a major threat to the validity of any qualitatively oriented study. Patton (2015) argues that to a certain degree, the researcher’s personal experiences, subjective knowledge, and relationships with human subjects can also add richness to qualitative research when researchers are careful to maintain a stance of mindful, empathic neutrality – or conveying “an understanding [of] a person’s situation and perspective without judging the person, and communicating that understanding with authenticity to build rapport, trust, and openness” (p. 57). Additionally, qualitative researchers must remain mindful of their own perspectives as they interact with subjects and interpret data. On-going reflexive practice is critical through data collection and interpretation in order to increase validity and reliability of the study. By practicing reflexivity, or critical self-examination and self-questioning, qualitative researchers remain aware of how their own cultural, political, and social experiences shape their own perspective and voice (McMillan & Schumacher, 2010; Patton, 2015). In the present study, the researcher practiced several strategies suggested by McMillan and Schumacher (2010) to monitor and enhance reflexivity, including keeping a field log and an ongoing reflex journal. The researcher also practiced audibility techniques to record data management and document the chain of evidence.
This multiple case study relied on open-ended, semi-structured interviews to address the research questions and theoretical propositions. Interviews are an important source of evidence in case study research, as they provide researchers with the opportunity to hear the perspective of individuals connected to the case (Yin, 2014). Yin suggests approaching case study interviews as “guided conversations rather than structured queries” (p. 110) in order to balance between a strict line of inquiry and responsiveness to reactions of the interviewee. Open-ended interviews with semi-structured questions determined prior to the interview and included in an interview guide or protocol can minimize variation in the questions asked of each interviewee, while still allowing the researcher to ask probing follow-up questions where appropriate (Patton, 2015; Yin, 2014).

Interview questions for the present study were developed with the theoretical framework in mind, in order to ensure that data gathered from the interviews would address the research questions and theoretical propositions of the study. Standard open-ended interviews ranging from 45-60 minutes were conducted with each interviewee. Interviewees were contacted via email with a follow-up phone call to confirm the time. Although face-to-face interviews were scheduled with all participants, an emergency campus closure at College B on the day of the scheduled site visit required those interviews to be conducted by phone. All interviews were conducted in real-time, either in person or via phone. This strategy allows interviewers to respond to non-verbal queues and provide non-verbal and verbal feedback (McMillan & Schumacher, 2010; Patton, 2015). The researcher took notes during the interview in order to control the tempo of the interview and note personal observations about interviewees’ responses.
analysis (Patton, 2015); however, all interviews were digitally recorded with the consent of the interviewees to allow for accuracy and aid in the researcher’s reflexive practice.

Validity

In qualitative research, validity can be defined as “the degree of congruence” between the researcher’s interpretations of the phenomena under study and the realities of the real-world context in which these phenomena exist (McMillan & Schumacher, 2010, p. 330). McMillan and Schumacher (2010) suggest that validity in a qualitative design is the degree to which the researcher and participants agree on the composition, description, and meaning of events or phenomena. To ensure validity in case study designs, Yin (2014) suggests that researchers use specific strategies during data collection and analysis, including the use of multiple sources of evidence, the establishment of a chain of evidence, and sharing initial case study report with key informants in order to corroborate findings.

Several strategies were used to strengthen the validity of the present study. Multiple sources of data and types of evidence were used in order to triangulate findings, terms were clearly defined in relationship to the theoretical propositions of the study, and all interviewees were given the opportunity to review and comment on transcripts of their interviews. Interviews followed a standard protocol and guide (Appendix B), to ensure as much consistency of process as possible. Although the interviews varied somewhat due to the semi-structured format, the same preliminary questions were asked of each participant, and in the same order.

Pilot test. To further strengthen the validity of the study, the researcher conducted a pilot test prior to applying for IRB approval for the study. In qualitative
research, pilot tests help to identify and eliminate potential biases in interview questions and protocols (McMillan & Schumacher, 2010). In addition, Yin (2014) suggests that pilot tests can also be used as formative evaluations of a proposed case study design that lead to “conceptual clarification” prior to launching the full study (p. 96). For the present study, the researcher used the pilot test to ensure the validity of the research design, interview questions, and data collection methods. Feedback from the pilot participant was used to further refine and improve the final interview questions and guidebook.

Interviewers can also unknowingly bias or influence interview responses through their mannerisms, personal characteristics, or inexperience (McMillan & Schumacher, 2010). To address this issue, the researcher invited a colleague with experience conducting qualitative interviews to observe the pilot interview and provide feedback and suggestions for improvement, using the prompts provided in Appendix C. The colleague possesses a doctorate in education and has experience conducting qualitative interviews; therefore, the colleague could observe and provide feedback on the researcher’s interview technique and protocols. Feedback from these direct observations served as interview training, and was used to enhance the researcher’s objectivity, mannerisms, and technique during subsequent interviews conducted in the study.

Reliability

In qualitative studies, reliability refers to the consistency of results, obtained through standardization of procedures. Within case study designs, Yin (2014) describes reliability as “demonstrating that the operations of a study – such as the data collection procedures – can be repeated, with the same results” (p. 46). Careful documentation of each step in the research process helps ensure consistency and strengthens reliability
(Yin, 2014). For multiple case designs such as the one followed in the present study, procedural documentation is essential in order to ensure that the steps taken for data collection and analysis are consistent across each case site. Therefore, the researcher developed and followed a case study protocol that was followed at each case site to ensure consistency of data collection. The researcher also developed and used protocols to organize and document data in a standardized manner.

**Case study protocol.** A case study protocol provides a structured description of the data collection procedures used for a given study. The protocol guides and standardizes the researcher’s steps, and therefore increases the reliability of a case study design (Yin, 2014). For the present study, the case study protocol included an interview guide (Appendix C), as well as protocols for gathering data from artifacts, documents, and archival records (Appendix D).

An interview guide can help to ensure that “the same basic lines of inquiry are pursued” with each interviewee (Patton, 2015, p. 439). The interview guide for the present study established consistent procedures and methods of questioning for each interview. The same preliminary questions were asked of each interviewee, although some follow-up questions varied. The guide also included potential probes that could be used to deepen participants’ responses where necessary in order to “increase the richness and depth of responses” (p. 465).

In addition to the interview guide, the case study protocol included an outline of the specific types of artifacts and documents to be collected from each case site. Although artifact and document collection generally require less interaction between researcher and participant, a list of the types of artifacts and documents to be collected
from each site ensured consistency in the types of sources sought at each case site. The artifact and document guide included a suggested timeline for gathering artifacts and documents in advance of in-person visits to the case sites, to allow for follow-up with participants on-site if necessary.

**Triangulation.** Triangulation is a strategy for “obtaining convergent data using cross-validation” of multiple sources of data and evidence (McMillan & Schumacher 2010, p. 331). In this study, data were gathered from multiple source types – e.g., interviews, artifacts, documents, and archival records. Within the interview source type, data were also gathered from members of different constituency groups, including formal and informal administrative, faculty, and staff leaders at each site. During data analysis, triangulating and cross-validating data from one source against other sources allowed the researcher to identify consistencies within the findings.

**Interrater reliability.** One specific type of triangulation that was used with interview data was interrater reliability, also referred to as analyst triangulation or intercoder agreement (McMillan & Schumacher, 2010; Patton, 2015). In this practice, two or more individuals independently analyze or code qualitative interview data and compare findings, in an effort to avoid potential bias associated with a single coder (Patton, 2015). Interrater reliability describes the degree to which the coders agree when independently performing content analysis, and is essential for establishing validity of the results (Lombard, Snyder-Duch, & Bracken, 2010). Patton (2015) also notes this method is particularly appropriate when working with semi-structured interviews, where participants are asked the same preliminary questions in the same order for the sake of consistency (Patton, 2015).
For the present study, the researcher invited a community college administrator with a doctorate degree in education and familiarity with social science research methods to serve as the second coder. Following the protocol suggested by Lombard et al. (2010), the researcher and intercoder established the indices and the tools that would be used during analysis of interrater reliability, determined the minimum level of reliability that would be acceptable for each index, and conducted a pilot test using a small set of interview data to formally assess reliability. After ensuring that reliability levels in the pilot were accurate, identical procedures were used on a randomly selected portion of interview data comprising roughly 10% of the full sample (Lombard et al., 2010). The intercoder followed the coding procedures using the data analysis steps outlined in the case study protocol (Appendix D). When results of the researcher and intercoder were compared, themes converged with a coefficient of .80, indicating acceptable levels of reliability (Lombard et al., 2010).

Data Collection

Because the distinction between a phenomenon and its context may not always be clear, case study research relies upon triangulation from multiple sources of data and evidence in order to reach conclusions about the case (Patton, 2015; Yin, 2014). Data were gathered through semi-structured interviews, and collection of artifacts and documents relevant to each case, following procedures outlined in the case study protocol (Appendix D). Archival data related to institutional performance for each case college were also consulted.
**Human Subjects Considerations**

In research studies with human subjects, researchers must be mindful of their ethical and legal responsibilities (McMillan & Schumacher, 2010). Prior to data collection, Brandman University’s Institutional Review Board (BUIRB) approved the research design and interview guide for the present study (Appendix E). Interview participants were invited to participate via an email that included an introduction to the researcher, a brief overview of the study, and a description of the anticipated time commitment (Appendix F). Once the participant had agreed to the interview, the researcher sent a follow-up email containing a research participant’s Bill of Rights (Appendix G), a copy of the informed consent form (Appendix H), and a formal request for permission to record the interview (Appendix I). All signed consent forms and recording permissions were stored in a locked filing cabinet at the researcher’s home.

Data collected from case sites were likewise safeguarded to ensure the privacy and confidentiality of the participants and case sites (McMillan & Schumacher, 2010; Patton, 2015; Yin, 2014). The identities of the case colleges and names of the CEO participants were known only to the researcher, the CEO serving as the informant for the snowball sampling procedures, and the dissertation chair. The names of all other individual interview participants were known only to the researcher and dissertation chair. When presenting findings, pseudonyms were used to refer to all case sites and individuals. Interview transcripts were maintained in a secure, password-protected folder on the researcher’s laptop; physical copies of transcripts were not maintained. When quoting directly from interview data and institutional artifacts and documents, the researcher replaced any personally or institutionally identifiable information in the
quotation with pseudonyms. The recorded audio files of the interviews were also stored securely in a password-protected folder on the researcher’s laptop. Audio files were destroyed once the interviews had been completely transcribed and transcripts were available.

**Interview Procedures**

Each participant interview followed the procedures documented in the interview guide section of the case study protocol (Appendix B). One week prior to the scheduled interview, the researcher sent an email to each participant confirming the date and time. Each email included two attachments: an outline of the interview questions, and a list of terms and definitions relevant to the study. The researcher made an effort to cluster interviews at each site together over the span of one or two days in order to be fully immersed in the environment and context of the case site.

Interviews ranging from 45-60 minutes were conducted with each interviewee. Interviews were conducted in real-time, a strategy that allows interviewers to respond to non-verbal queues and provide non-verbal and verbal feedback (McMillan & Schumacher, 2010; Patton, 2015). Although the interviews were recorded, the researcher took notes during the interview in order to control the tempo and note personal observations about interviewees’ responses analysis (Patton, 2015). At the conclusion of each interview, the researcher documented immediate reactions and impressions in the reflex journal maintained throughout the study.

Recordings of the interviews were sent to a transcription service within 24 hours of the interview. Once the transcripts were received, the researcher confirmed the accuracy by reading the transcript along with the recording twice – once straight through
without stopping, and a second time pausing to take additional notes in the reflex journal. Each interviewee given an opportunity to review the transcript of their respective interview for accuracy and to clarify their intent and meaning. Interviewees were emailed an electronic copy of their interview transcript, and invited to add additional clarifying comments.

**Collection of Artifacts and Documents**

Artifacts and documents were collected at each case site in order to triangulate findings and strengthen the validity and reliability of the study (McMillan & Schumacher, 2010; Yin, 2014). The specific types of artifacts and documents collected at each site included administrative documents, institutional reports and handbooks, minutes of committee meetings, and articles in local news sources about the leadership, culture, learning practices and/or second order change at each case college. Physical and cultural artifacts, such as campus maps and photographs of campus learning centers and meeting spaces, were also collected as evidence of the cultural context at each case site.

The majority of artifacts and documents were collected from the case college’s publicly available website. Interviewees were also asked about relevant documents and artifacts during interviews. In addition to uncovering additional, non-public documents, this strategy allowed the researcher to ascertain the level of meaning and importance given to specific examples of institutional documentation at each case site.

**Archival Data**

Archival data includes longitudinal records kept by an organization or about an organization (McMillan & Schumacher, 2010). Specifically, archival data may include publicly available government data, service or performance records, and/or survey data.
about the case itself (Yin, 2014). Archival data can be used by the researcher to triangulate or clarify findings from other sources of case study data, as long as the specific purpose and audience for which the data were originally produced is kept in mind during interpretation (Yin, 2014).

The present study relied on data related to college performance and outcomes available from the public website of the California Community Colleges Chancellor’s Office. The data warehouse on the Chancellor’s Office website includes longitudinal data from each California community college in a number of standardized categories, which allows for ease of comparison from college to college. Colleges submit these data as part of annual mandated reports.

**Data Analysis**

According to Yin (2014), developing a high-quality analysis of case study data requires “attending to all the evidence collected, displaying and presenting the evidence apart from any interpretation, and considering alternative interpretations” (p. 132). In addition, Yin (2014) advises that developing a clear analytic strategy prior to the data analysis phase provides direction for analysis by linking case study data to concepts of interest. To develop an analytic strategy for the present study, the researcher followed Yin’s (2014) suggestion to “play with your data” (p. 135) to look for promising patterns related to the theoretical propositions. Then, the researcher used the general strategy of relying on theoretical propositions as a strategy in order to determine priorities for inductive analysis, guide analytical work, and consider alternative interpretations (Yin, 2014). As data were analyzed against the theoretical propositions related to the research questions, deductive pattern-matching techniques were used to compare patterns.
emerging from the analysis of data collected at each individual case site with those predicted in the theoretical proposition. Cross-case analysis was then performed to identify patterns of congruity or incongruity between cases.

The orientation of the present case study is largely qualitative, and relies on phenomenological methods to gather and interpret interview data. Qualitative analysis relies on inductive content analysis to organize and categorize data, in order to identify patterns and distinguish relationships (McMillan & Schumacher, 2010; Patton, 2015). Unlike quantitative analysis, qualitative analysis occurs during data collection as well as after: as McMillan and Schumacher (2010) point out, in qualitative research “data collection and analysis are interwoven, influencing one another” (p. 367). The following section outlines the inductive approach used to analyze data for the purposes of pattern identification as it was collected, using the theoretical propositions as a guide.

**Theoretical Propositions**

Yin (2014) suggests four general strategies that can be used for analysis of case study data, including relying on theoretical propositions to establish the priorities for analysis. The theoretical propositions for the study shaped the research design and data collection plan, and therefore yielded priorities for analysis (Yin, 2014). In the present study, theoretical propositions associated with culture, leadership, organizational learning, and second order change emerging from the review of literature helped to establish the initial list of thematic categories used in data analysis (see Table 3). During analysis, the category list was revised as new patterns related to the theoretical propositions emerged. In this sense, the overall analytical style for the study followed the template analysis style described by McMillan and Schumacher (2010), in which a
logically derived set of categories is applied to the data, but with opportunities for revisions as warranted by emergent themes.

Table 3

*Initial Categories for Analysis Derived from Theoretical Propositions*

<table>
<thead>
<tr>
<th>Category (from Schein)</th>
<th>Theoretical Proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactivity</td>
<td>Proactive culture and leadership support timely, inclusive problem solving processes; goal-oriented, data-informed decision-making; and awareness of emerging issues.</td>
</tr>
<tr>
<td>Commitment to “learning to learn”</td>
<td>Culture and leadership committed to the skill of learning engage in reflection and experimentation, allow calculated risk-taking, and seek learning opportunities in mistakes.</td>
</tr>
<tr>
<td>Positive assumptions about human nature</td>
<td>Culture and leadership with positive assumptions about others minimize blame and actively develop the trust and psychological safety needed for learning to occur.</td>
</tr>
<tr>
<td>Environmental management</td>
<td>Culture and leadership develop processes for interpreting the environment and demonstrate adaptability and flexibility in response to external changes.</td>
</tr>
<tr>
<td>Commitment to inquiry and dialogue</td>
<td>Culture and leadership committed to practices of inquiry and dialogue will demonstrate the belief that multiple solutions or “truths” may exist for any given problem, show willingness to admit unknowns, and address “undiscussable” issues.</td>
</tr>
<tr>
<td>Positive orientation toward the future</td>
<td>Culture and leadership with a positive orientation toward the future monitor performance against near-term goals in order to make course-corrections when needed.</td>
</tr>
<tr>
<td>Commitment to full and open task-relevant communication</td>
<td>Culture and leadership committed to open, task-relevant communication maintains multiple channels for sharing information, promotes transparency, trust, integrity (i.e., truth-telling), and builds psychological safety.</td>
</tr>
<tr>
<td>Commitment to cultural diversity</td>
<td>Culture and leadership committed to cultural diversity develops practices and structures to support cross-cultural communication, mutual understanding, and the exchange of multiple perspectives.</td>
</tr>
<tr>
<td>Commitment to systems thinking</td>
<td>Culture and leadership committed to systems thinking demonstrates awareness of interdependence of issues and events in order to make sense of the environment.</td>
</tr>
<tr>
<td>Commitment to internal cultural analysis</td>
<td>Culture and leadership committed to internal cultural analysis develops practices that support collective self-reflection and analysis of group functioning.</td>
</tr>
</tbody>
</table>

**Preliminary Coding and Categorization in Dedoose**

Qualitative content analysis is a process that involves “identifying, coding, categorizing, classifying, and labeling the primary patterns in the data” (Patton, 2015, p. 553). Software tools can assist researchers working with large amounts of data by
organizing and collating coded data and automating some basic analytical tasks (Patton, 2015). For the present study, the researcher used Dedoose v.8, published by SocioCultural Research Consultants (2018), to assist with the content analysis.

Using the theoretical proposition and field notes as a guide, the researcher created codes, or thematic categories, in Dedoose. During data collection, each individual interview transcript, document, and artifact collected was scanned into Dedoose and analyzed to see whether the codes were present. Constant review of the data allowed for additional codes to be added as warranted, both when patterns began to emerge around a code that had not yet been established in Dedoose, and when the frequency of a single code in the data became large enough to justify sub-codes. Coding the data in this fashion allowed the researcher to identify initial patterns emerging from the data for each individual case, and established a foundation for interpretative analysis and pattern-matching (Patton, 2015).

The researcher used the theoretical propositions for the study to determine priorities for inductive analysis and guide analytical work. First, a list of the cultural and leadership elements predicted by the theoretical propositions was generated and used as an initial list of codes for inductive analysis. The researcher then coded and categorized data from each case site, adding codes where necessary to describe elements of culture or leadership emerging from the data that had not been predicted by the theoretical propositions. After preliminary coding of all data, the researcher reviewed the list of codes for redundancy and accuracy and generated a refined list of 98 codes. These codes were then clustered into 13 subthemes related to the theoretical propositions. As data were analyzed against the theoretical propositions related to the research questions,
pattern-matching techniques were used to compare patterns emerging from the analysis of data collected at each individual case site with those predicted in the theoretical proposition (Yin, 2014).

**Pattern Matching Analysis**

Once patterns have been identified using inductive content analysis, deductive analysis can be used to analyze the data against an existing framework (Patton, 2015). Pattern matching is one such strategy for data analysis; Yin (2014) asserts that pattern matching is “one of the most desirable techniques” to use for analysis of case study data (p. 143). When using pattern-matching analysis, researchers compare the patterns found in the data with patterns predicted prior to data collection. In the present study, patterns in the data were matched against those hypothesized by the theoretical framework (Table 3), following the process outlined in Figure 6.

![Figure 6](image)

*Figure 6. Description of pattern matching process for data analysis. Adapted from Case study research, by R.K. Yin, 2014, 5th ed. (Los Angeles, CA: Sage).*

Similarity between the research findings and predicted patterns can help to strengthen the internal validity of the study (Yin, 2014). Pattern-matching logic can be used to consider patterns among nonequivalent dependent variables, as well as to consider rival explanations or rival theoretical propositions (Yin, 2014). In multiple case
study designs, the presence of successful matching in multiple cases within the study demonstrates replication of results and leads to more powerful cross-case findings (Yin, 2014). Once data and evidence for each site were collected and analyzed, a separate round of pattern matching was performed in order to compare the empirical patterns emerging from each case, and seek patterns of congruity or incongruity across all cases.

**Limitations**

Although the researcher’s objective was to present complete and thorough research in relation to the stated purpose and research questions driving the study (McMillan & Schumacher, 2010), there are limitations inherent to any qualitative inquiry. The following limitations were identified for the present study:

1. The selected design, multiple case study, called for a small, non-randomly generated sample for both case and participant selection. Therefore, the results are not generalizable to a larger population (McMillan & Schumacher, 2010; Yin, 2014).

2. The use of semi-structured interviews limited the researcher’s ability to make dramatic changes to the interview process and protocol once interviews began (McMillan & Schumacher, 2010; Patton, 2015).

3. Likewise, because interviews were used as the primary method of collecting data regarding participants’ lived experiences, the data collected were subjective, potentially incomplete, and susceptible to participants’ intentional or unintentional biases (Patton, 2015).
Summary

This chapter provided a detailed overview of the methodology and research design that guided this comparative case study. A multiple case design with embedded unit of analysis was used to understand the impact of organizational culture and campus leadership on the development of organizational learning practices and facilitation of second order change in California community colleges. The purpose statement and research questions were cited in order to provide rationale for the design and demonstrate alignment with data collection and analysis procedures. This chapter also provided information about procedures used to identify the population and sample for the study, and describes the procedures and protocols used during case selection, data collection, and data analysis. Validity and reliability considerations were discussed, and the study’s limitations were addressed. The following chapter describes and analyzes the data collected during the study.
CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

Higher education leaders recognize that transformational structural and cultural changes will be necessary in order to meet performance expectations and improve service to students (Bailey et al., 2015; Phelan, 2016; Tierney, 2014). Leaders within the California Community College system have begun to discuss organizational learning as a framework for implementing transformational change throughout the system, as well as the role that college leaders play in developing cultures where organizational learning behaviors are valued and practiced (California Community Colleges Chancellor’s Office, 2015; Foundation for California Community Colleges, 2017; Tena et al., 2017). As noted in the literature review, however, few higher education studies discuss the ways that an organization’s culture and leadership affect its capacity for organizational learning and second order change. As a result, this study explored the impact of organizational culture and leadership on organizational learning practices and second order change in California community colleges. To address the research questions, the researcher collected artifacts and interviewed 18 leaders from three California community colleges. This chapter presents the findings of this research. The chapter begins with the purpose statement and research questions, followed by a brief description of the methodology used for data collection and analysis, a description of the population and sample, and a presentation of the data for each case and the cross-case analysis.

**Purpose Statement**

The purpose of this multiple case study was to explore the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges. A secondary purpose of the study
was to explore the role of organizational culture and campus leadership in facilitating second order change in California community colleges.

**Research Questions**

The following four research questions guided this multiple case study:

1. What impact do organizational culture and campus leadership have on the development of organizational learning practices in California community colleges?
   a. What impact does organizational culture have on the development of organizational learning practices in California community colleges?
   b. What impact does campus leadership have on the development of organizational learning practices in California community colleges?

2. What role do organizational culture and campus leadership have in the facilitation of second order change in California community colleges?
   a. What role does organizational culture have in the facilitation of second order change in California community colleges?
   b. What role does campus leadership have in the facilitation of second order change in California community colleges?

3. What patterns of congruity or incongruity between cases can be identified with regard to the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges?
   a. What patterns of congruity or incongruity between cases can be identified with regard to the impact of organizational culture on the development of organizational learning practices in California community colleges?
b. What patterns of congruity or incongruity between cases can be identified with regard to the impact of campus leadership on the development of organizational learning practices in California community colleges?

4. What patterns of congruity or incongruity between cases can be identified with regard to the role of organizational culture and campus leadership in the facilitation of second order change in California community colleges?
   a. What patterns of congruity or incongruity between cases can be identified with regard to the role of organizational culture in the facilitation of second order change in California community colleges?
   b. What patterns of congruity or incongruity between cases can be identified with regard to the role of campus leadership in the facilitation of second order change in California community colleges?

**Research Methods and Data Collection Procedures**

This study used a multiple case study design with embedded units of analysis to explore how organizational culture and campus leadership impact the development of organizational learning practices and facilitate second order change at California community colleges. Within the multiple case study design, the study used a phenomenological approach to explore the concepts of organizational culture, campus leadership, organizational learning practices, and second order change at three separate single-district colleges. Each college served as a separate case site for the study as outlined in Chapter 3 (see Figure 5). The researcher collected data for the study through semi-structured interviews and artifact analysis. To ensure consistency across sites and interview participants, the researcher developed an interview script based on Schein’s
dimensions of organizational learning culture, the theoretical framework described in the literature review.

The research design and interview protocol, and interview questions were approved by the Brandman University Institutional Review Board (BUIRB) on October 6, 2017 (see Appendix E). Consent forms shared with the participants indicated the methods used by the researcher to protect the identity of the case sites and individual participants. Each site and participant was assigned a unique code, and all references to names and specific institutions were removed from the transcripts. All consent forms were signed prior to the interviews. Fourteen participants signed the consent forms in the presence of the interviewer prior to an in-person interview. The remaining four interviews were conducted via phone. Each of these participants signed their consent forms digitally by emailing a statement of consent directly to the researcher during the beginning of the phone call. All interviews were digitally recorded and sent to a transcription service. The researcher reviewed the transcripts with the corresponding audio recording to verify accuracy of the transcribed content. Each participant was offered an opportunity to review their transcript and make corrections or clarifications. Twelve participants asked to review the transcript; one participant identified a spelling error, and a second provided clarification and further context for their remarks. The researcher also collected artifacts from each college related to organizational culture and leadership. Identifying information was removed from each artifact.

To analyze the data, the researcher used a pattern-matching technique common to case study analysis (Yin, 2014). The researcher used the theoretical propositions for the study to determine priorities for inductive analysis and guide analytical work. First, a list
of the cultural and leadership elements predicted by the theoretical propositions was generated and used as an initial list of codes for inductive analysis. The researcher then coded and categorized data from each case site, adding codes where necessary to describe elements of culture or leadership emerging from the data that had not been predicted by the theoretical propositions. After preliminary coding of all data, the researcher reviewed the list of codes for redundancy and accuracy and generated a refined list of 98 codes. Theses codes were then clustered into 13 subthemes related to the theoretical propositions. As data were analyzed against the theoretical propositions related to the research questions, pattern-matching techniques were used to compare patterns emerging from the analysis of data collected at each individual case site with those predicted in the theoretical proposition (Yin, 2014). Five major themes emerged from the data after this process. The research and findings are described in this chapter.

**Population and Sample**

The general population for this study included the 114 colleges in the California Community College system. However, the California Community College system includes multi-college and single-college districts. For this study, the researcher delimited the target population to include only colleges from single-college districts, in order to control for the additional cultural and leadership complexity associated with multi-college districts. Additionally, the theoretical framework predicts that practices of goal-setting and performance monitoring will be present in an organizational learning culture, along with an orientation toward the future that is somewhere between the near-term and long-term. Therefore, the target population for the study was defined as single-district colleges that had set a six-year goal for at least one optional indicator in the
California Community College system’s framework of performance monitoring indicators. 36 colleges met both criteria, and the three colleges were selected from this target population to serve as case sites using a snowball sampling method. Colleges selected as case sites were located in the California Community College system’s Bay Area and Southern regions. The case sites also varied in size. The five-year average of full-time equivalent students at each college ranged from approximately 5,250 to 11,500.

The sample for the study consisted of the three case sites and their respective interview participants. At each site, criterion-based sampling was used to select participants who had held one of four specific formal roles. Then, snowball sampling was used to identify an additional one to four participants described as grassroots or informal leaders. The final sample included 18 total individual participants, including both formal and informal leaders at each college as outlined in Table 4.

Table 4

*Participant Roles by Case Site: Formal vs. Informal Leaders*

<table>
<thead>
<tr>
<th>Case Site</th>
<th>Formal Leaders</th>
<th>Informal Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case A</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Case B</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Case C</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

*Demographic Data*

During the interview process, the researcher also gathered demographic data from each participant in order to better understand the characteristics of the sample (McMillan & Schumacher, 2010). Demographic information collected from each individual participant included gender, race/ethnicity, age, years employed at the case site, and years in the current leadership position.
Overall, the sample included gender diversity. Eight participants identified as female, and 10 identified as male. Within cases, however, there was less diversity. All four participants from Case B identified as female. Table 5 provides a full breakdown of participant demographics by case site and gender.

Table 5

*Participant Demographics: Case Site and Gender*

<table>
<thead>
<tr>
<th>Case Site</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case A</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Case B</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Case C</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

Participants’ self-identified race/ethnicity categories are shown in Table 6. Overall, the sample included participants from diverse racial and ethnic backgrounds. Each individual site included racial and ethnic diversity, as well. Participants at Case A reflected the highest degree of racial and ethnic diversity.

Table 6

*Participant Demographics: Case Site and Self-Identified Race/Ethnicity*

<table>
<thead>
<tr>
<th>Case Site</th>
<th>African American or Black</th>
<th>South Asian, Asian/Pacific Islander</th>
<th>Biracial</th>
<th>Hispanic, Mexican, Chicana/o</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case A</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Case B</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Case C</td>
<td>1</td>
<td></td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

Participants also reflected some degree of generational diversity, although the majority of participants were 50 or older. Age ranges for participants at each site are provided in Table 7.
Table 7

*Participant Demographics: Case Site and Age*

<table>
<thead>
<tr>
<th>Case Site</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case A</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Case B</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Case C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

Participants were also asked about their longevity at their college, as well as their longevity in their current leadership role. At all three sites, the majority of participants had been in their current leadership roles five or fewer years, even if they had been employed at their college for longer. Tables 8 and 9 display data related to participants’ tenure at their colleges and within their respective leadership roles.

Table 8

*Participant Demographics: Years Employed at Case Site*

<table>
<thead>
<tr>
<th>Case Site</th>
<th>≤ 5 years</th>
<th>6-15 years</th>
<th>16-25 years</th>
<th>≥ 26 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case A</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Case B</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Case C</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 9

*Participant Demographics: Years in Current Leadership Position*

<table>
<thead>
<tr>
<th>Case Site</th>
<th>≤ 5 years</th>
<th>6-10 years</th>
<th>11-15 years</th>
<th>≥ 15 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case A</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case B</td>
<td>4</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Case C</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Presentation of the Data

This section of the study presents the findings that emerged from the research and analysis of data. Following the methodology described in Chapter III, each individual case is presented separately before moving on to the cross-case comparison. Findings for Research Questions 1 and 2 are discussed in the context of each individual case college. Research Questions 3 and 4 are addressed in the cross-case analysis following the presentation of individual cases.

**College A: Research Question 1**

*What impact do organizational culture and campus leadership have on the development of organizational learning practices in California community colleges?*

Two themes related to Research Question 1 emerged from the analysis of College A’s data with high frequency. Table 10 displays the ranking of themes at College A, along with their frequency and distribution across interviews and artifacts.

Table 10

*Rank and Frequency of Themes Related to Organizational Learning: College A*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Interviews</th>
<th></th>
<th>Artifacts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Sources</td>
<td>Freq.</td>
<td>Sources</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>238</td>
<td>8</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Intentionality of learning / change</td>
<td>208</td>
<td>8</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Communication / information sharing</td>
<td>154</td>
<td>8</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>135</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Internal / external alignment</td>
<td>132</td>
<td>8</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>
At College A, organizational culture and campus leadership impact the development of organizational learning practices primarily through (a) framing and sensemaking and (b) the degree of intentionality with which learning is approached.

During the analysis, artifacts were used to triangulate and confirm themes emerging from the analysis of interviews. Artifacts were selected based on the categories of sources established in the case study protocol (Appendix D). Artifacts reviewed for College A included official communications for external audiences, a monthly newsletter from the Superintendent/President, presentations given at college-wide forums, recent accreditation reports, governance handbooks, minutes from committee and board meetings, campus maps, and strategic plans. Particularly with regard to College A’s use of framing, artifacts and interviews were found to use consistent language. Institutional data were woven throughout the artifacts to provide context and rationale.

<table>
<thead>
<tr>
<th>Main Theme Group</th>
<th>Subtheme</th>
<th>Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and information sharing</td>
<td>Honest, proactive communication</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>Inclusive communication and dialogue</td>
<td>49</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>Engaging with institutional data</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Framing, sensemaking, and engaging</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Interconnection and integration</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Shared self-perception</td>
<td>121</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>Approach to learning as a practice</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Beliefs about internal capacity for learning</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Intentional, open-minded problem-solving</td>
<td>26</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>Approach to external forces and factors</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Organizational structures and roles</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Orientation toward the future</td>
<td>26</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>Relationships and trust</td>
<td>135</td>
</tr>
</tbody>
</table>

*Figure 7*. Frequency and distribution of subthemes emerging from interview data for College A, Research Question 1. Subthemes are presented together with their main theme group, and color scales are used to indicate the overall rank of individual subthemes. Darker shading indicates highest ranked subthemes.
In addition to the main themes that emerged for Research Question 1, the
subtheme of relationships and trust emerged from interview data with high frequency,
and cut across the two main themes. Figure 7 displays the distribution of subthemes
emerging from the analysis of interview data. Participants’ perceptions of relationships
and trust within the College A culture established the context for their observations about
the framing and intentionality of organizational learning practices at College A. The
main themes and subtheme will be discussed in greater detail in the sections below.

**Framing and sensemaking.** Throughout the interviews, participants at College
A indicated a shared belief that institutional data should be used as a starting point for
inquiry and dialogue. “Right now, that is the biggest movement. Everything is ‘there is
no discussion without data’” (A5). Data provide a frame that helps individuals engage in
inquiry and ask, “what’s going on, why is it happening this way” (A5). College A also
increasingly values data as a frame for goal-setting and decision-making activities. “I
think over time it’s come to an understanding that, ‘Oh, that evidence is actually helping
us make those decisions.’ It’s not just a CYA thing. It’s not just there to cross t’s and dot
i’s” (A4).

At the same time, some participants indicated that the use of data to frame
dialogue and decision-making is still an emerging practice within the culture. “I don’t
think too many people know our data. Like, we push out so much data, I don’t think
people read it all” (A1). Participant A8 also suggested that discussions about data often
involve confronting fears related to job security and safety within the organization. “The
data says, ‘well listen, you’ve got some low enrollment courses here,’ and the folks are
looking and they’re nervous. You can understand that, right? So they’re asking these
questions because they can see them losing their jobs.” In these conversations, reframing
the discussion around shared values such as student success helps to promote safety and
lead to a more productive discussion:

So the data – sometimes it’s both soothing and scary at the same time. And it’s
the administration, the Academic Senate, Vice President, and Dean’s job to say,
‘Let’s look at this in a way that we can try to provide an avenue for our feeder
schools, for our students to be successful.’ (A8)

**Intentionality of learning.** Participants indicated that College A tries to maintain
an intentional, proactive mindset towards learning. “Learning has to be something that’s
continual in a person. We always try to extend that to our students, saying ‘be lifelong
learners,’ but we have to be lifelong learners, too” (A8). Participant A3 agreed, and
suggested that learning from others within the culture is also important: “I think
[educating each other is] vitally important and we learn from each other. I think we’re
supposed to learn from each other for our whole ... you know, as long as we’re alive.”
Participants described College A as being in a state of “transformation” (A6), and
“constantly learning” (A7). While participants were generally energized by the
“stretching and growing and learning” that happens on a “daily basis” (A6), they
acknowledged that it comes with a cost. Participant A7 described College A’s ability to
learn, regroup, and adapt as a strength, “but at the same time it can make us weak,
because we deplete a lot of our energy doing that constantly.”

In addition to energy costs, participants consistently cited a lack of broad
engagement in organizational activities as affecting College A’s capacity for learning.
Despite intentional and ongoing communication, participants felt there was an issue of
“leading the horse to water but the horse not wanting to drink” (A4). “We just have to wrestle with – not disseminating the information, the information is out there – but getting them to consume it, getting everybody to read through it” (A2). Participants described full-time faculty with longer employment at the college as the most difficult to engage. Participant A2 characterized College A as having two “camps” of faculty, a “new camp that probably just came out of school and was doing research” and sees the value in engaging in ongoing learning and inquiry, and a second camp comprised of those “who have been here for a while, maybe have forgotten or just simply did not need to do that inquiry or were left out. It’s been very hard to get them to the table” (A2) despite intentional communication and opportunities for participation.

To increase engagement, campus leaders at College A intentionally try to build capacity for learning. In part, this is done by empowering others to take ownership of learning activities, creating “mini-Chiefs” (A2) to help lead dialogue and decision-making processes. Mentoring and empowering others promotes sustainability of productive learning and organizational progress. Participant A1 recounted that in past times of urgent change, “it was just my way, or no way,” but notes that this does not support sustainable learning practices. “It works out well when you have a strong leader, right? But if that leader’s not here at the institution for the next 30 years, [the institution is] not gonna grow.” To build capacity for long-term learning, Participant A1 has consciously shifted their leadership style to focus on “teaching the campus committees, engaging the campus community into being involved in committees” (A1).

**Relationships and trust.** Participants at College A consistently mentioned respectful, trusting, relationships as critical to understanding and working at College A.
“We’re a small college, so everybody knows everybody. So the level of respect, it has to be there. It really does” (A8). Multiple participants characterized relationships at College A as close, even familial. “I think that to me is the most important culture piece on this campus, is understanding that we’re our family” (A1). While acknowledging that “within any family there is some dysfunction” (A8) or people who are “estranged from the family” (A4), participants indicated that this metaphor provides frame for discussions.

“It’s like, ‘Oh, okay. That’s the uncle who always wants to talk about the budget,’ or, ‘That’s my sister who’s really concerned about the homeless students’” (A4). Participant A4 finds this understanding of relationships to be helpful for ascribing positive assumptions to others’ motivations during difficult discussions. “Even if there are disagreements, there’s an understanding about where the person is coming from and there’s generally a trust that people have their hearts in the right place.”

This sense of trust in others’ intentions may help College A manage defensive routines and maintain an institutional focus. “I think that regardless of whether we like somebody or not, that’s not necessarily what we’re here for. We’re supposed to all have working relationships” (A3). Participant A8 agreed that maintaining respectful working relationships allows College A to move through disagreement and challenging conversations more easily:

…folks will come in and sit down with me, even if we have a disagreement. Because one of the things I try to tell folks, “We’re reasonable people. If we disagree, let’s not be disagreeable. Let’s still be respectful of one another.”
College A: Research Question 1a

What is the impact of organizational culture on the development of organizational learning practices?

In addition to the subtheme of relationships and trust discussed in Research Question 1, the subtheme of shared self perception emerged from the data related to Research Question 1a with a high degree of frequency. At College A, organizational members’ shared perceptions of their collective self-identity have a strong impact on organizational learning. Shared understanding of College A’s identity frames dialogue and affects the degree of intentionality with which the college approaches factors from the external environment. Table 11 displays the most frequent subthemes related to the impact of organizational culture on the development of organizational learning practices at College A.

Table 11

*Top Five Subthemes Related to Organizational Culture and Learning: College A*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq.</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared self perception</td>
<td>121</td>
<td>Framing and sensemaking</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>107</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Approach to learning as a practice</td>
<td>83</td>
<td>Intentionality of learning/change</td>
</tr>
<tr>
<td>Approach to external forces and factors</td>
<td>65</td>
<td>Internal/external alignment</td>
</tr>
<tr>
<td>Beliefs about internal capacity</td>
<td>64</td>
<td>Intentionality of learning/change</td>
</tr>
</tbody>
</table>

Throughout the interviews, participants described College A using similar and consistent language, suggesting a broadly shared cultural identity. College A was described “proactive” (A6), “ready” (A7), and “progressive” (A8, A3), with “high
expectations of where we are going to go” (A5). Participants also demonstrated consistent excitement about College A’s future, while simultaneously making reference to its past – specifically, events leading up to and immediately following a serious accreditation sanction. Participants indicated that this experience deeply affected College A’s culture, leaving some members feeling “scarred” (A2), “singled out” (A3), and “distrustful of outside influences” (A6). Overall however, participants perceived College A as hard-working, focused, goal-oriented, and proud of its ability reinvent itself quickly in defiance of others’ expectations:

We’re survivors. We’re resilient. That’s the word that I was looking for. I would categorize that as – I think we’re oftentimes underdogs, and I think there’s a proud star for that. Like, yes we are [underdogs], and look how far we have come, and are going. (A7)

**College A: Research Question 1b**

The subtheme of honest, proactive communication was found most frequently in the data related to Research Question 1b. Two additional, interrelated subthemes emerged as important for understanding the impact of campus leadership on organizational learning practices at College A: (a) beliefs about internal capacity, and (b) relationships and trust. Analysis of the data suggests that at College A, campus leadership impacts the development of organizational learning through honest, proactive communication and by intentionally building internal capacity for organizational learning. Both activities require active cultivation of relationships and trust within the culture. Table 12 displays the frequency and distribution of themes and subthemes related to Research Question 1b.
Table 12

*Top Five Subthemes Related to Campus Leaders and Learning: College A*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq.</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honest, proactive communication</td>
<td>54</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Beliefs about internal capacity</td>
<td>28</td>
<td>Intentionality of learning/change</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>28</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Framing, sensemaking, and engaging</td>
<td>21</td>
<td>Framing and sensemaking</td>
</tr>
<tr>
<td>Approach to external forces and factors</td>
<td>15</td>
<td>Internal/external alignment</td>
</tr>
</tbody>
</table>

**Honest, proactive communication.** At College A, both formal and informal leaders impact the development of organizational learning practices through honest, proactive communication about learning and change. Leaders work to communicating with college subcultures and structural subgroups “at all levels” (A3), including faculty, senior and mid-level administrators, classified staff. Campus leaders at College A play a “very strong role” in communication (A5), by proactively sharing information with others to support dialogue and learning. One participant noted that this practice is particularly important when communicating with faculty: “We bring the information to them and begin the discussion, so that doesn’t give them an additional task of trying to do the research” (A5). Participants’ espoused values relating to communication and information sharing were consistent with artifacts at College A, particularly the Superintendent/President’s monthly letter to the college community. Non-written channels for communication at College A include quarterly campus forums, “brown bag” discussions, and open office hours held by the Superintendent/President and other administrators. Participants agreed that consistent and transparent communication
through each of these channels helps to build trust necessary for dialogue to take place, especially when there are unknowns or uncertainty.

**Beliefs about internal capacity.** As noted in Research Question 1, leaders at College A share the belief that the intentional practice of building capacity for learning can increase engagement and positively impact the development of organizational learning practices overall. Leaders at College A build capacity for learning by actively cultivating a learning mindset within the culture. In part, this practice involves modeling comfort with uncertainty and openness to the ideas of others. Participant A8 asks simple open-ended questions such as “what are your thoughts on this?” and allows time for reflection, in order to create an environment for organizational learning and “a dialogue for change.” Relationships and trust play an important role in this practice, as it requires leaders to “be empathetic” (A8) with their followers, in order to “let them see something different and not force it on them” (A8).

Leaders also build capacity for organizational learning when making hiring decisions, by intentionally seeking employees who reflect a learning mindset. “If the organization has the ability to develop leadership and … keep this going, you’ll get all of that synergy that comes from that of those new people, new ideas, new ways to look at things” (A6). Once new employees – and faculty in particular – are hired, both formal and informal leaders at College A focus on intentional socialization and mentoring, “giving them a different perspective – maybe a different view of a culture that we wanted to create” (A2).
College A: Research Question 2

What role do organizational culture and campus leadership have in the facilitation of second order change in California community colleges?

Analysis of data collected for College A suggests that organizational culture and campus leadership facilitate second order change primarily through framing and sensemaking activities. Activities related to communication and information-sharing, aligning the internal culture with external expectations, and maintaining relationships also play a role in the facilitation of second order change. Table 13 displays the ranking of themes related to the facilitation of second order change at College A, along with their frequency and distribution across sources.

Table 13

| Rank and Frequency of Themes Related to Second Order Change: College A |
|-------------------------------------------------|-----------------|-----------------|
| Theme                                           | Interviews      | Artifacts       |
|                                                 | Freq. | Sources | Freq. | Sources |
| Framing and sensemaking                         | 264   | 8       | 17    | 10      |
| Communication / information sharing             | 161   | 8       | 6     | 3       |
| Internal / external alignment                   | 150   | 8       | 25    | 10      |
| Intentionality of learning/change               | 145   | 8       | 2     | 2       |
| Relationships within the culture                | 139   | 8       | 0     | 0       |

As with research question 1, artifacts were used to triangulate and confirm themes emerging from the analysis of interviews related to the facilitation of second order change. Artifacts were selected based on the categories of sources established in the case study protocol (Appendix D). Artifacts reviewed for College A included official
communications for external audiences, a monthly newsletter from the Superintendent/President, presentations given at college-wide forums, recent accreditation reports, governance handbooks, minutes from committee and board meetings, campus maps, and strategic plans. Artifacts were found to provide a clear vision and direction for the college. Particularly in the Superintendent/President’s newsletter, information was consistently framed in terms of broader change initiatives underway at College A, such as the Guided Pathways implementation. Institutional data were woven throughout the artifacts to provide rationale and generate a sense of urgency.

In addition to the main themes emerging from the data, the researcher found that the interrelationships between the subthemes provided important context for understanding how culture and leadership help to facilitate second order change at College A. Subthemes related to Research Question 2 are presented in Figure 8.

<table>
<thead>
<tr>
<th>Main Theme Group</th>
<th>Subtheme</th>
<th>Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and information sharing</td>
<td>Honest, proactive communication</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>Inclusive communication and dialogue</td>
<td>49</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>Engaging with institutional data</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Framing, sensemaking, and engaging</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Interconnection and integration</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Shared self-perception</td>
<td>128</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>Approach to learning as a practice</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Beliefs about internal capacity for learning</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td>Intentional, open-minded problem-solving</td>
<td>36</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>Approach to external forces and factors</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>Organizational structures and roles</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Orientation toward the future</td>
<td>52</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>Relationships and trust</td>
<td>139</td>
</tr>
</tbody>
</table>

*Figure 8.* Frequency and distribution of subthemes emerging from interview data for College A, Research Question 2. Subthemes are presented together with their main theme group, and color scales are used to indicate the overall rank of individual subthemes. Darker shading indicates highest ranked subthemes.
The subtheme of relationships and trust was found to cut across both of the main themes. The main themes and cross-cutting subtheme will be discussed in the sections that follow.

**Framing and sensemaking.** Throughout the interviews, participants at College A consistently framed change activities in terms of shared cultural values and beliefs. For example, participants indicated that College A has a strong commitment to addressing social issues in the surrounding community. Many of the major change initiatives discussed by participants were linked to this commitment. For example, the Guided Pathway’s implementation was consistently described as a way to address “real issues in our community” by being “forward thinking, future thinking about the people we serve” (A8). In another discussion of the Guided Pathways implementation, Participant A1 described how they drew on shared beliefs about learning from external models and self-reinvention to frame the message in terms that resonated with the culture:

I showed a video of Guttman College in New York. I’ve never heard about that school, but it was one of the Guided Pathways schools. Founded in 2011, and success and retention is off the chart. And they started from scratch. [College A] starts from scratch.

Participants acknowledged that widespread engagement in activities related to second order change was still “nascent” (A2) at College A, and that an undercurrent of fear about whether changes can be sustained remains present in the culture. “This kind of idea of, ‘they’re just saying that, we’re going to go back [to what we were before],’ there’s a lack of trust. Not only in themselves, but that the leadership will be able to carry on” (A7). In addition to framing the change itself, therefore, campus leaders have
to frame the work of the change in order to “bring people along” (A8), build confidence and trust, and help them make sense of the change as it occurs. One strategy used by both formal and informal leaders to facilitate acceptance for change in these situations is to directly involve members of the culture in the design of the implementation. Although the decision to implement a change may have been made, leaders provide choices and opportunities to others to define what the change will look like in practice. “We have to make those types of decisions of, ‘This is going to happen – how would you like it, though? Want me to cut it up? Want me to just give it to you whole’” (A7)? Participant A2 agreed that choice and involvement in the design of a second order change is important, especially for faculty. With Guided Pathways, for example, “There is that will that it’s more grassroots, it’s more organic. The faculty are saying, ‘We want to do this.’ So it’s not where they’re being told to do it” (A2).

Regardless of the specific change or implementation, participants agreed that facilitating second order change requires understanding the ways that individual members of the culture are connected to the organization, and showing respect for those connections in the midst of change. Members of the College A culture have “kids that went to school here, grandkids that went to school here, cousins and brothers and all that, so they have a connection to the institution. A deep connection. And we have to recognize that connection as we make decisions” (A1). For Participant A1, this kind of framing requires “recognizing the past but also focusing on the future” in order to preserve core cultural values – and sometimes even physical artifacts – through a change:

People need – a lot of times people do construction, they want to tear down the old stuff and build new things. But it’s about our culture, and people have been
here for a long time. We tear that down, what’ll that be? They think their house
is gone.

*Communication and information sharing.* Interview participants indicated that
proactive communication with subcultures at all levels of the institution is important for
facilitating second order change. Participants suggested that proactive communication
with multiple subcultures and stakeholder groups at the college not only helps to build
support and engagement, but also allows expertise and experience about an issue to flow
in multiple directions across the organizational structure. For example, a recent strategic
planning process involved a series of collaborative summits to set the vision of the
college. “It was a committee and a group effort, so there were a lot of people
collaborating to kind of define what that vision would be. Our
[Superintendent/President] really stepped back and allowed the committee to do that”
(A6). At the same time, campus leaders provided the structure for the conversations to
occur, by “creating the committees and forcing the conversation by having people attend”
and agree on the mission, vision, and goals in a way that “would not have happened
organically” (A4).

Proactive, collaborative dialogue to define the change also helps to increase trust
while change occurs. During a second order change, “the design is not just one-sided”
(A5). Specifically in the Guided Pathways implementation, getting perspectives and
collaboration from multiple areas of campus and “not from top-down saying, ‘This is
what we need to do,’ is really helping make that cultural change [and] develop that trust”
(A5). As a result, when campus leaders communicate about second order changes at
College A, members of the culture are more likely to see the change as occurring for “a
good reason” and trust that leaders “want the best thing out of it” (A3), consistent with the shared vision and goals of the college.

**Relationships and trust.** Throughout the interviews, participants consistently indicated that trusting relationships within the culture facilitate change by enabling difficult conversations that may lead to deep changes within the organization. Relationships provide a sense of safety during times of change. Participant A8 observed that there are some individuals who are “receptive to change, who are willing to get in, to say, ‘Okay, doc, we’ll at least give it a try.’ And I think that happens because there is a relationship between that person and the individuals around them.”

Participants suggested that the safety that comes from trusting relationships is especially critical when discussing deep changes with individuals who have longevity within the culture. These individuals must be able to trust not just the people involved in the change, but the process as well. As Participant A7 explained, many personnel with a long history at College A have experienced a lot of “broken promises,” and have a mentality of “what good is it, you’re going to do what you’re going to do anyways.” Participant A4 echoed this view, noting that people with longevity at College A have “seen the ups and downs,” and may not trust that changes can be sustained. “They see this as an upswing, but there may be pessimism in the sense that, ‘Oh, this is just an upswing. Things are going to go bad again sometime in the future.”’ Trust in the process allows members to demonstrate more courage and take risks, even when they “may not think that it’s going to lead to any change.” (A7)
**College A: Research Question 2a**

*What role does organizational culture have in the facilitation of second order change in California community colleges?*

Table 14 displays the frequency and distribution of themes and subthemes related specifically to the role of organizational culture in facilitating second order change.

Table 14

*Top Five Subthemes Related to Organizational Culture and Second Order Change: College A*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq.</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships and trust</td>
<td>111</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Shared self-perceptions</td>
<td>98</td>
<td>Framing and sensemaking</td>
</tr>
<tr>
<td>Beliefs about internal capacity</td>
<td>79</td>
<td>Intentionality of learning/change</td>
</tr>
<tr>
<td>Honest, proactive communication</td>
<td>58</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Approach to external forces and factors</td>
<td>52</td>
<td>Internal/external alignment</td>
</tr>
</tbody>
</table>

In addition to the cross-cutting subtheme discussed above in Research Question 2, the shared perception members of College A hold about their organizational identity plays a strong role in the facilitation of second order change. Perceptions about self-identity were also found to affect other subthemes. In particular, the subthemes of (a) shared self-perception and (b) approach to external forces and factors were often interwoven in the data, suggesting that College A’s sense of identity has been largely influenced by its relationship with the external environment. These data suggest that College A may hold shared self-perceptions that are tied to external expectations, and frames change activities in light of this shared belief.
Understanding interconnections between internal and external factors helps College A’s culture make sense of complex, systemic changes. When new external initiatives or state mandates emerge, College A is proactive, and is “thinking of things that we are doing that would be aligned with a new initiative. Or, if we’re not aligned with an upcoming initiative we start looking at how we can align as quickly as possible” (A5). Having a sense of control over the outcome of interconnected changes helps to facilitate broader participation in the change:

…if this domino falls and causes the domino 20 dominoes later to fall as well, then all you can do is just brace yourself and say, “How will we deal with the impact of this happening?” If there is more of an opportunity to interact with it and change the outcome, then I think people will try to get involved (A4).

**College A: Research Question 2b**

*What role does campus leadership have in the facilitation of second order change in California community colleges?*

Table 15 displays the frequency and distribution of themes and subthemes related specifically to the role of campus leadership in the facilitation of second order change. Analysis of the data suggests that at College A, campus leaders rely on proactive communication and culturally relevant framing to engage members of the culture in change activities and align internal and external expectations. Framing changes in terms of shared beliefs such as the college mission and vision or with references to the culture’s shared perception of organizational identity helps campus leaders communicate the rationale for second order changes. In the Guided Pathways implementation, for example, campus leaders remain focused on the goals of the implementation and the
vision of what the college will look like after the change has been completed. Consistent messaging about the change carries through multiple communication channels, including campus forums, meetings, and even individual conversations: “In any speech that I do, in any conversations, it’s Guided Pathways” (A1). Campus leaders also intentionally align other ongoing campus initiatives back to the goals of the Guided Pathways implementation to help focus direction and energy.

Table 15

*Top Five Subthemes Related to Campus Leaders and Second Order Change: College A*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq.</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honest, proactive communication</td>
<td>54</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Framing, sensemaking, and engaging</td>
<td>47</td>
<td>Framing and sensemaking</td>
</tr>
<tr>
<td>Beliefs about internal capacity</td>
<td>28</td>
<td>Intentionality of learning/change</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>28</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Approach to external forces and factors</td>
<td>20</td>
<td>Internal/external alignment</td>
</tr>
</tbody>
</table>

Campus leaders also rely on intentional framing and communication to help align internal change activities in terms of external expectations. For Participant A1, proactive communication of external expectations allows College A to have a better sense of control over externally driven changes. In addition to making sure “everyone’s aware of what’s going on,” Participant A1 described a practice of “managing” external pressures to ensure alignment between internal and external activities. “Managing it” (A1) involves engaging members of the community to align external expectations with internal priorities and work already in progress. Managing external expectations in this way requires deliberate, proactive action. “It’s not waiting until next summer and saying, ‘Oh,
we gotta figure this out.’ No, no, no. It’s going to connect to what we’re already doing” (A1). In this sense, “managing it” (A1) involves translating externally driven changes in a way that resonates with the internal culture and existing priorities for change.

**College A: Unexpected Findings**

Two unexpected findings emerged from the analysis of data related to the organizational culture and campus leadership at College A. Throughout the interviews, participants consistently referenced shared beliefs about the impact of employees’ longevity at the college on the culture’s willingness to engage in activities connected to organizational learning and change. Longevity also appeared to be connected to College A’s beliefs about relationships and trust: “I think trust is hard within any organization. I think for me, people trust me because I’ve been here for so long and they know what my intentions are” (A1). Notably, the average length of employment for interview participants at College A was 14.6 years, even though the average number of years participants had held their leadership role was much lower (3.8). Among the five participants who held administrative roles, all had been promoted into their position after holding at least one other position at College A. The organizational behavior of promoting individuals into a leadership role from within the existing cultural membership may indicate a deeper underlying assumption at College A related to the nature of relationships and trust of external entities.

A second unexpected finding to emerge from the data was the frankness with which participants (including faculty and those administrators who had emerged from faculty) described the changing nature of faculty work in a rapidly changing environment. For example, Participant A2 suggested that 20 years ago, faculty could just
teach and hold office hours. “But now, with all of these external demands on quality, retention, accreditation, faculty need to be involved in many more things.” Participant A8 suggested that changing expectations for faculty work can be reframed as part of a constant commitment to student learning, as doing “everything that is possible to attract and instruct and help these students turn on a light, give them something they can hang their hat on,” including work outside the classroom, such as recruiting and program review. College A’s observations about shifting perceptions of how faculty work is defined in the broader academic culture may reflect the presence of a defensive routine in the California Community College system as a whole.

**College B: Research Question 1**

*What impact do organizational culture and campus leadership have on the development of organizational learning practices in California community colleges?*

At College B, organizational culture and campus leadership impact the development of organizational learning practices primarily through (a) communication and information sharing, (b) framing and sensemaking, and (c) relationships and trust (subtheme). Table 16 displays the ranking of themes at College B, along with their frequency and distribution across interviews and artifacts.

During the analysis, artifacts were used to triangulate and confirm themes emerging from the analysis of interviews. Artifacts were selected based on the categories of sources established in the case study protocol (Appendix D). Artifacts reviewed for College B included official communications and newsletters emerging from the Public Information Office, recent accreditation reports, process documents and handbooks, and official documentation of the mission statement. Particularly with regard to College B’s
communication and use of framing, artifacts and interviews were found to use consistent language. College communications were timely and consistent with descriptions of events within the interviews.

Table 16

*Rank and Frequency of Themes Related to Organizational Learning: College B*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Interviews</th>
<th>Artifacts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Sources</td>
</tr>
<tr>
<td>Communication / information sharing</td>
<td>95</td>
<td>4</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>84</td>
<td>4</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>74</td>
<td>4</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>66</td>
<td>4</td>
</tr>
<tr>
<td>Internal and external alignment</td>
<td>50</td>
<td>4</td>
</tr>
</tbody>
</table>

In addition to the main themes of (a) communication and information sharing and (b) framing and sensemaking, one subtheme emerged with a high degree of presence across all interviews. This subtheme, relationships and trust, frequently co-occurred with the main themes during coding and analysis. Relationships and trust within the culture and leadership therefore appear to support the development of organizational learning practices at College B. Figure 9 displays the distribution of subthemes emerging from the analysis of interview data. In order to keep the theme clusters together, a color scale is used to indicate the relative rankings of the subthemes within the data. The main themes and crosscutting subtheme emerging from analysis will be discussed in greater detail in the sections that follow.
Figure 9. Frequency and distribution of subthemes emerging from interview data for College B, Research Question 1. Subthemes are presented together with their main theme group, and color scales are used to indicate the overall rank of individual subthemes. Darker shading indicates highest ranked subthemes.

Communication and information sharing. At College B, proactive communication and information sharing have a strong impact on the development of organizational learning practices and the degree to which members engage in learning activities. Timely, inclusive communication helps to promote understanding of issues of institutional importance. Transparent communication builds trust and relationship, which in turn allows organizational members to question assumptions, try new things, and improve engagement in potentially difficult conversations.

Participants indicated that both formal and informal leaders at College B try to be as transparent as we can” (B1) when sharing information. “We share the good and the bad so that nobody is ever caught off guard by what they might hear” (B1). This practice promotes consistent understanding of organizational behavior, in that it gives everyone “some words for what we’re doing and why” (B1). For some communications, leaders work together to develop “messaging” (B2) in order to share information intentionally.
written for different subgroups on campus, first sending “something from a faculty perspective,” and then, “several days later, somebody else sends something that’s focused for a different constituency” (B2).

College B’s practice of intentional, proactive communication also helps to diffuse potential problems and build trust. “So long as everybody is aware and on the same page, then something that might otherwise be an issue” doesn’t escalate (B5). Campus leaders are “thoughtful about being proactive and giving people the information they need to understand the context and the backdrop,” which allows for trust to be built “relationship by relationship and behavior by behavior, and one action at a time” (B1). Trust within the culture then promotes more productive communication in both formal and informal structures. The flow of communication varies to a certain extent, based on the topic at hand. Although communication “mostly seems to go through [the] managers, through [the] deans and up” (B4), organizational members also seem comfortable with more horizontal communication across departments and roles. Participant B4 described what this looks like in practice: “I play a college-wide role. So if somebody is wanting to communicate something about big picture things, college-wide projects that we’re working on, they’ll come straight to me and talk to me about it.”

Participants consistently cited communication as critical to dialogue about learning, and analysis of campus artifacts included samples of communication via email, social media, website, published newsletter, and short videos. However, participants also acknowledged that “communication is a tough nut” (B2), and perhaps not one of the college’s “strongest points” (B4). Part of the difficulty may relate to College B’s size. “It’s a continual effort to try to keep reaching people, especially when you have 600 part-
time faculty that teach at multiple places, and we have about 210 or so full-time faculty” (B1). One participant suggested that when a college-wide project does not go as planned, members of College B consider whether communication may have been part of the issue. “We tend to step back and see what have we done, and where did we miss out on informing people, giving people a chance to interact with whatever the thing is” (B2). Challenges with communication may also be due to past tendencies towards having “a culture of being very nice, of not having disagreements in the open” (B1). College leaders have intentionally worked to improve this aspect of communication, by shifting decision-making to a consensus model and allowing “ample discussion” and collaboration as the group decides on a course of action (B1). During this practice, leaders model behaviors that show that

...it’s okay to disagree in a civil way in public, it’s okay to ask questions, it’s okay to say, “Where’s the data that would show us that? Why do we think that would be a natural consequence or result of this action or behavior?” And [it’s okay] to have real conversation and disagree and then try to come to some kind of understanding or consensus (B1).

**Framing and sensemaking.** The ways in which College B frames learning and makes sense of the environment around it impacts the development of organizational learning practices. Organizational learning activities at College B are often intentionally linked to espoused values and beliefs, including student success and equity and being a strong community partner (B1). “Where we don’t think throwing money at something is going to make a difference, we don’t do it. So we tie back all these things that we’re doing to the big areas of focus that we are really focusing on” (B1). This framing appears
to help reinforce shared goals and common interests during college-wide discussions and when arriving at consensus about next steps. When a discussion can be framed to demonstrate that something is “in the best interest of our students, it’s very easy I feel like to get our faculty on board, get our staff on board” (B5). For example, College B went into a multi-year project related to improving success and completion rates with an intentional focus on “the kinds of transformations that we’d want to see relative to student success and equity” (B1). Members of the college community then engaged in “a year’s worth of discussion, discovery, and discussion” (B1) about data related to equitable success and completion. Similarly, college-wide discussions about the implementation of the Guided Pathways framework are linked to the frame of “transforming the student experience” (B2).

Participants also described a practice of using frames that resonate with aspects of College B’s shared perception of itself as being innovative and “at the head of the pack” (B2). College B frames its institutional goals using aspirational language, with words such as “vanguard” and “sustainable” (Artifact 7). In interviews, participants indicated that discussions about projects or initiatives often include an element of improvement. Participant B4 suggested that generally speaking, the culture is interested in reflecting on its own performance and looking for ways to improve.

Personally, I’m somebody who’s thinking, “okay, well that didn’t go well, how can we improve,” or “hey, let’s take a look at these data – wow, that doesn’t look good, but what does that mean? How can we get better?” But that [attitude is] not as easy to have as an organization. I think in general, in most cases, people at
[College B] are in the range of, “Wow, let’s take a look at these and see what it tells us we can do better.”

**Relationships and trust within the culture.** In addition to the two main themes discussed above, the subtheme of relationships and trust appeared with strong frequency across all interviews. Codes related to relationship and trust co-occurred and cut across the main themes. For example, consistent communication about processes and procedures help leaders in the college who are engaged in building relationships, as “part of building those relationships is the communication aspect” (B5). Similarly, Participant B1 uses intentional and strategic communication to build relationships and trust with leaders of other subgroups on campus:

> We work really hard to share probably more than we need to share, but to build the trust of, “We are going to confidentially give you information that we think will be helpful for you to have so that we’re building trust at the same time that we’re helping you prepare for what you might encounter as a leader.”

Participants acknowledged that relationships and trust are always “a work in progress in educational institutions” (B1), and that there may always be a group that questions the motives of others. “In other words, it’s, ‘if we have goals, what’s the real motivation behind having those goals? Is it really for the best of the college? Or is there some kind of ulterior motive behind those things’” (B4)? However, keeping the discussion focused on a common goal or shared value helps College B minimize the fear of blame and increase safety for difficult discussions. When examining institutional data that could be potentially threatening, for example, leaders frame the discussion around “here’s what our students are experiencing” so that members of the group don’t “end up
feeling like, ‘okay, well they’re not doing well and it’s my fault, and you’re saying that it’s my fault (B4).’” This practice not only builds openness for discussion, but also reinforces the common goals within the relationship.

**College B: Research Question 1a**

*What is the impact of organizational culture on the development of organizational learning practices?*

Table 17 displays the ranking of the top five subthemes related to the impact of organizational culture on the development of learning practices.

Table 17

*Top Five Subthemes Related to Organizational Culture and Learning: College B*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq.</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships and trust</td>
<td>46</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Shared self-perception</td>
<td>35</td>
<td>Framing and sensemaking</td>
</tr>
<tr>
<td>Honest, proactive communication about learning</td>
<td>29</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Inclusive communication and dialogue</td>
<td>29</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Approach to learning as a practice</td>
<td>28</td>
<td>Intentionality of learning</td>
</tr>
</tbody>
</table>

In addition to the themes related to communication and relationships discussed above in Research Question 1, shared beliefs about the collective identity of the culture – i.e., “this is who we are, how things happen, and what we believe” – impact the development of organizational learning practices at College B. In particular, shared perceptions about the importance of espoused values and beliefs about the availability of resources affect the intentionality with which College B approaches learning activities. Analysis of interview data suggests that College B’s culture is increasingly approaching
organizational learning as an ongoing practice. These two subthemes are discussed in the sections that follow.

**Shared self-perception.** Participants described College B as “at the forefront” (B5), “on the cutting edge of innovation” (B1), and “first adopters” (B2). Participants shared a sense of pride in being proactive about issues or ideas that later emerged as statewide initiatives. Participant B1 described a recent example: “By the time that the state started talking about Guided Pathways we were already well on our way to developing them. There was no doubt we were doing this, and we had decided to do it on our own.” Participants shared a perception that College B’s stable fiscal situation allows them to be proactive, rather than reacting primarily to what “enrollments are and how available funding [will] be” (B4). Participant B2 agreed that because College B has “better funding than most other community colleges in California,” members believe that they have some agility and more freedom to take risks. “We can go ahead and pay for things and try it or do it, when other people are struggling to be able to [take a risk]” (B2). At the same time, the availability of resources has both “pluses and minuses” (B2), particularly with regard to motivation and engagement. Participant B1 pointed out that when resources are not an overriding concern,

> you have to generate your own sense of hunger about motivating people to do more, to do better, because you don’t have your traditional motivators for how districts are run. So you can get complacent with, “We’re good enough.” Good can kind of be the enemy of great.

**Approach to learning as a practice.** Analysis suggests that the organizational culture at College B is increasingly intentional about approaching learning as a practice.
As discussed above, College B uses intentional communication and framing to encourage reflection and learning from potential mistakes or unexpected results. In addition, organizational members are increasingly willing to learn from each other. Although “people stay at [College B] for a long, long time” (B1), Participant B2 suggested that the culture is “getting more enlightened, partly because of the people that we’re bringing in the door” that have “new pedagogical insight” (B2). College B also frames professional development activities around issues of college-wide importance, such as Guided Pathways (B1).

College B has become more intentional about learning from external models, as well. Participant B1 noted that in the past, College B “didn’t look outside” regularly. “We looked at ourselves as having all the answers and doing the best work there was.” However, in more recent years, College B has tried to modify that behavior, and now participants in national initiatives in order to learn from peers that are “high-performing and high-achieving and committed to the same kind of values” (B1).

**College B: Research Question 1b**

*What is the impact of campus leadership on the development of organizational learning practices?*

Table 18 displays the ranking of the top five subthemes related to the impact of relating to the impact of campus leadership on the development of learning practices. The strongest subthemes emerging from the analysis were related to the themes of communication and relationship. A second cluster of subthemes related to internal capacity for learning, engaging the culture in learning, and approach to external change drivers.
Table 18

*Top Five Subthemes Related to Campus Leaders and Learning: College B*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq.</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honest, proactive communication about learning</td>
<td>37</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>20</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Beliefs about internal capacity for learning</td>
<td>11</td>
<td>Intentionality of learning</td>
</tr>
<tr>
<td>Framing, sensing, and engaging</td>
<td>10</td>
<td>Framing and sensemaking</td>
</tr>
<tr>
<td>Approach to external forces</td>
<td>7</td>
<td>Internal/external alignment</td>
</tr>
</tbody>
</table>

Within the broader cultural context discussed above in Research Question 1, leaders at College B impact the environment in which organizational learning occurs by facilitating proactive communication, framing dialogue with shared values in mind, and actively cultivating trusting relationships. College B leaders also impact the development of organizational learning practices through behaviors that intentionally build capacity for learning within the culture. By establishing the environment in which learning activities will take place, leaders increase College B’s overall capacity for learning. For example, when engaged in dialogue and learning related to systemic, interconnected changes such as a Guided Pathways implementation, Participant B1 suggested that individual members of the culture don’t see the connections immediately. Leaders are “having to draw those conclusions and connections for people (B1)” and “help people understand what the reality is (B4).” Institutional data that presents college performance against external expectations can help to articulate the connections, if carefully framed in a way that is “real and relevant to their lives, their roles” (B4). Once members understand that “there’s something we need to be paying attention to” (B4), College B leaders continue to build
capacity for learning by engaging members in open-ended questions to question assumptions and “model having difficult discussions” (B1) in a way that promotes trust and supports risk.

**College B: Research Question 2**

*What role do organizational culture and campus leadership have in the facilitation of second order change in California community colleges?*

Two major themes and one crosscutting subtheme emerged from the analysis of data related to Research Question 2. At College B, organizational culture and campus leadership facilitate second order change primarily through (a) communication and information sharing, (b) framing and sensemaking, and (c) relationships and trust (subtheme). Table 19 displays the ranking of themes for Research Question 2 at College B, along with their frequency and distribution across interviews and artifacts.

**Table 19**

**Rank and Frequency of Themes Related to Second Order Change: College B**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Interviews</th>
<th>Artifacts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Sources</td>
</tr>
<tr>
<td>Communication and information sharing</td>
<td>108</td>
<td>4</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>92</td>
<td>4</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>73</td>
<td>4</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>64</td>
<td>4</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>64</td>
<td>4</td>
</tr>
</tbody>
</table>

During the analysis, artifacts were used to triangulate and confirm themes emerging from the analysis of interviews. Artifacts were selected based on the categories
of sources established in the case study protocol (Appendix D). Artifacts and interviews used consistent language to frame activities related to change in culturally meaningful terms. For example, the mission statement and institutional goals include a focus on equitable access and success. Interview participants discussed second order changes using a similar frame.

As in the analysis for Research Question 1, the subtheme of relationships and trust emerged with a high degree of presence across all the data. Relationships and trust at College B therefore appear to both support the development of organizational learning practices and facilitate second order change. Figure 10 displays the distribution of subthemes emerging from the analysis of interview data. In order to keep the theme clusters together, a color scale is used to indicate the relative rankings of the subthemes within the data. The main themes and crosscutting subtheme emerging from analysis will be discussed in greater detail in the sections below.

<table>
<thead>
<tr>
<th>Main Theme Group</th>
<th>Subtheme</th>
<th>Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and information sharing</td>
<td>Honest, proactive communication</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Inclusive communication and dialogue</td>
<td>29</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>Engaging with institutional data</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Framing, sensemaking, and engaging</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Interconnection and integration</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Shared self-perception</td>
<td>36</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>Approach to learning as a practice</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Beliefs about internal capacity for learning</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Intentional, open-minded problem-solving</td>
<td>27</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>Approach to external forces and factors</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Organizational structures and roles</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Orientation toward the future</td>
<td>8</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>Relationships and trust</td>
<td>73</td>
</tr>
</tbody>
</table>

*Figure 10.* Frequency and distribution of subthemes emerging from interview data for College B, Research Question 2. Subthemes are presented together with their main theme group, and color scales are used to indicate the overall rank of individual subthemes. Darker shading indicates highest ranked subthemes.
Communicating to facilitate change. Communication and information sharing help College B find stability and develop shared understanding during times of uncertainty and change. At College B, “it’s really important to have that communication” when managing a situation where members of the culture “don’t know what the outcome is going to be, when there’s a level of uncertainty” (B5). During a recent change to the college’s classification and compensation structure involving renegotiation of all job descriptions, regular communication about “where we were in the process” and “what the next steps were” helped to mitigate some of the fear and uncertainty surrounding the change (B5). Communication and information sharing flowed both directions: college-wide forums provided opportunities for the leadership team to share progress, and allowed employees to ask questions and share concerns (B5). The college also developed and shared a philosophy to guide the change and linked conversations about job descriptions to ongoing dialogue about the Guided Pathways implementation (B1). Although fear about the change remained “until the final report came out and everyone could see it” (B5), regular and consistent communication helped to reassure members of the culture while the details of the change were being developed.

Organizational beliefs about the importance of inclusive communication and dialogue also play a role in the facilitation of second order change at College B. College B places “a large value” on the inclusion of diverse perspectives in problem-solving dialogue (B1). “Whenever we try to tackle a particular issue or situation, I think the first thing that happens is that whoever is sort of leading the charge on that looks around and says, ‘okay, who needs to be involved in this’” (B4)? College B “makes a real effort” to include “people with different outlooks and different experiences” when staffing a
committee or work group (B2). In addition to differences in background and discipline, the college looks for a diversity of experience and longevity at the college so that there is an “early-career, mid-career, late-career kind of mix” of perspectives (B2). Intentionally engaging a variety of perspectives in dialogue and communication about change helps College B “make sure that we’re getting all the pieces in mind that we need to be thinking about to decide something” (B4) and makes it easier to “get people on board” (B2) with the change.

**Framing and making sense of change.** At College B, intentional framing facilitates second order change by contextualizing change and change activities in a way that resonates with the culture. As with the framing of organizational learning practices, participants described change and change activities in terms of espoused values and priorities of the college, such as student success and equity. Participant B1 described College B’s Guided Pathways implementation as a “rare opportunity” to “transform our organization, or structure, our facilities, our coursework, our policies and procedures” in order to “make sure that we’re supporting student success and equity.” Other goals, priorities, and changes can be connected to this frame, as well. For example, Guided Pathways work has been incorporated into the classification and compensation study, as new job descriptions are negotiated (B1). Similarly, the Academic Senate has established goals related to the way that “bodies of the Senate are handling or touched by” work connected to the Guided Pathways implementation (B2).

Framing change in culturally meaningful terms provides a common interest during potentially difficult discussions and helps to keep the focus on improvement, rather than evaluation. “If people are seeing things in an evaluative way, with potentially
negative results … then you’re not going to be listening to other kinds of results” (B4).

In contrast, dialogue framed around a shared value such as improving the student experience can be much more frank and open:

> We listened to student voices through focus groups and panel discussions that were open and honest about what was going well, what wasn’t going well. And we engaged as many people as would come in the discussion about what we might do to change policies and practices, behaviors, and all kinds of things that would impact student success positively. (B1)

**Relationships and trust.** At College B, trust and safety within relationships facilitate honest dialogue about change and enables members to question assumptions and take risks. Participants described trust as “critical to any organization being able to move forward in a positive direction” (B4). Participants also acknowledged that trust is “hard, really hard” to build and maintain, particularly in a “large enough way that people feel like they are a part of something, that what they do means something, that they’re valued” (B4). Participant B1 noted that College B had gone through a period marked by mistrust, “where there wasn’t good faith in the board, and the board didn’t have good faith in the leadership, and so forth,” but characterized the current degree of trust on campus as “definitely improving and improved.” To build trust and promote the safety required for dialogue about second order change, both formal and informal leaders model trusting behaviors and minimize blaming when questioning assumptions in public. When confronted with an undiscussable issue or “elephant in the room” (B5), leaders “address any elephants” and bring the issue into the conversation respectfully, in a way that isn’t perceived as “evaluative” (B4). In addition to promoting safety and trust, this practice
facilitates change by keeping the conversation focused on institutional improvement, rather than personal performance.

**College B: Research Question 2a**

*What role does organizational culture play in the facilitation of second order change?*

Table 20 displays the ranking of the top five subthemes related to the role that organizational culture plays in the facilitation of second order change at College B. After the subtheme of relationships and trust discussed in Research Question 2, College B’s organizational culture facilitates second order change primarily through honest, proactive communication about change.

Table 20

*Top Five Subthemes Related to Organizational Culture and Second Order Change: College B*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq.</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships and trust</td>
<td>53</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Honest, proactive communication</td>
<td>42</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Shared self-perception</td>
<td>35</td>
<td>Framing and sensemaking</td>
</tr>
<tr>
<td>Inclusive communication and dialogue</td>
<td>29</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Intentional, open-minded problem-solving</td>
<td>27</td>
<td>Intentionality of learning</td>
</tr>
</tbody>
</table>

As discussed above, the College B culture places a high value on openness and transparency, and organizational structures and behaviors have been designed to ensure that everyone has the opportunity to be informed. In keeping with this value, information about change initiatives is communicated broadly throughout the college, using multiple
channels and tailoring the messaging based on the audience and “what their role is going to be” in the change (B4). Information about “large scale change” that may “engage a lot of people in the process” may be discussed at an All College Day; more detailed information may “show up in meetings” and “shared in the collegial consultation groups” (B4). In addition to helping College B disseminate information about a change effort, inclusive and proactive communication also facilitates engagement – often by illuminating areas or topics where organizational members remain uncertain or unaware. Communication may begin with individuals who already understand the rationale for change, but as others in the organization begin to hear about the change “you begin to find those that really weren’t on board to begin with. Either because they don’t necessarily understand what you’re doing or they don’t believe in what you’re doing, or they just didn’t know about it” (B4). Identifying gaps in understanding or pockets of resistance allows the college to “regroup” (B2), refocus, and reframe.

**College B: Research Question 2b**

*What is the role of campus leadership in facilitating second order change?*

Analysis of data related to Research Question 2b indicates that leaders at College B facilitate second order change primarily through intentional communication and framing that creates a shared sense of urgency. Table 21 displays the top five subthemes that emerged from the analysis.
Table 21

*Top Five Subthemes Related to Campus Leaders and Second Order Change: College B*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq.</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honest, proactive communication</td>
<td>37</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>20</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Framing, sensemaking, and engaging</td>
<td>18</td>
<td>Framing and sensemaking</td>
</tr>
<tr>
<td>Organizational structures and roles</td>
<td>16</td>
<td>Internal/external alignment</td>
</tr>
<tr>
<td>Beliefs about internal capacity for learning/change</td>
<td>11</td>
<td>Intentionality of learning/change</td>
</tr>
</tbody>
</table>

Leaders at College B facilitate second order change by steering and coordinating campus communication about change efforts in a way that frames the rationale for change. “You want to try to make sure that everybody understands the need for [change], right? The sense of urgency for it (B4).” When first communicating about the Guided Pathways implementation, for example, leaders framed the message around values of equity and social justice, and invited students to share stories about their current experiences. This intentional framing and communication is particularly important for Participant B1, who tries “to get people to understand good enough isn’t good enough for us” in a culture that does not have to worry about revenue from enrollment:

The challenge is to get people to keep striving and be hungry for change and continuous improvement, even when there’s really not a reward for that. Your reward has to be intrinsic, and it’s about your commitment to your students and to social justice and to equity.

To facilitate this understanding, leaders at College B intentionally design communication and change activities that engage members of College B in questioning
assumptions about the structures, behaviors, or practices involved in the change. Leaders ask open-ended questions about the change, such as “Have you thought about this? How are you engaging these people that don’t work in your area” (B4), and “How can we do it better” (B5)? College B leaders have also created situations that require dialogue and interaction across silos, in workgroups or at larger all-college events. At one Guided Pathways event, “tables had a mixture of faculty from different areas … and it was the most eye-opening thing for each of them,” because they realized, “Oh! That’s what our students tell you? I didn’t know that” (B4). By creating opportunities for connection between members of different subgroups, leaders facilitate broader dialogue about the rationale for the change. “You just kind of start little by little, and then hopefully people continue that conversation” (B4).

**College B: Unexpected findings**

Two unexpected findings emerged the analysis of data from College B that were not predicted by the theoretical framework. First, participants suggested that institutional successes may negatively affect leaders’ ability to create urgency and rationale for change. College B’s financial situation affords it the resources to “do the right thing because it’s the right thing” (B1), without worrying as much about how enrollment might be affected. Participant B1 suggested that College B has “all the opportunities and things in place to really be the best at our student’s outcomes,” and that there’s no excuse for not ensuring “most if not all of our students are able to achieve their educational goals.” However, without strong motivators, Participant B1 indicated that the college could become “complacent” about engaging in changes required to pursue those opportunities.
A second unexpected finding emerged around College B’s shared belief in the importance of inclusion and sharing of multiple perspectives during activities connected to learning and change. Paradoxically, several participants suggested that emphasizing inclusivity without discussing intersectionality leads to less connection and more silos. Participant B1 described how this issue manifests when establishing student groups:

My goal is to advocate for those across the board and to help people understand that at [College B] we have the opportunity to help all students. It doesn’t have to be at the expense of one group. And that’s really new to them because they still sort of see, rather than being in a growth mindset, they still sort of see a finite pie and, “I gotta get mine for this group of students or nobody’s advocating for them.”

This also manifests within the governance structure. Participant B4 found three different formalized groups at College B dedicated to the issue of equity and inclusion. As a result, there are “a lot of people working on things, but not a whole lot of coordination and I don’t know how much progress, as a whole, because one’s not talking to the other” (B4). Participant B4 suggested that the duplication of efforts could reflect the passion of an individual or group, or the feeling that “maybe somebody’s not doing enough so we’re going to do it.”

**College C: Research Question 1**

*What impact do organizational culture and campus leadership have on the development of organizational learning practices in California community colleges?*

In analyzing the data for College C, the researcher found that although all five major themes interact to impact the development of organizational learning practices, one
main theme and two subthemes were particularly present for both organizational culture and campus leadership. At College C, organizational culture and campus leadership impact the development of organizational learning practices primarily through (a) the degree of intentionality with which learning activities are approached, (b) relationships and trust (subtheme), and (c) honest, proactive communication (subtheme). Table 22 displays the ranking of themes for Research Question 1 at College C, along with their frequency and distribution across interviews and artifacts.

Table 22

<table>
<thead>
<tr>
<th>Theme</th>
<th>Interviews Freq.</th>
<th>Interviews Sources</th>
<th>Artifacts Freq.</th>
<th>Artifacts Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intentionality of learning</td>
<td>229</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>147</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>140</td>
<td>6</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>Communication / information sharing</td>
<td>133</td>
<td>6</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>91</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

During the analysis, artifacts were used to triangulate and confirm themes emerging from the analysis of interviews. Artifacts were selected based on the categories of sources established in the case study protocol (Appendix D). Artifacts examined for College C included governance manuals and diagrams, college news and press releases, committee minutes, planning documents, documents related to goal-setting processes, and mission and vision statements. Diagrams outlining institutional governance structures in particular were found to clearly communicate how and where issues would
be communicated, as well as how and where internal and external factors should be included in decision-making processes. These artifacts echoed interview participants’ perceptions of the importance of strong, intentional governance processes within the College C culture.

In addition to the main theme emerging from the interview data, two subthemes related to the development of organizational learning practices also emerged with a high frequency across all College C interviews: (a) relationships and trust, and (b) honest, proactive communication. Figure 11 displays the distribution of subthemes emerging from the analysis of interview data. In order to keep the theme clusters together, a color scale is used to indicate the relative rankings of the subthemes within the data.

<table>
<thead>
<tr>
<th>Main Theme Group</th>
<th>Subtheme</th>
<th>Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and information sharing</td>
<td>Honest, proactive communication</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Inclusive communication and dialogue</td>
<td>50</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>Engaging with institutional data</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Framing, sensemaking, and engaging</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Interconnection and integration</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Shared self-perception</td>
<td>50</td>
</tr>
<tr>
<td>Intentionality of learning</td>
<td>Approach to learning as a practice</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Beliefs about internal capacity</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Intentional, open-minded problem-solving</td>
<td>41</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>Approach to external forces and factors</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Organizational structures and roles</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Orientation toward the future</td>
<td>17</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>Relationships and trust</td>
<td>91</td>
</tr>
</tbody>
</table>

Figure 11. Frequency and distribution of subthemes emerging from interview data for College C, Research Question 1. Subthemes are presented together with their main theme group, and color scales are used to indicate the overall rank of individual subthemes. Darker shading indicates highest ranked subthemes.

These two subthemes frequently co-occurred with the main theme of intentionality. Elements of culture and leadership related to relationships, trust, and honest communication therefore appear to support the development of organizational
learning practices at College C. The main theme and crosscutting subthemes emerging from analysis will be discussed in greater detail in the sections below.

**Intentionality of learning.** At College C, the organizational culture and campus leadership impact the development of organizational learning through intentional approaches to learning as a regular, ongoing practice. The majority of learning activities at College C are directed through an internal governance structure comprised of councils and planning committees that interact with the Academic Senate and Executive Cabinet, for the purpose of intentional communication, decision-making, and evaluation of plans, actions, and procedures (Artifact 4). Decision-making and dialogue within the governance structures include consideration of internal data (e.g., program review, assessment results, performance indicators, existing initiatives and plans) and external trends (e.g., community input, labor market data, regional forecasts). These internal and external factors act as “inputs into the whole process,” sitting “on the outside,” but intentionally feeding in to dialogue and decision-making (C1). The governance system defines roles in dialogue and provides an intentional structure for communication.

Within the governance structure, organizational activities such as cyclical planning help College C frame dialogue around institutional goals and performance indicators. For example, once institutional priorities have been established through a strategic planning process, institutional work intentionally “revolves around those priorities” and focuses on “how do we get to making improvements” (C1) and addressing gaps in performance related to the core priorities of the college. Intentionally linking discussions to the strategic plan and requiring that new initiatives and projects are “vetted through strategic planning” (C3) supports intentional dialogue around shared priorities.
Annual planning processes provide a similar frame for intentional data analysis and proactive, intentional discussions about progress within individual departments. Several participants noted that the annual process “seems to always be in flux” (C2), but suggested that the changes allowed for some intentional flexibility to address emerging gaps or needs. “To a certain extent, I think that’s good, because we’re recognizing that [the annual process] isn’t totally filling the need that it should” (C5).

Throughout the interviews, participants described examples of learning from experience and applying what has been learned to future iterations of initiative or dialogue. At the conclusion of a process or project, “we’re willing to look at it and say what went well, what didn’t go so well, and how do we make a change for the better in this next major cycle” (C4). For example, at the time of interviews College C had begun development of its next five-year strategic plan, and had developed “a completely different framework, based on what we learned from the current one” (C1). This practice of intentional analysis of results appeared to be in place whether the overall outcome of the process or project was positive or negative. Participant C2 suggested that even when College C experienced a disappointing result, it was able to reflect and learn:

Right now, we really truly, I think, are in a place where disappointing results don’t necessarily lead to incrimination and finger pointing. That has been – well, it’s easy for anyone to fall into that particular trap, but when things don’t go as expected or as planned, we really do a lot of soul-searching. Not in the sense of well, it’s your fault or your fault or your fault, but what didn’t go right? What can we do better next time?
Consistent with this approach of intentional, iterative learning, Participant C1 described the use of small pilot projects as an opportunity to learn and “just work out the bugs” before launching a full implementation. However, not all participants felt that pre-implementation dialogue was always intentional and proactive. Participant C3 suggested that even though College C is “flexible” and able to learn and adapt, intentional dialogue sometimes only begins when a project yields unexpected results. “At that point in time is when I think we really [say], “Okay, let’s sit down, let’s talk about this, let’s refocus, let’s come up with a game plan.”

Similarly, while all participants agreed that reflection and analysis were important for ongoing improvement, there was also a shared perception that the culture may not always have the capacity to support intentional reflection and learning at a level “appropriate for strategic thinking” (C4) across the institution. Participants expressed consistent perceptions about the time and energy required to engage in organizational learning activities. “I think there’s a huge amount of frustration about all of the initiatives that are coming at us, in a sense that nothing is really given a chance to work to see if these initiatives actually are effective or not” (C5). Participant C6 agreed that it sometimes felt that the college had so many “new initiatives that we don’t have time to reflect on what we have to do.” Shared beliefs about perceived scarcity of time may in themselves impact how members of College C approach learning practices, in that they may not believe there is time to prioritize “deep conversations” that allow the challenging of assumptions about “how effective all of this stuff really is” (C5). Participant C1 suggested that perhaps the goal for College C is a balance between reflection, learning, and action:
There’s only so much time for self-reflection on stuff, and that can take on a whole life of its own, but the bottom line is, you’ve got to get the work done. We do [reflect]. We don’t make a big deal about it, but at the same time, we’re monitoring and at least we’re taking a look at it on a regular basis, and not just assuming, “Oh yeah, everything’s just great, and everything’s fine.”

**Relationships and trust.** In addition to the main theme of intentionality discussed above, the subtheme of relationships and trust emerged from the analysis of data at College C as an important factor in the development of organizational learning practices. Codes in the relationships and trust subtheme frequently co-occurred with and cut-across the main themes of (a) intentionality of learning and (b) communication and information sharing. Participants discussed the importance of consistency between communication and behavior for building trust, and noted that this was particularly important for campus leaders. “If they’re not consistent, then you won’t trust [them]” (C6). For example, one participant described a past leader who would “say one thing” to their cabinet and “maybe another thing to the town hall meetings” attended by the campus at large. “[They were] not popular” (C6). Building trust also involves demonstrating competence and knowledge over time. “A big part of [trust], though, I honestly think it’s time. And then basically proving yourself and showing what you’re knowledgeable about – because it comes down to a lot of institutional knowledge” (C3).

Participants suggested that intentionally breaking out of traditional “silos” to develop relationships with others outside their areas also helped to promote trust, understanding, and learning. When members of the College C culture can engage with others outside their silo, the discussions and relationships that emerge can support
learning practices such as questioning assumptions. Participant C5 described how working with colleagues from other disciplines has helped them engage in discussions of student success and achievement:

We don’t always agree, but even just a chance to talk about it I think is helpful if for no other reason than to realize that this problem is not unique to you. You tend to blame yourself if something is going wrong. Then that gives you a chance to realize maybe there’s something you need to do differently.

**Honest, proactive communication.** The subtheme of honest, proactive communication about learning and change cut across the main theme of intentionality, and was strongly linked to the subtheme of relationships and trust. For example, Participant C1 explicitly cited intentional, honest communication as their primary strategy for building trust among members of the organization:

The only way to build trust is to be open and transparent and communicate about everything and just when you think you’ve communicated enough, you haven’t. I’ve always done that. I might over-communicate, but I don’t care. I’m never going to have anybody come to me and go, “Oh, we didn’t hear about this,” or, “We didn’t know about this,” or, “Nobody told us X, Y, and Z.” They’re not going to be able to do that here, because we don’t operate that way.

Participant C2 agreed that “you don’t want to surprise people.” In order to promote understanding of an issue and build engagement, “reaching out and acknowledging and honoring areas of responsibility is really crucial” (C2). In this way, proactive communication reinforces trust, while “lack of communication” contributes to “bitterness, or people being upset or not feeling like they’re valued” (C3). For Participant
C3, communication also strengthens relationships by showing respect, even when opinions about a subject may differ. “At least respect what I do enough to … give me a heads-up, or take me into consideration so I can give you my opinion. My opinion might not go anywhere, but at least I know you’re hearing me out.”

Participants suggested that when honest, proactive communication related to learning does not occur at College C, it may be because the “the most difficult issues that we have to deal with don’t avail themselves to a regular functioning governance system” (C4), despite the fact that College C’s governance structure was intentionally designed to allow for “good, hard discussion” (C5). This may be because of the time allotted on the agenda of any given meeting. “You might have an agenda this long, but the free-flowing discussion only lets you go this far. Then when you have the next agenda, it’s long again and then you’re only going to have this much time” (C6). Another participant indicated that there might be “more dedication to the process” than the outcome of the process (C5). From Participant C4’s perspective, however, factors of both time and process contribute to the challenge of engaging in deep dialogue about difficult issues:

It feels awkward to bring those things up when there’s already agenda items and we’re talking about that, to bring up another item … It’s like, “I’d like to bring this up.” For somebody to say this, then all eyes remain on that person. It’s like, is this the right time? Well, when is there ever the right time?

**College C: Research Question 1a**

*What is the impact of organizational culture on the development of organizational learning practices?*
In addition to the discussion of intentionality, relationships, and communication above in Research Question 1, College C’s organizational culture impacts the development of organizational learning practices through shared beliefs and behaviors related to organizational structures and roles. Table 23 displays the ranking of the top five subthemes related to the impact of organizational culture on the development of learning practices at College C.

Table 23

*Top Five Subthemes Related to Organizational Culture and Learning: College C*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq.</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach to learning as a practice</td>
<td>91</td>
<td>Intentionality of learning/change</td>
</tr>
<tr>
<td>Beliefs about internal capacity for learning</td>
<td>85</td>
<td>Intentionality of learning/change</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>75</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Honest, proactive communication</td>
<td>52</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Organizational structures/roles</td>
<td>52</td>
<td>Internal/external alignment</td>
</tr>
</tbody>
</table>

The organizational structure and clearly defined roles within College C’s structure help members of the College C culture maintain “intended discussion” and understand “where things are going to go” (C2). College C’s governance structure outlines a clear expectation for each committee or council, including “how they work, and what their membership is, and what their charge is, and what their roles are, and responsibilities, and all that” (C1). As much as possible, College C’s structure is integrated to promote coordination and avoid duplication.

Committees and councils include representation from the main subgroups on campus, i.e., faculty, administration, and classified support staff, in order to facilitate
communication and dialogue throughout the institution. However, “it’s easy for someone to get left behind” (C1) if the culture is not intentional about inclusion. “If you’re a representative serving on a governance council, your job is to go back and keep your constituent group informed about what’s going on. That looks good on paper but often doesn’t work sometimes in real time” (C1). Participant C3 suggested that College C has been putting “more thought” into the membership of ad hoc committees and cross-functional task groups to ensure the right people are “at the table to talk about” a given initiative or project. “But then you get to too many hands in there, too. I think finding that perfect flow or that balance – we’re still striving to that” (C3).

**College C: Research Question 1b**

*What is the impact of campus leadership on the development of organizational learning practices?*

Table 24 displays the ranking of the top five subthemes related to the impact of campus leadership on the development of learning practices at College C.

Table 24

*Top Five Subthemes Related to Campus Leaders and Learning: College C*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq.</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honest, proactive communication</td>
<td>31</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>16</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Engaging with institutional data</td>
<td>15</td>
<td>Framing and sensemaking</td>
</tr>
<tr>
<td>Organizational structures and roles</td>
<td>14</td>
<td>Internal/external alignment</td>
</tr>
<tr>
<td>Approach to external forces/factors</td>
<td>13</td>
<td>Internal/external alignment</td>
</tr>
</tbody>
</table>
In addition to the subthemes of (a) honest, proactive communication and (b) relationships and trust discussed above in Research Question 1, campus leaders at College C impact the development of organizational learning by framing institutional performance in such a way that helps internal organizational structures approach and understand external expectations. For example, during a recent strategic planning retreat with a “large cross section of folks from campus” (C1), campus leaders presented data related to both internal and external metrics to frame the discussion. Individuals at the retreat worked “with actual, real data and trends in the data. That’s never happened before. That was really cool to see, as a starting point for developing the next strategic plan” (C1). Several participants cited the college’s Guided Pathways implementation as an opportunity for campus leaders to continue this approach of proactively engaging with data to frame discussions, create urgency, and do a “better job as a learning organization” (C4).

**College C: Research Question 2**

*What role do organizational culture and campus leadership have in the facilitation of second order change in California community colleges?*

Two major themes and two cross-cutting subthemes emerged from the analysis of data related to Research Question 2. At College C, organizational culture and campus leadership facilitate second order change primarily through (a) framing and sensemaking, (b) internal and external alignment, (c) relationships and trust (subtheme), and (d) honest, proactive communication. Table 25 displays the ranking of themes for Research Question 2 at College C, along with their frequency and distribution across interviews and artifacts.
Table 25

*Rank and Frequency of Themes Related to Second Order Change: College C*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Interviews</th>
<th></th>
<th>Artifacts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Sources</td>
<td>Freq.</td>
<td>Sources</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>175</td>
<td>6</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>165</td>
<td>6</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>146</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Communication/information sharing</td>
<td>139</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>104</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Throughout the analysis, artifacts were used to triangulate, confirm, and expand on data emerging from the interviews. Artifacts were selected based on the categories of sources established in the case study protocol (Appendix D). In terms of supporting the facilitation of second order change, artifacts were consistent with interview data, in that they reflected intentional framing within the organizational structure. For example, institutional documents such as committee minutes and planning handbooks consistently use the College C mission and vision statements as a page header or footer; in this sense, the mission and vision literally frame organizational communication and actions. Likewise, the researcher found clear, stated intentions to study, understand, and meet external standards for student success across planning documents and institutional value statements. This was consistent with statements about espoused values related to student success that emerged from interviews.

Three subthemes emerged with high frequency from interview data related to Research Question 2. One of these subthemes, beliefs about internal capacity, was found
to be primarily related to organizational culture; this subtheme will be addressed below with Research Question 2a. The other two subthemes, (a) relationships and trust, and (b) honest, proactive communication, cut across the main themes for both organizational culture and campus leadership. Figure 12 displays the distribution of subthemes emerging from the analysis of interview data related to the facilitation of second order change at College C. The main themes and crosscutting subthemes emerging from the analysis of interview data analysis will be discussed in greater detail in the sections that follow.

<table>
<thead>
<tr>
<th>Main Theme Group</th>
<th>Subtheme</th>
<th>Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and information sharing</td>
<td>Honest, proactive communication</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>Inclusive communication and dialogue</td>
<td>50</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>Engaging with institutional data</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Framing, sensemaking, and engaging</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Interconnection and integration</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Shared self-perception</td>
<td>52</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>Approach to learning as a practice</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Beliefs about internal capacity</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Intentional, open-minded problem-solving</td>
<td>56</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>Approach to external forces and factors</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Organizational structures and roles</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Orientation toward the future</td>
<td>44</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>Relationships and trust</td>
<td>104</td>
</tr>
</tbody>
</table>

*Figure 12. Frequency and distribution of subthemes emerging from interview data for College C, Research Question 2. Subthemes are presented together with their main theme group, and color scales are used to indicate the overall rank of individual subthemes. Darker shading indicates highest ranked subthemes.*

**Framing and sensemaking.** At College C, both organizational culture and campus leadership facilitate second order change through framing activities. Connecting changes to shared beliefs and values such as student equity or increased student success helps members of College C make sense of the change, and promotes improved engagement in change activities. In addition, framing helps leaders at College C
communicate the rationale for change. From Participant C1’s perspective, all framing at
College C should tie back to “moving the needle” on student outcomes:

If students aren’t finishing and completing degrees and accomplishing their goals,
it means nothing to have a great counseling program, or some other great support
program. The program in and of itself means nothing. It only means something if
it’s contributing to these outcomes. That’s it. That’s the frame we take here.

College leaders use this frame to drive strategic planning and establish institutional
priorities. The frame of student outcomes also provides a structure for discussing second
order changes, such as the college’s Guided Pathways implementation, that will touch
“almost everything we do from curriculum to scheduling to counseling and everything in
between” (C2). In the midst of discussions about how the implementation will change
operations, the frame of improving student outcomes becomes a common, stabilizing
theme.

Particularly for changes that are connected to external mandates, framing allows
College C to maintain a more proactive sense of control. “It’s unfortunate that we’re
being made to do something that we didn’t decide to do on our own, right? But we
approach it as a challenge as opposed to a burden” (C2). Participant C4 shared that some
at College C embrace changes as opportunities that are “glass half-full,” while others see
change more pessimistically, either as “more compliance” or “a lot more work” in
addition to all the college’s current initiatives. “To be honest, there’s some truth to both
sides of that equation, but it’s the mindset of how people come to it” that matters for
facilitating change (C4).
**Internal and external alignment.** At College C, intentional alignment between internal structures and the external environment help to facilitate second order change. As discussed above in Research Question 1, College C designed its governance structure so that committees and councils consider specific inputs from the external environment for the purposes of monitoring trends and informing internal plans. This degree of proactivity allows College C to be “a little ahead of the game” (C1) with some projects that eventually become external mandates.

This intentional alignment helps leaders at College C identify areas of overlap between projects that support the same outcome or goal. For example, Participant C1 described how College C recently combined “three pots of money” from grants supporting the goal of college readiness to create integrated oversight for all three projects:

We mapped. We created an organizational chart so that we make sure we’re not duplicating. … We don’t want to create, “Oh, let’s create a director over here, a director over here, and another one over here for that grant.” No. This is all integrated. Let’s create one [director], and part of the funding will come from here, some from here, some from there. That’s the way we do it, so we make sure we’re integrating.

This integration not only allows College C to maximize its financial resources to support a given change, it also helps to streamline change-related work. Each individual project can be framed in terms of the broader outcome or goal that links the projects together.

**Relationships and trust.** In addition to the main themes discussed above, the subtheme of relationships and trust emerged from the analysis of data at College C as an
important factor in the facilitation of second order change. As with organizational learning at College C, trusting relationships based on transparent communication promote better engagement in practices that lead to productive learning and change. “You can’t get things done unless you have trust” (C1). Cultivation of trust is particularly important for new leaders in an organization. “If you’re going to come into an organization and lead that organization, you have to develop the trust first before you start asking people to buy in to what you’re trying to do” (C1).

Participants had varying perspectives about the degree of trust and psychological safety present in the environment, but most agreed that trust was improving as the rate of administrative turnover stabilized. Participant C3 commented that now that most of the middle management teams “have been here four years or more, they’re starting to build that trust” and are “less threatened” by feedback, input, and potentially difficult questions from others. “We currently have an administrative structure that doesn’t feel threatened by those kinds of questions. That hasn’t always been the case” (C2). One participant noted that those in “privileged positions,” such as tenured faculty and high-level administrators, experienced more safety when asking difficult questions than “faculty members who are on the tenure track, and adjunct faculty in particular” (C4). Another participant, however, observed that especially in governance meetings, “people hold back when they need to comment critically on something” (C5). Participant C5 suggested that College C may still be in the process of learning how and why to confront defensive routines in order to facilitate change:

It may not be that they’re afraid of conflict, but they just don’t want to deal with it. It’s like, “I’ve got enough going on. I don’t need to pick this fight.” I think
what does happen is that if we’re talking about issues that affect education, that affect our students, that affect learning is that we haven’t really learned how to talk about some of the issues in an honest way, and a respectful way, and to really dig more deeply into why someone is saying something that they’re saying.

**Honest, proactive communication about change.** As with the development of organizational learning practices, honest, proactive communication emerged as a subtheme that cut across other main themes related to Research Question 2. Throughout the interviews, participants at College C indicated that honest, proactive communication played an important role in the facilitation of second order change. Communicating early in a change process helped to identify potential barriers and promote shared understanding of the rationale for change.

Participants at College C referred to their upcoming Guided Pathways implementation as an example of a “deep change” (C2) that had the potential to affect nearly all aspects of college operations. Participants agreed that clear, proactive communication would be important for facilitating a successful implementation. College C described multiple channels for communication, including mandatory campus meetings. “We’re bringing the whole campus together. Not just faculty, but everybody is going to be required to be there, and we’re going to introduce Guided Pathways. Because we don’t want anybody to be left behind” (C1). In addition, smaller meetings such as the Academic Senate would allow more discussion and dialogue about the change. Participant C2 suggested that this was important for any faculty members who felt they weren’t “being consulted appropriately” by administration about the implementation. “I don’t think that’s the case, but they [e.g., faculty] need to hear that”
(C2). Thoughtful discussion and dialogue early in the implementation process allows faculty and administrators at College C to develop a shared vision for the change.

**College C: Research Question 2a**

*What role does organizational culture play in the facilitation of second order change?*

Table 26 displays the ranking of the top five subthemes related to the role of organizational culture in the facilitation of second order change at College C.

Table 26

*Top Five Subthemes Related to Organizational Culture and Second Order Change: College C*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beliefs about internal capacity</td>
<td>96</td>
<td>Intentionality of learning/change</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>88</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Honest, proactive communication</td>
<td>58</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Organizational structures/roles</td>
<td>52</td>
<td>Internal/external alignment</td>
</tr>
<tr>
<td>Shared self-perception</td>
<td>50</td>
<td>Framing and sensemaking</td>
</tr>
</tbody>
</table>

Four of the subthemes to emerge for Research Question 2a were related to the main themes and cross-cutting subthemes discussed in Research Question 2 above. A fifth subtheme related to shared beliefs about internal capacity, emerged with high frequency from interview data related to the role of organizational culture in the facilitation of second order change.

When discussing College C’s capacity to support second order changes, participants frequently mentioned resources required to facilitate change activities,
including funding, time, and capacity to keep pace with additional work. Participants perceived financial capacity to be extremely important. “Good intentions aren’t enough. You need to have funding in order to move forward” (C6). College C has been “very proactive in identifying grants” (C2). Participants characterized College C’s success in obtaining grant funding as something that enhanced the overall capacity for change, both in terms of expanded funding and additional, grant-funded positions within the organization. For example, Participant C1 described one recent pilot project, in which the college learned that the change effort “was starting to put a lot of pressure on folks who were already overloaded.” To expand capacity, College C “wrote a grant” (C1) and got additional resources to create additional positions that could oversee a larger-scale implementation of the change.

While participants recognized that grant funding allows College C to move forward with large-scale change initiatives, they expressed some reservations about how this practice might affect capacity in other ways. One suggested that multiple grants diffuse the effort and attention directed towards change within the culture, because “one [grant] doesn’t take center stage for very long” (C6). Other participants pointed out that grants “create more work” (C5), and that the additional work adds layers of complexity to the organizational structure (C4). “I’m of the mind that although it’s good to go after resources, there are times where we shouldn’t go after them because it’s too much extra time and too many strings attached” (C4). Additional layers and strings make it “harder to cut through … with the core messages of student success” that can ultimately frame a change and create a sense of urgency.
**College C: Research Question 2b**

What is the role of campus leadership in facilitating second order change?

Table 27 displays the ranking of the top five subthemes that emerged from the analysis of data related to Research Question 2b.

Table 27

*Top Five Subthemes Related to Campus Leaders and Second Order Change: College C*

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>Freq</th>
<th>Main Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing, sensemaking, and engaging</td>
<td>53</td>
<td>Framing and sensemaking</td>
</tr>
<tr>
<td>Honest, proactive communication</td>
<td>31</td>
<td>Communication/information sharing</td>
</tr>
<tr>
<td>Approach to external forces/factors</td>
<td>17</td>
<td>Internal/external alignment</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>16</td>
<td>Relationships within the culture</td>
</tr>
<tr>
<td>Organizational structures and roles</td>
<td>14</td>
<td>Internal/external alignment</td>
</tr>
</tbody>
</table>

At College C, campus leaders facilitate second order change primarily through activities that seek to cultivate urgency and engagement in the broader culture, including framing, communication, and aligning the internal structure with the external environment. Leaders discussed framing changes in terms of institutional goals and “core outcomes” (C1), and using “brutal data” (C4) to demonstrate the immediate need for change and engage the broader culture in the effort. “In the end, it’s about are we effective as an organization, and the proof of that is student success” (C1). Leaders also understand the importance of trusting relationships in facilitating change. As Participant C1 observed, trust has been essential for lessening resistance and promoting understanding:
We’ve implemented a lot of changes here, in a short period of time. Anywhere along that path, it could have been very easy for any group on the campus to put up some resistance or not be a part of it or question it or whatever [to] try to block it, but we haven’t had that. I think in general, folks have come along and they’ve bought into what we’re doing.

**College C: Unexpected findings**

Two unexpected findings emerged from the analysis of data at College C that were not predicted by the theoretical framework. First, at least one participant at College C worried that recent successes and “great progress” could lead to complacency. Participant C4 suggested that continued emphasis on success stories makes it challenging to “show there’s still urgency.”

… I’m trying to help lead the way in our unit to get this across to folks: but even with the success, look at where we still are. Does it mean it’s insurmountable? No. Does it mean there’s nothing we can do? No. But does it mean there’s a lot of hard work ahead? Yes. So I don’t want people to fall into this sense of, “well, we’ve made it, now let’s just make incremental improvement.” We have a lot of work to do.

Participant C1 echoed this concern: “I’m very proud of what we’ve done, but at the same time, I look at [the data] and I go, “You know what? This is the base line. Whatever was happening before was a problem.” Both leaders expressed the challenge of generating urgency for change in the midst of perceived organizational success.

A second unexpected finding related to participants’ perceptions of the roles of organizational subcultures within College C, and the frankness with which participants
discussed the effect that faculty have on governance and decision-making at College C. Several participants referred to state regulations such as AB 1725 that establish defined roles for faculty and administrators in participatory governance at California community colleges. “Faculty would like to participate more, perhaps, than they are, but current regulatory environments don’t let that happen” (C2). One participant suggested that faculty at College C have sometimes been hesitant “to move toward change” (C6), and suggested that “transformational change … can only happen in a community college where the faculty want transformational change” (C6). Participant C1 agreed that understanding the faculty role – at College C and throughout the system – is key for leaders who wish to implement change: “you’re doomed in this business … if you don’t understand the role of faculty in higher education. If you don’t get that, you’re not going to be successful in any administrative position.”

**Cross-Case Analysis: Research Question 3**

*What patterns of congruity or incongruity between cases can be identified with regard to the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges?*

In the analysis of the data related to the impact of organizational culture and campus leadership on the development of organizational learning practices at all three case sites, two themes emerged with high overall frequency: (a) intentional learning, and (b) framing and sensemaking. Table 28 displays the overall ranking of themes across all three cases, along with their frequency and distribution across interviews and artifacts.
Table 28

*Rank and Frequency of Themes Related to Organizational Learning: All Cases*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Interviews Freq.</th>
<th>Interviews Sources</th>
<th>Artifacts Freq.</th>
<th>Artifacts Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intentionality of learning/change</td>
<td>511</td>
<td>18</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>469</td>
<td>18</td>
<td>50</td>
<td>24</td>
</tr>
<tr>
<td>Communication / information sharing</td>
<td>382</td>
<td>18</td>
<td>22</td>
<td>8</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>322</td>
<td>18</td>
<td>37</td>
<td>18</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>292</td>
<td>18</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

To identify patterns of congruity and incongruity between cases, the researcher compared how each theme ranked at each individual site. Figure 13 displays a comparison of the ranking of themes emerging from interview data at each individual site. Although the theme of intentional learning/change was the most frequently appearing theme overall, its rank varied from first to third at the individual sites and was much more present at colleges A and C. The theme of framing and sensemaking was more consistently ranked, and present as the first or second theme at each college. Communication was only ranked in the top three themes at colleges A and B.

<table>
<thead>
<tr>
<th>Main Theme</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intentionality of learning/change</td>
<td>208</td>
<td>74</td>
<td>229</td>
<td>511</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>238</td>
<td>84</td>
<td>147</td>
<td>469</td>
</tr>
<tr>
<td>Communication and information sharing</td>
<td>154</td>
<td>95</td>
<td>133</td>
<td>382</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>132</td>
<td>50</td>
<td>140</td>
<td>322</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>135</td>
<td>66</td>
<td>91</td>
<td>292</td>
</tr>
</tbody>
</table>

*Figure 13.* Comparison of themes related to organizational learning emerging from interview data at each case site. Color scales are used to indicate the relative rank of each theme. Darker shading indicates highest ranked themes.
Additional patterns of congruity and incongruity emerged from a comparison of the ranking of subthemes emerging from the data. Figure 14 displays the rank and distribution of subthemes at each college. The subtheme of relationships and trust was frequent at all three sites, and the most frequent subtheme overall. Honest, proactive communication was also highly ranked at each college. Subthemes relating to the intentionality of learning were incongruous across cases, appearing with much lower degree of frequency at College B. Similarly, the subtheme of shared self-perception had a higher frequency at College A and B, suggesting that shared self-perception may influence framing activities more at these sites than at College C.

<table>
<thead>
<tr>
<th>Main Theme Group</th>
<th>Subtheme</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and information sharing</td>
<td>Honest, proactive communication</td>
<td>105</td>
<td>66</td>
<td>83</td>
<td>254</td>
</tr>
<tr>
<td></td>
<td>Inclusive communication and dialogue</td>
<td>49</td>
<td>29</td>
<td>50</td>
<td>128</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>Engaging with institutional data</td>
<td>58</td>
<td>23</td>
<td>60</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>Framing, sensemaking, and engaging</td>
<td>21</td>
<td>10</td>
<td>10</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Interconnection and integration</td>
<td>38</td>
<td>16</td>
<td>27</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Shared self-perception</td>
<td>121</td>
<td>35</td>
<td>50</td>
<td>206</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>Approach to learning/change as a practice</td>
<td>90</td>
<td>29</td>
<td>95</td>
<td>214</td>
</tr>
<tr>
<td></td>
<td>Beliefs about internal capacity</td>
<td>92</td>
<td>29</td>
<td>93</td>
<td>214</td>
</tr>
<tr>
<td></td>
<td>Intentional, open-minded problem-solving</td>
<td>26</td>
<td>16</td>
<td>41</td>
<td>83</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>Approach to external forces and factors</td>
<td>80</td>
<td>28</td>
<td>57</td>
<td>165</td>
</tr>
<tr>
<td></td>
<td>Organizational structures and roles</td>
<td>26</td>
<td>19</td>
<td>66</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>Orientation toward the future</td>
<td>26</td>
<td>3</td>
<td>17</td>
<td>46</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>Relationships and trust</td>
<td>135</td>
<td>66</td>
<td>91</td>
<td>292</td>
</tr>
</tbody>
</table>

*Figure 14.* Comparison of subthemes related to organizational learning emerging from interview data at each case site. Color scales are used to indicate the relative rank of each theme. Darker shading indicates highest ranked themes.

The general patterns of congruity and incongruity that emerged from the analysis are summarized in Table 29, and discussed in greater detail in the following sections.

Patterns that appeared to relate mostly to culture or leadership are addressed with Research Question 3a and 3b, respectively.
Table 29

Summary of Patterns: Impact of Culture and Leadership on Org Learning Across Cases

<table>
<thead>
<tr>
<th>Patterns of Congruity</th>
<th>Culture &amp; Leadership (RQ3)</th>
<th>Mostly Culture (RQ3a)</th>
<th>Mostly Leadership (RQ3b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Framing &amp; sensemaking</td>
<td>• Intentional approach to learning as a practice</td>
<td>• Honest, proactive communication</td>
</tr>
<tr>
<td></td>
<td>• Relationships &amp; trust</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Honest, proactive</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patterns of Incongruity</td>
<td>• Internal/external</td>
<td>• Shared self-</td>
<td>• Specific approaches to</td>
</tr>
<tr>
<td></td>
<td>alignment</td>
<td>perception</td>
<td>framing &amp; engagement</td>
</tr>
<tr>
<td></td>
<td>• Organizational</td>
<td>• Beliefs about</td>
<td></td>
</tr>
<tr>
<td></td>
<td>structures &amp; roles</td>
<td>internal capacity</td>
<td></td>
</tr>
</tbody>
</table>

Overall patterns of congruity. Framing and sensemaking activities support the development of organizational learning practices at all three case sites. All three colleges use institutional data as a starting point for dialogue that may lead to learning and change. Participants at all three sites also discussed how their colleges use aggregated data as a neutral or objective entry point into a conversation, in order to help surface and challenge underlying assumptions without putting any single individual or department on the spot. In addition, leaders at each site use data to reinforce connections to institutional priorities and cultural values. These connections may be discussed in a meeting or forum, and then reinforced through documents such as strategic plans, annual reports, and college performance scorecards. Within college communications, institutional data reinforce framing and provide a starting point for inquiry and dialogue.

To some degree, participants at each college described a general approach to organizational learning activities as an ongoing practice that can lead to continuous improvement. All three colleges appear willing to try new things, learn from the results, and apply what has been learned moving forward, although participants from College C did suggest that the time required for intentional reflection and analysis can be a barrier.
Similarly, each colleges’ shared beliefs about their own internal capacity – funding, workload, and time in particular – appear to influence how and whether learning occurs. Participants at each college mentioned challenges associated with finding time to engage in new initiatives, given their existing workloads. If these comments reflect a broader pattern of belief about scarcity of resources held by members of the respective cultures, members’ stress, anxiety, and burn out may increase and their engagement in learning and change activities may decrease. Leaders at all three colleges spoke of intentional efforts to address this challenge, in order to build a mindset that was not oriented towards scarcity. At College C, for example, Participant C1 has asked that the leadership team avoid using the phrase “initiative fatigue” in order to frame the dialogue in more constructive and concrete terms:

Don’t bring that [phrase] here anymore. Bring to me, ‘Hey, this area over here is doing X, Y, and Z, and now they’ve got some other thing from the outside that’s putting a lot of pressure on them in terms of work. Is there something we can maybe do about it?’” Okay, great. Now I can [do something] about it.

Perhaps the strongest pattern of congruity between cases, however, is the impact that relationships and trust have on the development of organizational learning practices. Participants indicated that when psychological safety and trust in others’ motivations are high, defensive routines are easier to address and deeper dialogue can occur. In contrast, when these elements are not present, defensive routines become more difficult to manage and dialogue may be less productive. For formal campus leaders, actively cultivating psychological safety requires transparency and proactive communication with other leaders and campus subgroups in order to build trust and minimize surprises. At College
B, leaders “try to be as transparent as we can be,” providing information and context “so that nobody is ever caught off guard by what they might hear” (B1). From Participant C2’s perspective, proactive communication builds respect while keeping everyone informed: “I think reaching out and acknowledging and honoring areas of responsibility is really crucial.” Similarly, participants at College A described a practice of providing written information on critical topics such as enrollment or accreditation that then become the basis for open dialogue at campus forums.

**Overall patterns of incongruity.** The manner in which colleges managed and internalized external factors varied across cases. For example, participants at College A consistently referenced shared beliefs about the effect of external factors on their college, and described how the college’s approach to active engagement with the external environment provided a sense of control over their situation. Clear future goals and a strong vision for the future also help leaders at College A provide the organizational culture with a sense of control with regard to changes in the external environment. “I would say the mindset would be, if you’re always ready, you don’t have to get ready” (A7). Participant A8 described this mindset of “always ready” for external changes as follows:

> We’ve got a chance to provide a better system by being proactive, by encouraging learning all the time. We can be transformative, we can deal with these situations, we can have different contingencies. Whatever comes up based on the goals, that’s how I try to deal with folks.

Similarly, at College C, internal governance systems are intentionally designed to enable regular environmental scanning and discussion of external opportunities in relation to
institutional goals. In contrast, leaders at College B indicated that the college is actively focused on improving its ability to “look outside ourselves” (B1). Rather than a primary focus on the external environment impacts the college, however, College B uses external engagement as an intentional opportunity to learn from peer colleges with similar values.

**Cross-Case Analysis: Research Question 3a**

*What patterns of congruity or incongruity between cases can be identified with regard to the impact of organizational culture on the development of organizational learning practices in California community colleges?*

In order to identify patterns related the impact of organizational culture on the development of organizational learning practices, the researcher compared the relative rankings of subthemes at each case site. Figure 15 displays the frequency and ranking of subthemes that emerged from the analysis of data at each site.

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships and trust</td>
<td>107</td>
<td>46</td>
<td>75</td>
<td>228</td>
</tr>
<tr>
<td>Shared self-perception</td>
<td>121</td>
<td>35</td>
<td>50</td>
<td>206</td>
</tr>
<tr>
<td>Approach to learning as a practice</td>
<td>83</td>
<td>28</td>
<td>91</td>
<td>202</td>
</tr>
<tr>
<td>Beliefs about internal capacity</td>
<td>64</td>
<td>18</td>
<td>85</td>
<td>167</td>
</tr>
<tr>
<td>Honest, proactive communication</td>
<td>51</td>
<td>29</td>
<td>52</td>
<td>132</td>
</tr>
<tr>
<td>Approach to external forces and factors</td>
<td>65</td>
<td>21</td>
<td>44</td>
<td>130</td>
</tr>
<tr>
<td>Inclusive communication and dialogue</td>
<td>49</td>
<td>29</td>
<td>50</td>
<td>128</td>
</tr>
<tr>
<td>Engaging with institutional data</td>
<td>48</td>
<td>21</td>
<td>45</td>
<td>114</td>
</tr>
<tr>
<td>Intentional, open-minded problem-solving</td>
<td>26</td>
<td>16</td>
<td>41</td>
<td>83</td>
</tr>
<tr>
<td>Organizational structures and roles</td>
<td>14</td>
<td>16</td>
<td>52</td>
<td>82</td>
</tr>
<tr>
<td>Interconnection and integration</td>
<td>38</td>
<td>16</td>
<td>27</td>
<td>81</td>
</tr>
<tr>
<td>Orientation toward the future</td>
<td>26</td>
<td>3</td>
<td>17</td>
<td>46</td>
</tr>
</tbody>
</table>

*Figure 15.* Patterns of congruity and incongruity related to the impact of organizational culture on the development of organizational learning practices. Subthemes have been ordered by overall frequency to make variations between cases more apparent.

**Patterns of congruity.** In addition to the subtheme of relationships and trust discussed above in Research Question 3, each college appeared to consistently approach
learning as an ongoing practice. Several patterns of congruity emerged around lower-ranked themes, as well, suggesting that intentional problem-solving, interconnections between groups and systems, and the overall orientation toward organizational future have less impact on the development of organizational learning than factors such as relationships and communication.

**Patterns of incongruity.** Two major patterns of incongruity emerged from the data. The subtheme of shared self-perception emerged much more strongly at colleges A and B. Although specific details and beliefs about shared self-identity varied, clear framing of dialogue around issues of shared identity had an effect on learning practices within the environment. To varying degrees, participants at all three colleges shared beliefs about whether their colleges were proactive, innovative, and willing to take risks and learn from their experiences. Each culture’s sense of its self-identity also included shared beliefs about the degree of control it has over external factors; this was particularly present at College A. The degree to which these beliefs were largely positive or negative appeared to influence how members of each college engaged in learning activities and the flexibility with which it responded to changes in the external environment.

A second incongruity emerged around beliefs about internal capacity. In particular, shared beliefs about the availability of resources, including funding and time, appeared to influence the degree of engagement in learning activities. At College B, where fiscal resources were more available, participants referred to shared beliefs about capacity for learning and change with less frequency than participants at colleges A and C. At College C in particular, participants referred to beliefs about time, workload, and
resources frequently when discussing their culture’s capacity for learning. At College A, engagement in learning appeared to be more linked to building capacity for formal and informal leadership within the culture. Participant A4 suggested that the issue of “burn out” among existing leaders is an ongoing challenge:

You have the same few people serving these multiple different roles of varying significance and in a lot of cases a very significant role. But it’s still the same people doing all of that work. So generally I would say there is excitement, but there is also fatigue.

To address this challenge, leaders actively work to “mentor from within, to cultivate leadership from within” (A2) and intentionally “engag[e] the campus community into being involved in committees” (A1).

**Cross-case Analysis: Research Question 3b**

*What patterns of congruity or incongruity between cases can be identified with regard to the impact of campus leadership on the development of organizational learning practices in California community colleges?*

In order to identify patterns related the impact of campus leadership on the development of organizational learning practices, the researcher compared the relative rankings of subthemes at each case site. Figure 16 displays the frequency and ranking of subthemes that emerged from analysis of data at each site.
Leaders at all three colleges consistently cited honest, proactive communication as having a strong impact on the development of organizational learning practices.

Similarly, relationships and trust emerged from the data as a pattern of congruity between cases. In discussions with leaders at each site, communication and trust emerged as linked and interdependent concepts. This suggests that proactive communication builds trust, and trust allows for more effective communication of difficult topics.

Although leaders at all three colleges also discussed the importance of framing organizational learning activities in culturally meaningful terms, approaches to framing were somewhat incongruous across cases. Leaders at College C discussed framing primarily in terms of engagement with institutional data and evaluations of organizational performance against established goals. Leaders at colleges A and B discussed framing more in terms of building engagement and linking learning to shared cultural values.

Regardless of the strategy used to frame learning and engage members of the culture in learning activities, leaders at all three colleges cited college-wide engagement in activities related to ongoing learning and change as a challenge. Faculty, and adjunct faculty in particular, were cited across all three sites as particularly challenging to engage
consistently. One leader suggested that leaders might need to actively build “an inquisitive culture of faculty, a culture of wanting to be involved outside the culture” (A2).

**Cross-Case Analysis: Research Question 4**

*What patterns of congruity or incongruity between cases can be identified with regard to the role of organizational culture and campus leadership in the facilitation of second order change in California community colleges?*

In the analysis of the data related to the role of organizational culture and campus leadership in the facilitation of second order change at all three case sites, the theme of framing and sensemaking emerged with a particularly high frequency relative to the other four themes. Table 30 displays the overall ranking of themes across all three cases, along with their frequency and distribution across interviews and artifacts.

**Table 30**

*Rank and Frequency of Themes Related to Second Order Change: All Cases*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Interviews</th>
<th>Artifacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing and sensemaking</td>
<td>531</td>
<td>42</td>
</tr>
<tr>
<td>Communication / information sharing</td>
<td>408</td>
<td>26</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>373</td>
<td>8</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>366</td>
<td>65</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>316</td>
<td>1</td>
</tr>
</tbody>
</table>

To identify patterns of congruity and incongruity between cases for this research question, the researcher compared the rankings of each theme at the individual case sites, as shown in Figure 17. The theme of framing and sensemaking was ranked as the first or
second theme at each college. Communication and information sharing was ranked in the first two themes at Colleges A and B, while the themes of intentionality and internal/external alignment were more present at College C.

<table>
<thead>
<tr>
<th>Main Theme Group</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing and sensemaking</td>
<td>264</td>
<td>92</td>
<td>175</td>
<td>530</td>
</tr>
<tr>
<td>Communication and information sharing</td>
<td>161</td>
<td>108</td>
<td>139</td>
<td>407</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>145</td>
<td>64</td>
<td>164</td>
<td>370</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>152</td>
<td>51</td>
<td>165</td>
<td>366</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>139</td>
<td>73</td>
<td>104</td>
<td>316</td>
</tr>
</tbody>
</table>

*Figure 17.* Comparison themes related to second order change emerging from interview data at each case site. Color scales are used to indicate the relative rank of each theme. Dark shading indicates highest ranked themes; lighter shading represents lowest ranked themes.

Additional patterns of congruity and incongruity emerged from a comparison of the ranking of subthemes emerging from the data. Figure 18 displays the rank and distribution of subthemes at each college.

<table>
<thead>
<tr>
<th>Main Theme Group</th>
<th>Subtheme</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and information sharing</td>
<td>Honest, proactive communication</td>
<td>112</td>
<td>79</td>
<td>89</td>
<td>280</td>
</tr>
<tr>
<td></td>
<td>Inclusive communication and dialogue</td>
<td>49</td>
<td>29</td>
<td>50</td>
<td>128</td>
</tr>
<tr>
<td>Framing and sensemaking</td>
<td>Engaging with institutional data</td>
<td>41</td>
<td>16</td>
<td>36</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Framing, sensemaking, and engaging</td>
<td>47</td>
<td>18</td>
<td>53</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>Interconnection and integration</td>
<td>48</td>
<td>22</td>
<td>34</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Shared self-perception</td>
<td>128</td>
<td>36</td>
<td>52</td>
<td>216</td>
</tr>
<tr>
<td>Intentionality of learning/change</td>
<td>Approach to learning/change as a practice</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Beliefs about internal capacity</td>
<td>107</td>
<td>37</td>
<td>104</td>
<td>248</td>
</tr>
<tr>
<td></td>
<td>Intentional, open-minded problem-solving</td>
<td>36</td>
<td>27</td>
<td>56</td>
<td>119</td>
</tr>
<tr>
<td>Internal/external alignment</td>
<td>Approach to external forces and factors</td>
<td>72</td>
<td>24</td>
<td>55</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>Organizational structures and roles</td>
<td>26</td>
<td>19</td>
<td>66</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>Orientation toward the future</td>
<td>52</td>
<td>8</td>
<td>44</td>
<td>104</td>
</tr>
<tr>
<td>Relationships within the culture</td>
<td>Relationships and trust</td>
<td>139</td>
<td>73</td>
<td>104</td>
<td>316</td>
</tr>
</tbody>
</table>

*Figure 18.* Comparison of subthemes related to organizational learning emerging from interview data at each case site. Color scales are used to indicate the relative rank of each theme. Darker shading indicates highest ranked themes.
The general patterns of congruity and incongruity that emerged from the analysis are summarized in Table 31, and discussed in greater detail in the following sections. Patterns that appeared to relate mostly to culture or leadership are addressed with Research Question 4a and 4b, respectively.

Table 31

<table>
<thead>
<tr>
<th>Patterns of Congruity</th>
<th>Culture &amp; Leadership (RQ4)</th>
<th>Mostly Culture (RQ4a)</th>
<th>Mostly Leadership (RQ4b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Relationships &amp; trust*</td>
<td>*Approach to change as an intentional practice relatively absent from all sites*</td>
<td>*Honest, proactive communication*</td>
<td>*Use of framing to build engagement*</td>
</tr>
<tr>
<td>*Honest, proactive communication*</td>
<td></td>
<td>*Beliefs about internal capacity &amp; resources*</td>
<td></td>
</tr>
<tr>
<td>Patterns of Incongruity</td>
<td>*Shared self-perception*</td>
<td>*Approach to building capacity for change*</td>
<td></td>
</tr>
<tr>
<td>*Internal/external alignment*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overall patterns of congruity.** The subtheme of relationships and trust appeared as one of the top two subthemes at all three colleges, suggesting that the degree of trust and psychological safety within the culture play an important role in the facilitation of second order change. A second pattern of congruity between cases emerged around the ability of the organization to maintain honest, proactive communication across subgroups. As in the development of organizational learning practices, these two subthemes appeared to be interconnected. Timely, transparent communication reinforced trust in leaders, and when present, appeared to allow the organizations to manage deep changes more effectively, and ensure that no one is “left behind” (C1).

**Overall patterns of incongruity.** The strong presence of framing and sensemaking as the leading overall theme appears to stem from an incongruity at the subtheme level. At College A, shared perceptions of self-identity within the culture
shape and facilitate the organization’s approach to change in a way that was much less present at the other two sites. Participants at College A described change activities using frames related to shared self-identity, and referred to the college as “resilient,” an “underdog” (A7), seeking to prove that it can “start from scratch” (A1). The shared belief that College A is adaptable and can survive major setbacks promotes willingness to take risks and try new things. Leaders at College A use this framing intentionally when discussing second order changes, such as Guided Pathways. This framing strategy was also somewhat present at College B. Leaders used frames connected to the culture’s shared perception of itself as innovative to help facilitate organizational change and transformation.

Patterns of incongruity between cases were also found in subthemes related to internal/external alignment. All three colleges discussed their engagement with the external environment. However, at College C, participants commented more frequently on governance structures and subgroup roles. College C designed its committee structure to include “emerging trends” as “inputs into the whole process” (C1) and provide coordination and integration between activities related to external initiatives. In contrast, participants College A – and to a lesser extent, College B – spoke more frequently about how external expectations are intentionally framed and for the internal culture to provide rationale and motivation for change.

Cross-Case Analysis: Research Question 4a

What patterns of congruity or incongruity between cases can be identified with regard to the role of organizational culture in the facilitation of second order change in California community colleges?
In order to identify patterns related to the role of organizational culture in the facilitation of second order change, the researcher compared the relative rankings of subthemes at each case site. Figure 19 displays the frequency and ranking of subthemes that emerged from analysis of data related to organizational culture’s role in the facilitation of second order change.

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships and trust</td>
<td>111</td>
<td>53</td>
<td>88</td>
<td>252</td>
</tr>
<tr>
<td>Shared self-perception</td>
<td>121</td>
<td>35</td>
<td>50</td>
<td>206</td>
</tr>
<tr>
<td>Beliefs about internal capacity</td>
<td>79</td>
<td>26</td>
<td>96</td>
<td>201</td>
</tr>
<tr>
<td>Honest, proactive communication</td>
<td>58</td>
<td>42</td>
<td>58</td>
<td>158</td>
</tr>
<tr>
<td>Inclusive communication and dialogue</td>
<td>49</td>
<td>29</td>
<td>50</td>
<td>128</td>
</tr>
<tr>
<td>Intentional, open-minded problem-solving</td>
<td>36</td>
<td>27</td>
<td>56</td>
<td>119</td>
</tr>
<tr>
<td>Approach to external forces and factors</td>
<td>52</td>
<td>16</td>
<td>38</td>
<td>106</td>
</tr>
<tr>
<td>Engaging with institutional data</td>
<td>41</td>
<td>16</td>
<td>36</td>
<td>93</td>
</tr>
<tr>
<td>Orientation toward the future</td>
<td>50</td>
<td>7</td>
<td>35</td>
<td>92</td>
</tr>
<tr>
<td>Organizational structures and roles</td>
<td>14</td>
<td>16</td>
<td>52</td>
<td>82</td>
</tr>
<tr>
<td>Interconnection and integration</td>
<td>38</td>
<td>16</td>
<td>27</td>
<td>81</td>
</tr>
<tr>
<td>Approach to learning as a practice</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

*Figure 19.* Patterns of congruity and incongruity related to the role of organizational culture in the facilitation of second order change. Subthemes have been ordered by overall frequency to make variations between cases more apparent.

**Patterns of congruity.** Patterns relating to the specific role of organizational culture in the facilitation of second order change were largely congruous between cases. Overall, beliefs and behaviors related to relationships and trust, internal capacity for change, and honest, proactive communication were found to play an important role in facilitating second order change across all three case sites. Approaching change as an ongoing practice emerged as relatively absent from the data at all three case sites, although participants indicated that being proactive about change was generally important.
**Patterns of incongruity.** In addition to the differences related to shared self-perception and internal/external alignment discussed above in Research Question 4, only small patterns of incongruity emerged for Research Question 4a. The themes of (a) honest, proactive communication and (b) inclusive communication and dialogue emerged with more relative frequency at College B. Several participants at College B indicated that the college’s positive financial situation affects how they approach change initiatives and the factors that drive change. Participant B1 suggested that in an environment that does not need to worry about enrollment revenue, “it takes real honest dialogue about the factors that we face that others don’t face” to motivate organizational members to engage in change activities. Honest, proactive, and inclusive communication may play a stronger role in the facilitation of second order change at College B than at the other two sites, in that it serves to build shared understanding of the rationale and urgency for change in more stable resource environment.

**Cross-Case Analysis: Research Question 4b**

*What patterns of congruity or incongruity between cases can be identified with regard to the role of campus leadership in the facilitation of second order change in California community colleges?*

In order to identify patterns related to the role of campus leadership in the facilitation of second order change, the researcher compared the relative rankings of subthemes at each case site. Figure 20 displays the frequency and ranking of subthemes that emerged from analysis of interview data related to the role of campus leadership in facilitating second order change.
Patterns of congruity. Patterns related to the role of campus leadership in facilitating second order change were largely congruous across all three case sites. Strong patterns of congruity emerged around the subthemes of honest, proactive communication and framing to build engagement. Across all three cases, leaders spoke of the importance of proactive communication around deep changes, in order to promote mutual understanding of the rationale and urgency for change. Likewise, leaders consistently spoke of the importance of framing second order changes around a culturally relevant rationale, such as shared goals or beliefs about student equity and success.

Patterns of incongruity. Perhaps the most apparent pattern of incongruity to emerge from the cross-case comparison related to leaders’ approach to building and managing internal capacity for change. At colleges A and B, leaders discussed intentional behaviors designed to build human capacity for change, including cultivating and empowering strong teams of formal and informal leaders and modeling culturally productive behaviors. At College C, leaders spoke of less of building human capacity, and more of expanding structural capacity for change, through the acquisition of funding and strengthening of governance systems.

<table>
<thead>
<tr>
<th>Subtheme</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honest, proactive communication</td>
<td>54</td>
<td>37</td>
<td>31</td>
<td>122</td>
</tr>
<tr>
<td>Framing to build engagement</td>
<td>47</td>
<td>18</td>
<td>53</td>
<td>118</td>
</tr>
<tr>
<td>Relationships and trust</td>
<td>28</td>
<td>20</td>
<td>16</td>
<td>64</td>
</tr>
<tr>
<td>Beliefs about internal capacity</td>
<td>28</td>
<td>11</td>
<td>16</td>
<td>64</td>
</tr>
<tr>
<td>Approach to external forces and factors</td>
<td>20</td>
<td>8</td>
<td>17</td>
<td>45</td>
</tr>
<tr>
<td>Organizational structures and roles</td>
<td>12</td>
<td>3</td>
<td>14</td>
<td>29</td>
</tr>
<tr>
<td>Interconnection and integration</td>
<td>10</td>
<td>6</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>Orientation toward the future</td>
<td>2</td>
<td>1</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Shared self-perception</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>
Summary

Chapter IV began with a review of the purpose statement, research questions, and methodology guiding the collection and analysis of data. Demographic information relevant to the population and sample were presented. Findings from each of the three individual case sites were presented and described in detail, followed by a comparison of results across all cases. Five major themes related to the development of organizational learning practices and facilitation of second order change emerged from the analysis: (a) communication and information sharing, (b) framing and sensemaking, (c) intentionality of learning and change, (d) internal/external alignment, and (e) relationships within the culture. Within these broad main themes, 13 subthemes were also present in the data. At each individual case site, the interplay between the subthemes reflected the unique cultural and leadership dynamics present within the organization.

The impact of organizational culture and campus leadership on the development of organizational learning practices varied somewhat from case to case. Activities related to framing and sensemaking were found to impact organizational learning at colleges A and B. Communication and information sharing had a strong impact on organizational learning at colleges B and C. The intentionality with which learning activities are approached was found to have a stronger impact at colleges A and C. However, one strong pattern of congruity emerged across all cases: relationships and trust have a strong impact on the development of organizational learning practices at all three sites. Participants at all three case sites indicated that when trust is present in the culture, members of the organization feel more able to question assumptions and move past defensive routines towards deeper learning.
Stronger patterns of congruity were found to exist between cases when analyzing the role of organizational culture and campus leadership in the facilitation of second order change. Activities related to (a) framing and sensemaking and (b) communication and information sharing helped to facilitate second order change at all three colleges. At colleges A and C, intentional alignment of internal culture with the external environment also played a role in facilitating change. As with the development of organizational learning practices, relationships and trust were found to be important for the facilitation of second order change at all three colleges. Formal leaders at all three sites suggested that communication and trust are interconnected. Proactive communication about change builds trust; stronger trust builds a better environment for communication about change.

Chapter V provides an expanded analysis of these findings. Based on this analysis, Chapter V also provides recommendations for action, suggestions for future research, and concluding remarks.
CHAPTER V: SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

Higher education leaders recognize that transformational structural and cultural changes will be necessary in order to meet performance expectations and improve service to students (Bailey et al., 2015; Phelan, 2016; Tierney, 2014). However, few studies of higher education examine how organizational culture and leadership affect colleges’ capacity for organizational learning and second order change. As a result, this study explored the impact of organizational culture and leadership on organizational learning practices and second order change in California community colleges. This chapter presents a summary of the research. The chapter begins with a restatement of the purpose statement and research questions, followed by a brief description of the methodology, population, and sample. The major findings emerging from the analysis of case study data are presented, and unexpected findings are identified and explored. The researcher draws on these key findings to reach conclusions and outlines implications for action. The chapter concludes with recommendations for future research on this topic and the researcher’s final reflections on the study.

Purpose Statement

The purpose of this multiple case study was to explore the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges. A secondary purpose of the study was to explore the role of organizational culture and campus leadership in facilitating second order change in California community colleges.
Research Questions

This study sought to address the following research questions:

1. What impact do organizational culture and campus leadership have on the development of organizational learning practices in California community colleges?
   a. What impact does organizational culture have on the development of organizational learning practices in California community colleges?
   b. What impact does campus leadership have on the development of organizational learning practices in California community colleges?

2. What role do organizational culture and campus leadership have in the facilitation of second order change in California community colleges?
   a. What role does organizational culture have in the facilitation of second order change in California community colleges?
   b. What role does campus leadership have in the facilitation of second order change in California community colleges?

3. What patterns of congruity or incongruity between cases can be identified with regard to the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges?
   a. What patterns of congruity or incongruity between cases can be identified with regard to the impact of organizational culture on the development of organizational learning practices in California community colleges?
   b. What patterns of congruity or incongruity between cases can be identified with regard to the impact of campus leadership on the development of organizational learning practices in California community colleges?
4. What patterns of congruity or incongruity between cases can be identified with regard to the role of organizational culture and campus leadership in the facilitation of second order change in California community colleges?
   a. What patterns of congruity or incongruity between cases can be identified with regard to the role of organizational culture in the facilitation of second order change in California community colleges?
   b. What patterns of congruity or incongruity between cases can be identified with regard to the role of campus leadership in the facilitation of second order change in California community colleges?

Methodology

This study used a multiple case study design with embedded units of analysis to explore how organizational culture and campus leadership impact the development of organizational learning practices and facilitate second order change at California community colleges. Within the multiple case study design, the study used a phenomenological approach to explore the interrelated concepts of organizational culture, campus leadership, organizational learning practices, and second order change at three different single-district community colleges. Each individual college served as a separate case site for the study as outlined in Chapter III. The researcher collected data by conducting semi-structured interviews and analysis of artifacts at each case site. To ensure consistency across sites and interview participants, the researcher developed an interview script based on the theoretical framework described in Chapter II.

The research design and interview protocol, and interview questions were approved by the Brandman University Institutional Review Board (BUIRB) on October
6, 2017 (see Appendix E). Consent forms shared with the participants indicated the methods used by the researcher to protect the identity of the case sites and individual participants. Each site and participant was assigned a unique code known only to the researcher, and all references to names and specific institutions were removed from the transcripts. All consent forms were signed prior to the interviews. Fourteen participants signed the consent forms in the presence of the interviewer prior to an in-person interview. The remaining four interviews were conducted via phone. Each of these participants signed their consent forms digitally by emailing a statement of consent directly to the researcher during the opening minutes of the interview call. Participants also gave written consent for the interview to be digitally recorded. Audio recordings were sent to a transcription service immediately after the interviews. The researcher reviewed the transcripts with the corresponding audio recording to verify accuracy of the transcribed content, and then deleted the audio file. The researcher also collected and analyzed artifacts related to organizational culture, leadership, organizational learning practices, and change activities from each college.

To analyze the data, the researcher used a pattern-matching technique common to case study analysis (Yin, 2014). The researcher used the theoretical propositions for the study to determine priorities for inductive analysis and guide analytical work. First, a list of the cultural and leadership elements predicted by the theoretical propositions was generated and used as an initial list of codes for inductive analysis. The researcher then coded and categorized data from each case site, adding codes where necessary to describe elements of culture or leadership emerging from the data that had not been predicted by the theoretical propositions. After preliminary coding of all data, the researcher reviewed
the list of codes for redundancy and accuracy and generated a refined list of 98 codes. Theses codes were then clustered into 13 subthemes related to the theoretical propositions. These subthemes were further clustered into five major themes. As data were analyzed against the theoretical propositions related to the research questions, pattern-matching techniques were used to compare patterns emerging from the analysis of data collected at each individual case site with those predicted in the theoretical proposition (Yin, 2014). Patterns of congruity and incongruity between cases were also identified. The results of this analysis were presented in Chapter IV.

**Population and Sample**

The general population for this study included the 114 colleges in the California Community College system. However, the California Community College system includes multi-college and single-college districts. For this study, the researcher delimited the target population to include only colleges from single-college districts, in order to control for the additional cultural and leadership complexity associated with multi-college districts. Additionally, the theoretical framework predicts that practices of goal setting and performance monitoring will be present in an organizational learning culture, along with an orientation toward the future that is somewhere between the near-term and long-term. Therefore, the target population for the study was defined as single-district colleges that had set a six-year goal for at least one optional indicator in the California Community College system’s framework of performance monitoring indicators. Thirty-six colleges met both criteria, and three colleges were selected from this target population to serve as case sites using a snowball sampling method. Colleges selected as case sites were located in the California Community College system’s Bay
Area and Southern regions. The case sites also varied in size. The five-year average number of full-time equivalent students at each college ranged from approximately 5,250 to 11,500.

The sample for the study consisted of the three case colleges and the interview participants at each site. At each college, criterion-based sampling was used to select participants in one of four specific formal leadership roles. Then, snowball sampling was used to identify an additional one to four participants described as grassroots or informal leaders. The final sample included 18 total individual participants. During data collection, demographic information was gathered from each participant in order to more accurately describe the characteristics of the sample (McMillan & Schumacher, 2010). Demographic data gathered from the participants included gender, race/ethnicity, age, the number of years employed at the case college, and the number of years spent in the current leadership role. The sample was diverse in terms of both race/ethnicity and gender. The sample also reflected some degree of generational diversity, although two-thirds of the participants were 50 years of age or older. The majority of participants (13/18) had been in their current leadership roles for five years or less. An equal number (13/18) had been employed at their college for five years or more.

**Major Findings**

Following the pattern-matching technique suggested by Yin (2014), the researcher analyzed individual cases and then compared data across all three case sites. Nine key findings related to the five main themes in the data emerged as a result of that process. Because the themes emerging from the data spanned across research questions, the key findings are presented thematically, rather than by question; however, a reference to the
research question(s) most directly related to the finding is provided. Each finding is discussed in the context of the literature review. Following Yin’s (2014) approach, each finding is also considered against the theoretical propositions used to establish priorities for analysis (see Table 3, p. 93).

**Intentionality of Learning and Change**

**Finding 1.** An institutional mindset that views organizational learning as an ongoing practice involving intentional inquiry and learning from experience – including the experiences of others – improves the degree to which learning activities are proactive, productive, and supportive of second order change (research questions 1/3 & 2/4). Participants at all three colleges provided examples of this mindset, ranging from deliberate inquiry processes to a general attitude that ongoing learning behaviors should be modeled for students. This finding is consistent with the theoretical propositions stemming from Schein’s (2017) dimensions for organizational learning, particularly the elements of proactivity and commitment to learning how to learn. An intentional mindset towards learning includes a willingness to reflect on past performance in order to apply lessons learned to course corrections or new situations, as well as a sense of curiosity about what can be learned from the experiences of other organizations and external models (Garvin, 1993; Levitt & March, 1988). All three sites showed willingness to look to other institutions for models and best practices and apply those lessons locally. Participants also indicated that learning from others within the culture was an important part of their organizational mindset, as summarized by Participant A8:
How do we create a culture of learning? We need to reward those folks [who try something new] and share their stars, share about the ideas, new concepts that they’ve come to, and let everybody see that.

In addition, proactive practices such as goal-setting and formative evaluations of institutional performance reflect cultural norms around organizational inquiry and self-reflection, which have been found to be necessary preconditions for double-loop learning and second order change (Argyris, 2010; Boyce, 2003; Tagg, 2010).

**Finding 2.** Shared beliefs about institutional capacity for learning and change, including beliefs about resources needed to support reflection and experimentation, may impact the development of organizational learning practices and engagement in activities related to organizational learning and change (research questions 1/3, 2/4). Although beliefs about resources and capacity varied from site to site, all three case colleges mentioned the time, energy, or funding required to support organizational learning activities and facilitate change. This finding is consistent with the theoretical propositions, as Schein’s (2017) model suggests that learning “takes time, energy, and resources,” and that a learning culture must prioritize tasks related to learning and “give its members the time and resources” required to do it (p. 345). A real or perceived lack of time, energy, or resources to support could potentially be a barrier to organizational learning and prohibit change. However, as participants noted, increasing one type of resource may decrease the availability of other resources, such as in the case of additional “layered work” (C4) that often accompanies grant funding in the form of grant-specific requirements, reporting, or positions needed to oversee grant-related work.
Framing and Sensemaking

**Finding 1.** Culturally resonant framing promotes mutual understanding of the underlying rationale for change within the organization’s culture (research questions 2/4). Regardless of whether the change activities were motivated by internal or external drivers, participants indicated that connecting the change to shared values, specific goals, or institutional priorities helped organizational members make sense of what was happening and “get on board” (B5). This type of framing is not explicitly predicted by the theoretical propositions for the study. Therefore, culturally resonant framing may be a compelling rival explanation for how organizations facilitate second order change. Elsewhere in the literature, Schein (2017) suggests that providing a “compelling positive vision” is an important strategy for reducing learning anxiety in times of change (p. 328). In addition, this finding is consistent with other research that has shown that change initiatives that are not contextualized in culturally meaningful terms have less likelihood of being sustained (Balthazard et al., 2006; Kezar & Eckel, 2002).

**Finding 2.** Institutional data can support proactive inquiry and facilitate dialogue about change when they are presented in culturally resonant terms and framed as a starting point for dialogue, rather than an end-point for individual or departmental evaluation (research questions 1/3, 2/4). Participants at all three case sites spoke of the importance of regular, data-informed dialogue, which is consistent with theoretical propositions related to proactivity and commitment to inquiry (Schein, 2017). However, participants at all three case sites suggested data could be threatening or “scary” (A8), and that organizational members needed to know that the data would not be used “in an evaluative way” (B4) before feeling safe engaging in data-driven inquiry. These
observations are consistent with literature that suggests institutional data can both trigger defensive routines and support the creation of safe environment to question past performance, behavior, or assumptions (Argyris, 2010; Dowd, 2005; Kish, 2016).

**Finding 3.** Shared perceptions of organizational identity affect the development of organizational learning practices and the facilitation of second order change (research questions 1/3, 2/4). This finding was particularly notable at College A. Although participants from each college spoke of their own cultural identity in consistent terms, participants at College A consistently and explicitly framed learning and change activities in relation to its self-image. For example, participants at College A have a shared belief that they are adaptable, resilient, and “the opposite of risk-averse” (A4). Leaders at College A use this framing intentionally, describing second order changes such as Guided Pathways as an opportunity for continued adaptation and reinvention. This strategy for framing was also observed to a lesser extent at College B, where changes were framed to resonate with the collective self-image of the college as a system-wide leader in innovation.

This finding is not explicitly predicted by the theoretical propositions for the study, and may provide a rival explanation for patterns of behavior and framing observed at colleges A and B. The literature does suggest that the process of environmental management involves interpretation of the environment in a way that resonates with the organization’s culture (Dauber et al., 2012; Schein, 2017), but does not explicitly discuss issues related to self-image within the dimensions for organizational learning. Elsewhere, Schein (2017) notes that “identity and images of self” are an important element of the shared beliefs, values, and behaviors that comprise organizational culture.
Literature on organizational learning and change suggests that leaders who align change processes with the existing organizational culture support better inquiry, reflection, and application of lessons learned from failure (Carmeli & Sheaffer, 2008; Kezar & Eckel, 2002; Lipshitz et al., 2007). Connecting change activities to a defining cultural element such as shared self-perception may be a strategy for promoting a shared vision and purpose. Depending on the specific perceptions shared among members, self-image may also contribute to the organization’s learning mindset, as appeared to be the case at both College A and College B.

**Communication and Information Sharing**

**Finding 1.** Proactive, frequent, and consistent communication with institutional subgroups builds mutual understanding of the rationale for change and provides stability during a change process (research questions 1/3, 2/4). Participants at all three case sites emphasized the importance of proactive communication across campus subgroups, particularly during an ongoing change process. Although there was acknowledgement that for any given issue, someone could still “be surprised two years later after we’ve talked it to death” (B2), each college was observed to take proactive steps to ensure that everyone is informed about issues related to learning and change. Indeed, the three superintendent/presidents agreed that they err on the side of over-communication, in order to promote broad understanding of an issue or change. This practice helps all three colleges keep organizational members informed and reduce anxiety during a change process. In addition, each college was found to employ consistent messaging through multiple channels, often with messages tailored toward multiple subgroups.
The theoretical propositions predict that clear, transparent, and task-relevant communication support learning and change, based on “the assumption that communication and information are central to organizational well-being” (Schein, 2017, p. 347), and that good communication should promote connection between organizational members during learning and change. This finding is also consistent with literature indicating open communication between higher education subgroups helps to build capacity for learning and change (Craig, 2004; Perfetti, 2015).

**Finding 2.** Communication and trust are interdependent: honest, proactive communication builds trust within the culture, and trust allows for more authentic learning and facilitates deeper dialogue about change (research questions 1/3, 2/4). In multiple interviews, participants explicitly linked transparent communication with trust. The most succinct connection of these two concepts came when Participant C1 was asked what strategies they use to build trust among organizational members:

> Communication. That’s the only way. There’s no other. There isn’t anything else. That’s my opinion. The only way to build trust is to be open and transparent and communicate about everything and just when you think you’ve communicated enough, you haven’t.

The theoretical propositions predict the relationship between communication and trust. Schein (2017) notes that complete information can only be shared after organizational members “have learned to trust each other, and trust is basically built when the parties tell each other the truth” (p. 348). Similarly, the literature suggests that cultural values related to honest communication, including transparency and integrity, build psychological safety and increase trust within the culture (Argyris, 2010; Lipshitz et al., 2011).
2002). As trust and safety increase, organizational members become more likely to work through defensive routines and engage in double-loop learning (Argyris & Schön, 1996; Lipshitz et al., 2007; Schein, 1993).

**Internal and External Alignment**

**Finding 1.** Clearly framed interconnections between internal priorities and factors in the external environment help an organizational culture make sense of complex, systemic changes (research questions 1b/3b, 2b/4b). This finding was much more present when analyzing the impact of campus leadership on the development of organizational learning practices and facilitation of second order change, suggesting that participants viewed the alignment and framing of interconnections primarily as the role of campus leaders. Participants at all three colleges suggested that leaders, and specifically administrators, must help to “draw those conclusions and connections for people” and ensure that interconnections between internal and external systems are “clearly articulated” (B1).

Although each case college described different strategies for engaging with the external environment, participants agreed that it was important to align external expectations for systemic change with internal priorities and shared cultural values. For example, participants frequently cited their colleges’ Guided Pathways implementations as an example of an externally driven second order change. Leaders at each college intentionally highlight connections between the Guided Pathways framework and existing internal priorities, such as increasing successful degree completion or more equitable student outcomes. Using culturally relevant terms to align internal and external priorities helps to make sense of the change, and provides a sense that to some extent, the
environment – or at least the college’s response to it – can be controlled. The theoretical propositions predict that in a learning culture, the culture and leadership will develop processes for interpreting the environment in order to help the organization adapt to disruptive change or disconfirming information. Translating external expectations into terms that resonate with the organization’s culture is one such process for environmental management (Dauber et al., 2012; Hogan & Coote, 2014; Schein, 2017), and a fundamental task for higher education leaders in an environment of change (Ewell & Ikenberry, 2015).

**Relationships within the Culture**

**Finding 1.** Relationships, trust, and psychological safety within the organization form the foundation on which organizational learning practices can be developed and provide stability through second order change (research questions 1/3, 2/4). At all three colleges, trusting relationships facilitate both organizational learning and second order change by providing the safety to take risks and question underlying assumptions, behaviors that are required in order for productive organizational learning to occur (Lipshitz et al., 2007; Schein, 1993). Participants reported that when trust and psychological safety are not present in the environment, the dialogue required for organizational learning does not occur. As noted above, trust and psychological safety are partially attributable to honest, transparent communication. However, two theoretical propositions in particular (commitment to “learning to learn” and positive assumptions about human nature) predict that trust and psychological safety can also be built by minimizing blame in conversations, accepting feedback from others, and maintaining positive assumptions about others’ ability and intent to learn (Schein, 2017). At all three
colleges, formal and informal leaders demonstrated a willingness to ask open-ended questions, avoid blame, and model comfort with uncertainty in order to promote a psychologically safe environment for dialogue, learning, and change.

**Unexpected Findings**

In addition to the key findings outlined above, the researcher also identified two unexpected findings not directly connected to the main five themes emerging from the research and analysis. These unexpected findings are discussed in the section that follows.

**Unexpected Finding 1**

Shared beliefs concerning subgroup roles in governance affect the institutional mindset for organizational learning, perceptions of organizational adaptability, and engagement in learning and change activities. Although the primary subgroups of faculty, classified support staff, and administrators have well established and clearly defined roles in the structure and governance of community colleges (Bensimon et al., 1989; Birnbaum, 1988; Jones, 1996), the degree to which perceptions of these roles affect the mindset for learning was somewhat unexpected. In particular, participants appeared to indicate that the role of faculty has changed, and that veteran faculty have been slow to adapt to the “professional obligations outside of the classroom,” while “the new group have definitely embraced that” (A2). Similarly, participants at College C suggested that for change to happen, “faculty have to be on your side” (C6). At all three colleges, participants suggested that hiring of new faculty has a strong impact on engagement, adaptability, and the overall nimbleness with which the organization can respond to its changing environment. As noted in the literature, faculty comprise a large, professional
subgroup (Bolman & Deal, 2013). In institutions with a large professional subgroup, commitment to professional ideologies (i.e., values specific to academic or discipline culture) will generally supersede organizational mandates for change unless the subgroup has “absolute belief in the values of the organization” (Dill, 1982, p. 308). Therefore, trust, dialogue, and framing become even more critical in times of second order change (Cejda & Leist, 2013; Corry, 2016; Maloney, 2008).

**Unexpected Finding 2**

A second unexpected finding emerged in a paradox expressed by participants at College B and College C. Participants indicated that shared beliefs about institutional successes and the relative availability of resources make it more challenging for leaders to create a sense of urgency for future changes. Members of both colleges suggested that ongoing success could lead to a decreased motivation and urgency for future changes. One participant worried that “we may have become a little bit complacent because we’re making such great progress,” and wondered about the effect of focusing primarily on institutional progress: “If you keep talking about success stories, how do we show there’s still urgency” (C4)? Similarly, participants at College B suggested that relative availability of resources meant that there was less survival anxiety in the culture: “We do not have to chase enrollment … so you have to generate your own sense of hunger about motivating people to do more, to do better” (B1). This finding appears consistent with the observation that success and resource slack can prohibit innovation and experimentation (M. D. Cohen, March, & Olsen, 1972; Levitt & March, 1988).
Conclusions

Overall, the findings from the study are consistent with the literature regarding organizational learning, organizational culture, leadership, and second order change reviewed in Chapter II. The unique culture and leadership of a given community college have a strong impact on the degree of trust and psychological safety present in the environment, which in turn affects the degree to which productive organizational learning occurs. Likewise, a community college’s culture and leadership each have a role in the framing and communication necessary for the successful facilitation of second order change. Based on the literature review and research findings, therefore, the researcher has drawn the following conclusions:

1. Community colleges that actively cultivate trusting relationships and psychological safety through proactive, honest, and transparent communication between subgroups have a stronger foundation on which to engage in the dialogue required for learning and change. Strong, trusting relationships facilitate both double-loop learning and second order change by providing the safety to take risks and question underlying assumptions. As shown in the literature, organizations that have proactively established psychological safe environments for learning have more success recognizing and confronting defensive routines.

2. Proactive, frequent, and consistent communication across campus subgroups provides stability for members of the college community during times of disruption. Ensuring that organizational members have access to consistent information about a change process promotes broad understanding and reduces anxiety as the change unfolds. This conclusion is consistent with the literature, which demonstrates that open
communication across subgroups builds capacity for change as members engage in frank dialogue around the information that has been shared.

3. Community colleges that develop proactive, intentional practices of organizational learning and inquiry that support learning from experience will have more success managing disconfirming information and adapting to disruptive changes. Colleges with a learning mindset have developed intentional practices for reflection on past experience that emphasize curiosity, inquiry, and continuous improvement. In addition, this mindset reflects openness to learning from other institutions and willingness to take calculated risks in order to learn from the results. As noted in the literature, these traits indicate a broader practice of questioning of assumptions about institutional performance and behavior and help to facilitate double-loop learning.

4. Culturally resonant framing helps community college leaders illuminate interconnections between internal and external systems and communicate the rationale and urgency for learning and change. This is largely the work of college leaders, as interconnections between complex internal and/or external systems may not be largely apparent to individual members of the culture. Framing change initiatives in culturally meaningful terms helps organizational members understand the change and make sense of complex processes, and provides motivation for action and engagement. Clearly framed messages with strong cultural resonance can also increase engagement in organizational learning activities connected to the change, including interaction with institutional data. Additionally, the literature notes that framing changes in meaningful cultural context increases the likelihood that they will be sustained over time.
5. Community colleges that believe they have the institutional resources, abilities, and leadership required for adaptation and change are better positioned to engage members of the culture in organizational learning activities. Developing broad engagement in learning and change activities is challenging. However, cultures that believe they have the time, energy, ability – and to a lesser degree, finances – to support learning and change are better able to decrease learning anxiety and increase confidence. Research indicates that decreasing learning anxiety is particularly important during processes that support unlearning of old behaviors.

**Implications for Action**

The conclusions of this study suggest concrete implications for action on the part of formal and informal leaders at California community colleges. Based on the review of literature, research findings, and conclusions of the study, several actions are recommended for community college leaders, as described below. Alignment between major findings, conclusions, and implications for action is shown in Appendix J.

1. Community college leaders should actively work to cultivate trust and psychological safety within the culture prior to engaging in processes that lead to second order change. Campus leadership teams (including formal leaders of administrative, faculty, and classified subgroups) should discuss and agree to specific strategies for building trust and psychological safety within their unique culture, including transparent communication and modeling of trust-building behaviors within the culture at large. Agreement on the trust-building strategies will support consistent application of these practices throughout the organization. In addition, leaders may also wish to include intentional opportunities for trust-building group activities and
meetings connected with a change process. In colleges with low trust, leaders should consider bringing in a culturally neutral facilitator to assist with strengthening trust prior to engaging in activities related to a second order change.

2. Community college leaders should develop and maintain written communication plans to ensure proactive, transparent, and consistent communication about organizational learning and change activities. As part of the development of the plan, leaders should take time to consider the style(s) of communication that will best suit the unique culture of their organization as a whole, as well as the cultures of the major subgroups within the organization. The plan should outline the types of regular communication the college will use to communicate about learning and change, e.g., campus-wide email blast, open forum, informational newsletter, committee report, YouTube presentation, etc. Communications outlined in the plan should be delivered through multiple channels, and should include consideration of multiple stakeholder or subgroup audiences. The plan should also include notes about the frequency and purpose of each type of communication, and the individual or group who will be primarily responsible for the communication. Once a general campus communication plan has been developed and implemented, it can be tailored to specific learning or change initiatives as needed.

3. Community colleges should actively cultivate a learning mindset within their culture by developing intentional opportunities for organizational learning. Such opportunities might include organized or ad hoc inquiry groups, celebrating lessons learned from failure, and rewarding those who take calculated risks. In addition, community college leaders should work with institutional research offices to develop
regular discussions of institutional data, in which institutional performance can be safely explored and if applicable, questioned. Although these activities can – and should – also be incorporated into change processes, community college leaders should begin implementing these practices well in advance of a change process, in order to build institutional habits of mind related to productive organizational learning.

4. Community college leaders should be intentional about framing and sensemaking when communicating about change processes. Leaders should draw connections between change initiatives and both espoused and underlying values of the culture, in order to help organizational members understand the rationale and urgency for change. Leaders who are new to their college may wish to talk through their framing with a small group of trusted organizational members first, in order to test for cultural resonance and gain feedback prior to campus-wide communication. Once in place, leaders should use consistent framing for the change process in communication and messaging, in order to reinforce understanding among organizational members.

5. Community college leaders should increase capacity for organizational learning and change within their culture by expanding resources required to support these activities. Although this expansion could include additional funding, expanding the time and energy allocated to change should be a first step. Leaders can expand capacity and increase engagement by empowering other formal and informal change leaders, through formal training, and by celebrating the results of learning and change as they occur. College leaders can also increase capacity by ensuring that the number of priorities and change initiatives underway at any one time is as realistic and
manageable as possible, given system constraints. Finally, college administrators should view hiring processes as an opportunity to build capacity for organizational learning, and particularly when hiring new faculty, look for candidates who demonstrate curiosity, adaptability, and flexibility in times of change.

**Recommendations for Further Research**

This study has suggested that organizational culture and campus leadership impact organizational learning practices and facilitate second order change within California community colleges. To further explore and extend the literature related to this topic, the researcher recommends the following areas for future study:

1. This study used a multiple case study methodology to compare three single-district colleges, and focused primarily on espoused values, beliefs, and behaviors of those three cultures. A single case study, perhaps conducted over a longer period of time, could more deeply explore how underlying cultural assumptions impact organizational learning and facilitate second order change.

2. This study focused on three single-district colleges that displayed specific goal-setting behaviors. Additional multiple or single case studies could be conducted to explore how variables such as college size and location (e.g., rural, urban, suburban) impact the development of an organizational learning culture and the facilitation of second order change. Similarly, this study could be replicated at a multiple college district to identify patterns of congruity or incongruity within the context of the district’s unique culture.

3. This study focused on perceptions organizational learning and second order change held by formal and informal leaders in California community colleges, and noted
some differences in the perceptions of administrators, faculty, and classified staff with regard to these topics. A future qualitative study could expand on these observations, to further explore the nature of the differing perceptions and experiences of administrators, faculty, and/or classified staff with regard to organizational learning and the facilitation of change.

4. Analysis of data gathered during the study indicated that trust, relationships, and psychological safety are necessary preconditions for organizational learning and second order change. A study examining the specific factors and practices that increase trust and psychological safety in the community college setting could provide important insights for community college leaders planning large-scale change implementations on their campuses.

5. Several findings in this study related to the concepts of framing and sensemaking. A study focused on the importance of these cultural processes for organizational learning in the community college setting could help to expand the literature on both community college culture and organizational learning.

6. During interviews, multiple participants discussed the impact of organizational members with longevity in the culture; longevity was often, but not always, cited as a factor when discussing challenges with organizational engagement. A study that explores the impact of employee longevity on organizational culture and/or organizational learning could provide insights on how to increase engagement in learning and change. In particular, a focus on the subgroup of tenured faculty in such a study would be beneficial.
7. Within the literature on organizational change in higher education, there is some discussion of resistance to change; however, there is less literature related to resistance to organizational learning in higher education. A study that examines the concept of learning anxiety in a community college change process could shed light on resistance to both learning and change.

8. A finding of the present study indicated that colleges’ mindset impacts organizational learning. Therefore, it would be beneficial to conduct a study that explores concepts related to organizational mindset. Such a study might consider concepts related to individual learning, such as growth vs. fixed mindsets, at the organizational level.

9. As the present study was being conducted, the California Community Colleges Chancellor’s Office released a series of ambitious goals for the system that will require second order changes at all individual California community colleges, as well as across the system. A study that focuses on the organizational learning activities involved as the Vision for Success (2017) was implemented and/or the activities involved with facilitating these system-wide changes could uncover best practices that would benefit leaders of future system-level changes.

10. This study did not explore the relationship between organizational learning practices and organizational performance. Additional studies that seek to identify relationships between organizational learning practices and improved organizational performance could provide valuable insight as the system works to achieve the goals outlined in the Vision for Success (2017) and adjust to a new performance-based funding model. Such a study could also be conducted within the context of the Guided Pathways framework, which all 114 California community colleges have chosen to implement.
Concluding Remarks and Reflections

The California community college system faces intense pressure and high expectations. State lawmakers and the general public look to the community colleges to prepare students for a technological future that has yet to be invented, train a generation of workers to ensure continued economic stability for the state, and adapt to a rapidly evolving political and demographic environment. As the Chancellor’s Office addresses these expectations, change initiatives are pushed out to the 114 colleges in the system. The rationale behind each initiative may or may not be clearly understood by the members of each individual college within the system; one interview participant in this study jokingly referred to the stream of change initiatives as “the flavor of the month.” And yet, in order to adapt to an environment that shows no signs of stabilizing, California community colleges must demonstrate adaptability and flexibility to frequent changes if they are to survive and thrive.

This study was designed and undertaken in part due to personal observations that some California community colleges appear to adapt easily to external factors, while others appear to have more difficulty managing change and engaging with the environment around them. In addition, minimal existing research explained the connections between organizational culture and ongoing learning that can lead to deep change and transformation on a community college campus. In the course of data collection and interviews at three different California community colleges, participants helped to confirm the findings in the broader literature on organizational learning: culture and leadership have a critical impact on how and whether a college responds as the ground around it shifts. This is true even for colleges that demonstrate multiple traits
of a “learning culture.” Throughout the interviews, participants shared stories of challenge, frustration, resilience, and success. None of the participants felt that their college had perfected learning or developed a model process for change. Each college was still learning, together.

The findings of this study illustrate that much of the work of organizational learning occurs during social processes. As a college engages in a collective learning activity, members of the culture construct meaning that provides stability for an adaptation. If trust and psychological safety are high, relationships within the culture can become a stabilizing force that allows members of the organization to step forward into uncertainty together. If trust and psychological safety are low, resistance to change becomes the stabilizing force. It is essential for community college leaders to understand how this interaction occurs within their college’s unique culture, in order to steer the organization towards deeper reflection, learning, and adaptation. Overall, California community colleges with cultures that engage in productive organizational learning practices will be more successful at initiating and sustaining deep changes in response to a rapidly evolving environment.


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228


234


Appendix A

Letter of Introduction to Potential Case Study Site Presidents

Dear [President Name],

For the past two years, I have been serving as an advisor and mentor to a cohort of doctoral students in the Organizational Leadership program at Brandman University. One of my students, Catherine Webb, is conducting a case study on organizational learning and transformative change in the California Community College system for her dissertation. Specifically, Catherine’s research focuses on the ways that culture and leadership impacts a college’s ability learn about and adapt to its external environment in order to respond to students’ needs, public expectations, and system demands. As part of this study, Catherine is exploring the perspectives about culture, leadership, and organizational learning held by individuals with both formal and informal leadership positions at three different California community colleges. This is a rich and timely topic for our system, and I am writing today to invite Butte College to participate in the study by serving as one of the three case sites for Catherine’s study.

Participation as a case site for the study would involve allowing Catherine to conduct brief in-person interviews with several of Butte College’s leaders, including you, your Academic Senate president, Classified Senate president, and the lead manager of your institutional research function. Catherine would also like to interview 1-3 additional individuals (selected by you) with more informal or grassroots leadership roles on campus. Interviews would ideally take place on your campus over the course of one or two days, and would be scheduled at your convenience between October 16 and December 8. All of the interviews will be confidential; Catherine’s case study protocols involve maintaining the anonymity of both the case colleges and all interview participants involved. Only Catherine, Catherine’s dissertation chair, and myself will know the names of the colleges selected for the study.

I anticipate that this research will help to deepen our understanding of cultural factors that support or prohibit how our colleges “learn to learn” and adapt to changes in our environment – including the changes that must occur in order to reach the system goals outlined in the Chancellor’s Vision for Success. I also anticipate that the results of the study will inform leadership development programs, giving presidents and middle leaders alike the tools to strengthen organizational learning within their own colleges and districts. We believe that Butte College has demonstrated the ability to adapt and learn. Your unique experiences and perspectives on organizational learning and change would enrich the findings of the study, and therefore be of great benefit to the system.

Catherine’s contact information is listed below should have any questions, and I am happy to answer questions as well. Thank you for your time and consideration! We would appreciate knowing your decision no later than the end of the day on Friday, October 13.

Best,
Dr. Kathleen Rose
APPENDIX B

Brandman University, Doctoral Dissertation

Researcher:  Catherine Webb

Case Site ID:    __________
Participant ID: __________
Date:    __________

First, I would like to thank you for agreeing to participate in this study. My name is Catherine Webb, and I am a doctoral student in the Organizational Leadership program at Brandman University. Specifically, I’m interested in the affect that organizational culture and leadership have on California community colleges’ ability to learn about and adapt to their external environment.

Before we begin, Brandman University requires that we review the Informed Consent form that I sent to you in advance of our interview, and that I obtain your signed consent to participate. As we’ve discussed, I will be digitally recording our interview. If you need me to stop the recording at any time, just let me know. The reason for the recording is to be sure that your responses can be transcribed verbatim. If you need me to stop the recording at any time, just let me know. After the interview has been transcribed, the digital recording will be destroyed. You will also have an ability to review the transcript if you choose, but it is not required. If you choose to review the transcript, you may offer any correction of intent or clarify terminology; again, this is not required.

Your name and your college will not be known to anyone other than myself and the chair of my committee. For record keeping and data analysis purposes, your college has been assigned a code, and you have been given a participant number.

Have you been able to review the form, and do you have any questions? (Answer questions, obtain signatures, and collect forms).

Thank you. At this time, may I have your permission to begin recording?

In my dissertation, I am examining the affect of organizational culture and leadership on organizational learning, which for the purposes of this study is defined as an organization’s ability to learn about and adapt to their external environment in order to improve performance and meet its institutional goals and objectives. Because productive organizational learning often leads to organizational changes, I am also examining how organizational culture and leadership affect second order change in California community colleges. Second order changes are also sometimes called transformative, transformational, or adaptive changes – this kind of change involves a deeply significant shift in the behavior, values, assumptions, and beliefs of an organization that is sustained over time. Are those terms clear?
You have been asked to participate in this study because of your role as a leader here at (case college). My intent is just to explore your perceptions of how elements related to culture and leadership practices affect your college’s relationship to learning and change.

Do you have any questions or concerns for me before we begin?

Thank you, and again, keep in mind that we can stop the interview at any time. If there is a question that you would prefer not to answer, you can give me a verbal indication and we will skip that question.

Let’s begin with some basic demographic questions that will be used to provide descriptive information about the study sample.

**Demographic questions:**

What is your age?

What is your gender?

What is your ethnicity?

What is your highest level of education attained?

How many years have you been at (case college)?

How many years have you been in the California community college system?

What is your current role at (case college)?

How long have you been in your current role?

Have you held other leadership roles at (case college)?

Thank you. Now I would like to move into some content questions.
Interview Questions (with potential follow-up/probing questions)

**Question 1: Proactivity**
What regular behaviors or practices do you feel best support proactive decision-making and problem solving in your college, and what would you say is the role of leadership in these practices?

Potential follow-up questions:
- *Can you say more about (specific practice/role)?*
- *How does your college remain aware of emerging issues or needs?*

**Question 2: Commitment to “Learning to Learn”**
How does your college tend to respond when things don’t go as planned or expected, or when there is a disappointing result? What practices, if any, does your college use to discuss and apply lessons learned from successes or failures?

Potential follow-up questions:
- *What do you and other leaders do after something doesn’t go as planned?*
- *Are there any practices in place to encourage calculated risk-taking?*

**Question 3: Positive Assumptions about Human Nature**
How well does (case college’s) culture create an environment where its members feel safe asking potentially difficult, embarrassing, or threatening questions about institutional goals and outcomes?

Potential follow-up questions:
- *What activities, practices, and attitudes do you and other leaders use to build trust and confidence within the culture?*
- *How would you say the environment here affects how individuals engage in problem solving and decision making activities?*

**Question 4: Management of the External Environment**
How would you describe your college’s collective mindset towards changes in the external environment? For example, does (case college) generally seem to believe that it can adapt to and manage external change, or does it more often appear to accept that “change is happening to us”?

Potential follow-up questions:
- *How do you and other leaders frame external changes when discussing change on campus?*
- *What processes exist on campus for discussing or interpreting the external environment?*
Question 5: Commitment to Inquiry and Dialogue
What value does (case college) place on practices of inquiry and dialogue in situations where there may be multiple explanations for an issue or result? How do you and other (case college) leaders support practices related to inquiry and dialogue in these situations?

Potential follow-up questions:
- What typically happens at (case college) when the dialogue runs into an “unknown” or “undiscussable” topic?

Question 6: Orientation toward the Future
How would you describe (case college’s) general mindset towards the future? For example, does the college tend to think ahead optimistically or pessimistically?

Potential follow-up questions:
- What processes or practices are in place to help the college think ahead? E.g., regular discussions of vision and strategic goals, etc.
- How do you and other leaders orient (case college) toward the future?

Question 7: Commitment to Full and Open Task-Relevant Communication
When deep, transformative, or layered changes are happening at (case college), how is information about the change process typically shared across campus? When deep changes are required, how are decisions made and communicated?

Potential follow-up questions:
- In your view, how well does (case college) communicate about change and decision-making?
- How would you characterize the way that members of the (case college) community communicate with you and other leaders about change initiatives?

Question 8: Commitment to Cultural Diversity in Problem-Solving
How well would you say (case college’s) includes culturally diverse perspectives in problem-solving or decision-making discussions? What value would you say (case college) places on the exchange of diverse perspectives?

Potential follow-up questions:
- What does this look like in practice?
Question 9: Commitment to Systems Thinking
How would you characterize (case college’s) ability to make sense of complex, interconnected issues or events? For example, when working through a complex challenge to support a deep change, can (case college) see interdependencies and multiple causes, or does the culture tend to look for a more linear cause/effect explanation?

Potential follow-up questions:
- *How do you and other leaders at (case college) frame complex, interconnected issues to support deep, second order change?*
- *Can you share an example of a time this happened?*

Question 10: Commitment to Internal Cultural Analysis
What practices at (case college), if any, support collective self-reflection? How does (case college) evaluate the dynamics of its internal culture?

Potential follow-up questions:
- *What value do you perceive that (case college) places on these practices?*
- *What role do you and other leaders play in these processes?*

Question 11
Is there anything else you would like to share with me regarding your perceptions of how culture and leadership impact your college’s ability to learn about the external environment and make changes when needed?
Gathering Feedback from Field Test Participant/Interviewee

Purpose:
Conducting interviews is a learned skill set/experience. Gaining valuable insight about your interview skills and affect with the interview will support your data gathering when interviewing the actual participants.

Instructions for Researcher:
While conducting the interview you should take notes of the participant’s clarification request or comments about not being clear about the question(s). After you complete the interview, ask your field test interviewee the following clarifying questions. Try not to make it another interview; just have a friendly conversation. Either script or record their feedback so you can compare with your observer(s) and develop your feedback report on how to improve the interview questions.

Feedback Prompts:

1. How did you feel about the interview? Do you think you had ample opportunities to describe what you do as a leader when working with your team or staff?

2. Did you feel the amount of time for the interview was ok?

3. Were the questions by and large clear or were there places where you were uncertain what was being asked? If so, can you tell me where in the interview things were unclear?

4. Can you recall any words or terms being asked about during the interview that were confusing?

5. And finally, did I appear comfortable during the interview… (I’m pretty new at this)?
Gathering Feedback from Field Test Interview Observer

Instructions for Observer:
Observe the interview, making note of the researcher’s verbal and nonverbal queues. After the conclusion of the interview, the researcher will discuss the following questions with you. The researcher will be completing a self-reflection on these same prompts in order to facilitate productive conversation.

Please provide constructive, candid feedback based on your observation. This will provide the researcher with valuable information that can be used to improve prior to conducting interviews for actual data collection. Thank you for your valuable time and assistance!

Feedback Prompts:

1. How long did the interview take? _____ Did the time seem to be appropriate?
2. How did the researcher appear during the interview? Comfortable? Nervous?
3. Going into it, did the interviewer appear prepared to conduct the interview? Is there something s/he could have done to be better prepared?
4. What parts of the interview went the most smoothly and why do you think that was the case?
5. What parts of the interview seemed to struggle and why do you think that was the case?
6. If you were to suggest changes to any part of the interview, what would that part be and how would you change it?
7. What suggestions do you have for improving the overall process?
Gathering Self-Reflective Feedback from the Researcher

Instructions for Researcher:
At the conclusion of the field test interview, reflect on the following questions. You should also discuss the following reflection questions with your ‘observer’ after completing the interview field test. The questions are written from your prospective as the interviewer. However, you can verbalize your thoughts with the observer and they can add valuable insight from their observation.

Feedback Prompts:

1. How long did the interview take? _____ Did the time seem to be appropriate?
2. How did you feel during the interview? Comfortable? Nervous?
3. Going into it, did you feel prepared to conduct the interview? Is there something you could have done to be better prepared?
4. What parts of the interview went the most smoothly and why do you think that was the case?
5. What parts of the interview seemed to struggle and why do you think that was the case?
6. If you were to change any part of the interview, what would that part be and how would you change it?
7. What suggestions do you have for improving the overall process?
APPENDIX D

Case Study Protocol

The following protocol describes the process for collecting and analyzing data at each individual case site.

1. **Data Collection**
   For each case site, collect the following source types using the methods outlined below. Documentation and archival records may be collected prior to interviews and observations of physical objects.

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<thead>
<tr>
<th>Source Type</th>
<th>Source Item</th>
<th>Method(s) of Collection</th>
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<tbody>
<tr>
<td>Documentation</td>
<td>• Governance and decision-making handbooks</td>
<td>• Thorough search of college website</td>
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<td></td>
<td>• Committee minutes and discussion items</td>
<td>• Potential follow-up question during interview</td>
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<td>• Official policies and procedures</td>
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<td>• Formal evaluations, including self-evaluations</td>
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<td>Archival records</td>
<td>• Organizational records</td>
<td>• Thorough search of college website</td>
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<td>• Performance data available from the Chancellor’s Office</td>
<td>• Query publicly available data warehouse</td>
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<td>• Maps and charts</td>
<td>on Chancellor’s Office website</td>
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<td>Interviews</td>
<td>• Semi-structured interviews with formal leaders</td>
<td>• In-person interviews</td>
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<td></td>
<td>• Semi-structured interviews with informal leaders</td>
<td></td>
</tr>
<tr>
<td>Physical objects</td>
<td>• Buildings, layout of space</td>
<td>• Photographs, where permitted</td>
</tr>
<tr>
<td></td>
<td>• Signage, works of art</td>
<td>• Written descriptions</td>
</tr>
<tr>
<td></td>
<td>• Technological equipment &amp; tools</td>
<td></td>
</tr>
</tbody>
</table>

2. **Data Analysis**
   Analyze data from each case separately: Case A, then Case B, then Case C.

   Use content analysis to code all artifacts and interview transcripts. After coding, perform pattern matching against the theoretical propositions for the study (listed below). Interview questions have been tied to the theoretical propositions.
### Initial Categories for Analysis Derived from Theoretical Propositions

<table>
<thead>
<tr>
<th>Category (from Schein)</th>
<th>Theoretical Proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proactivity</strong></td>
<td>Proactive culture and leadership support timely, inclusive problem solving processes; goal-oriented, data-informed decision-making; and awareness of emerging issues.</td>
</tr>
<tr>
<td><strong>Commitment to &quot;learning to learn&quot;</strong></td>
<td>Culture and leadership committed to the skill of learning engage in reflection and experimentation, allow calculated risk-taking, and seek learning opportunities in mistakes.</td>
</tr>
<tr>
<td><strong>Positive assumptions about human nature</strong></td>
<td>Culture and leadership with positive assumptions about others minimize blame and actively develop the trust and psychological safety needed for learning to occur.</td>
</tr>
<tr>
<td><strong>Environmental management</strong></td>
<td>Culture and leadership develop processes for interpreting the environment and demonstrate adaptability and flexibility in response to external changes.</td>
</tr>
<tr>
<td><strong>Commitment to inquiry and dialogue</strong></td>
<td>Culture and leadership committed to practices of inquiry and dialogue will demonstrate the belief that multiple solutions or “truths” may exist for any given problem, show willingness to admit unknowns, and address “undiscussable” issues.</td>
</tr>
<tr>
<td><strong>Positive orientation toward the future</strong></td>
<td>Culture and leadership with a positive orientation toward the future monitor performance against near-term goals in order to make course-corrections when needed.</td>
</tr>
<tr>
<td><strong>Commitment to full and open task-relevant communication</strong></td>
<td>Culture and leadership committed to open, task-relevant communication maintains multiple channels for sharing information, promotes transparency, trust, integrity (i.e., truth-telling), and builds psychological safety.</td>
</tr>
<tr>
<td><strong>Commitment to cultural diversity</strong></td>
<td>Culture and leadership committed to cultural diversity develops practices and structures to support cross-cultural communication, mutual understanding, and the exchange of multiple perspectives.</td>
</tr>
<tr>
<td><strong>Commitment to systems thinking</strong></td>
<td>Culture and leadership committed to systems thinking demonstrates awareness of interdependence of issues and events in order to make sense of the environment.</td>
</tr>
<tr>
<td><strong>Commitment to internal cultural analysis</strong></td>
<td>Culture and leadership committed to internal cultural analysis develops practices that support collective self-reflection and analysis of group functioning.</td>
</tr>
</tbody>
</table>

Draft an analysis of each individual case to address Research Questions 1 and 2.

Upon completion of the individual case analysis, conduct cross-case analysis to determine the degree of congruence or incongruence across cases (Research Questions 3 and 4).
APPENDIX E

Brandman University IRB Approval

BRANDMAN UNIVERSITY INSTITUTIONAL REVIEW BOARD
IRB Application Action – Approval

Date: 9/23/2017

Name of Investigator/Researcher: Catherine E. Webb

Faculty or Student ID Number: B00490449

Title of Research Project:
Culture, Leadership, and Organizational Learning in California Colleges: Exploring the Potential for Second Order Change

Project Type: ☑ New ☐ Continuation ☐ Resubmission

Category that applies to your research:
☑ Doctoral Dissertation EdD
☐ DNP Clinical Project
☐ Masters’ Thesis
☐ Course Project
☐ Faculty Professional/Academic Research
☐ Other: 

Funded: ☑ No ☐ Yes (Funding Agency; Type of Funding; Grant Number)

Project Duration (cannot exceed 1 year): One Year

Principal Investigator’s Address: 1320 Lawton Avenue / Pacific Grove, CA 93950

Email Address: cwebb2@mail.brandman.edu Telephone Number: (773) 750-6390

Faculty Advisor/Sponsor/Chair Name: Dr. Len Hightower

Email Address: whightow@brandman.edu Telephone Number: (503) 341-2672

Category of Review:
☑ Exempt Review ☐ Expedited Review ☐ Standard Review

I have completed the NIH Certification and included a copy with this proposal

[NIH Certificate currently on file in the office of the IRB Chair or Department Office]

Signature of Principal Investigator: Catherine Webb

Digitally signed by: Catherine Webb
Date: 2017.09.23 15:27:40 -07'00"

Date: 9/23/2017

Signature of Faculty Advisor/
Sponsor/Dissertation Chair: Walter Len Hightower

Digitally signed by: Walter Len Hightower
Date: 2017.09.25 22:27:18 -07'00"

Date: 9/25/2017

Brandman University IRB Rev, 11.14.14
Adopted
November 2014
BRANDMAN UNIVERSITY INSTITUTIONAL REVIEW BOARD
IRB APPLICATION ACTION – APPROVAL
COMPLETED BY BUIRB

IRB ACTION/APPROVAL
Name of Investigator/Researcher: Catherine E. Webb

- Returned without review. Insufficient detail to adequately assess risks, protections and benefits.
- Approved/Certified as Exempt form IRB Review.
- Approved as submitted.
- Approved, contingent on minor revisions (see attached)
- Requires significant modifications of the protocol before approval. Research must resubmit with modifications (see attached)
- Researcher must contact IRB member and discuss revisions to research proposal and protocol.

Level of Risk:  No Risk  Minimal Risk  More than Minimal Risk

IRB Comments:
Provide site permission letters from the "3 individual colleges selected from the target population."

Tim Perez
IRB Reviewer

Telephone: Email:

BUIRB Chair: Doug DeVore  Date: 10/06/17

REVISED IRB Application
Name: Douglas P. DeVore

Telephone: 623-293-2421  Email: ddevore1@mac.com  Date: December 6, 2017

BUIRB Chair:

Dear Potential Study Participant,

My name is Catherine Webb, and I am a doctoral candidate in the Organizational Leadership program at Brandman University. For my dissertation, I am researching the affect of organizational culture and leadership on organizational learning and change in California community colleges. My study focuses on the ways that culture and leadership impacts a college’s ability learn about and adapt to its external environment, in order to address performance gaps and more effectively reach institutional goals. As part of this study, I am exploring the perspectives of those with both formal and informal leadership positions at several selected California community colleges regarding this topic.

Your college has agreed to be a case site for this study. I am writing to introduce myself and ask if you would be willing to consider participating in this research by providing your perspectives on culture, leadership, and change at your college in a 45-60 minute interview. The interview would be scheduled at a time that it is convenient for you.

If you agree to participate, you may be assured that the interview will be completely confidential. A coding system will be used so that your name will not be attached to any notes, recording, or transcripts from the interview. The interview will be audio-recorded with your consent, and audio recording will be destroyed after the interview has been transcribed. All information associated with the interview will be accessible only by my dissertation chair and myself. You will be free to stop the interview and withdraw from the study at any time.

If you would like to discuss this further, I am available by email and phone. Additionally, you are welcome to contact my dissertation chair, Dr. Len Hightower, at whightow@brandman.edu.

Your perspective and experience as a leader at your college will greatly enrich the study and our understanding of this topic, and it would be an honor to speak with you. I know that your time is incredibly valuable and I appreciate your consideration of this request.

Sincerely,

Catherine Webb
Doctoral Candidate, Brandman University
Email: cwebb2@mail.brandman.edu
Phone: 773-xxx-xxxx
APPENDIX G
Participant Bill of Rights

BRANDMAN UNIVERSITY INSTITUTIONAL REVIEW BOARD
Research Participant’s Bill of Rights

Any person who is requested to consent to participate as a subject in an experiment, or who is requested to consent on behalf of another, has the following rights:

1. To be told what the study is attempting to discover.
2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice.
3. To be told about the risks, side effects or discomforts of the things that may happen to him/her.
4. To be told if he/she can expect any benefit from participating and, if so, what the benefits might be.
5. To be told what other choices he/she has and how they may be better or worse than being in the study.
6. To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study.
7. To be told what sort of medical treatment is available if any complications arise.
8. To refuse to participate at all before or after the study is started without any adverse effects.
9. To receive a copy of the signed and dated consent form.
10. To be free of pressures when considering whether he/she wishes to agree to be in the study.

If at any time you have questions regarding a research study, you should ask the researchers to answer them. You also may contact the Brandman University Institutional Review Board, which is concerned with the protection of volunteers in research projects. The Brandman University Institutional Review Board may be contacted either by telephoning the Office of Academic Affairs at (949) 341-9937 or by writing to the Vice Chancellor of Academic Affairs, Brandman University, 16355 Laguna Canyon Road, Irvine, CA, 92618.
APPENDIX H

Informed Consent Form

TITLE:  Culture, Leadership, and Organizational Learning in California Community Colleges: Exploring the Potential for Second Order Change

RESPONSIBLE INVESTIGATOR:  Catherine Webb

PURPOSE OF STUDY:  This study is being conducted for a dissertation in Organizational Leadership at Brandman University. The purpose of this research study is to explore the impact of organizational culture and campus leadership on the development of organizational learning practices in California community colleges. A secondary purpose of the study is to explore the role of organizational culture and campus leadership in facilitating second order change in California community colleges.

PROCEDURES:
By participating in this study, I agree to participate in a face-to-face interview, which will last approximately 45-60 minutes and will be audio recorded (separate privacy statement attached).

I understand that:

a) The possible risks of this study are minimal. However, there may be some discomfort as a result of participating in the interview. I understand that I do not need to answer any interview questions that cause discomfort.

b) The possible benefit of this study to me is that my input may help add to the research regarding organizational leadership, culture, learning, and change in the California Community College system. The findings will be available to me at the conclusion of the study. I understand that I will not be compensated for my participation.

c) Any questions I have concerning my participation in this study will be answered by Catherine Webb, available by email at ewebb2@mail.brandman.edu or by phone at 773-xxx-xxxx. Questions may also be answered by the dissertation chairperson: Dr. Len Hightower at whightow@brandman.edu.

d) I may refuse to participate or may withdraw from this study at any time without any negative consequences. I understand that the Investigator may stop the study at any time.
e) I also understand that no information that identifies me will be released without my separate consent and that all identifiable information will be protected to the limits allowed by law. If the study design or the use of the data is to be changed, I will be so informed and my consent re-obtained. I understand that if I have any questions, comments, or concerns about the study or the informed consent process, I may write or call the Office of the Executive Vice Chancellor of Academic Affairs, Brandman University, and 16355 Laguna Canyon Road, Irvine, CA 92618, (949) 341-7641. I acknowledge that I have received a copy of this form and the “Research Participant’s Bill of Rights.”

I have read the above and understand it. Any questions have been answered to my satisfaction, and I hereby agree to participate in the study.

_______________________________________________
Printed Name of Participant

_______________________________________________
Signature of Participant

_______________________________________________
Signature of Principal Investigator

_______________________________________________
Date
APPENDIX I

Privacy Act Statement and Consent Agreement for Audio Recording

Privacy Act Statement & Consent Agreement for Audio Recording

I give my consent to allow audio recording during the interview, and for those records to be reviewed by persons involved in the study.

I understand that all information will be kept confidential and will be reported in an anonymous fashion, and that the audio recording will be erased after the interview has been transcribed.

I understand that I may elect to receive a copy of the transcript once the audio recording has been transcribed so that I may review and correct as necessary.

I further understand that I may withdraw this consent at any time without penalty.

____________________________________________
Printed Name of Participant

____________________________________________
Signature of Participant

☐ Please email a copy of the transcript for my review to the following address:

____________________________________________

Signature of Principal Investigator

____________________________________________
Date
APPENDIX J

Alignment Matrix: Major Findings, Conclusions, and Implications for Action

<table>
<thead>
<tr>
<th>Major Findings</th>
<th>Conclusion</th>
<th>Implication for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relationships, Finding 1</strong>&lt;br&gt;Relationships, trust, and psychological safety within the organization form the foundation on which organizational learning practices can be developed and provide stability through second order change.</td>
<td>Community colleges that actively cultivate trusting relationships and psychological safety through proactive, honest, and transparent communication between subgroups have a stronger foundation on which to engage in the dialogue required for learning and change.</td>
<td>Community college leaders should actively work to cultivate trust and psychological safety within the culture prior to engaging in processes that lead to second order change.</td>
</tr>
<tr>
<td><strong>Communication, Finding 2</strong>&lt;br&gt;Communication and trust are interdependent: honest, proactive communication builds trust within the culture, and trust allows for more authentic learning and facilitates deeper dialogue about change.</td>
<td>Strong, trusting relationships facilitate both double-loop learning and second order change by providing the safety to take risks and question underlying assumptions. As shown in the literature, organizations that have proactively established psychological safe environments for learning have more success recognizing and confronting defensive routines.</td>
<td>Suggestions for College Leadership Teams:&lt;br&gt;• Discuss and agree to specific strategies for building trust and psychological safety (e.g., transparent communication, modeling of trust-building behavior)&lt;br&gt;• Practice trust-building behaviors consistently throughout organizational meetings – before, during, and after change processes&lt;br&gt;• Intentionally include group activities designed to build trust in the design of second order change processes&lt;br&gt;• Engage an external facilitator to help strengthen trust, relationships, and communication prior to implementing a second order change process (especially recommended for colleges with a low degree of trust)</td>
</tr>
</tbody>
</table>

257
<table>
<thead>
<tr>
<th>Major Findings</th>
<th>Conclusion</th>
<th>Implication for Action</th>
</tr>
</thead>
</table>
| **Communication, Finding 1**  
Proactive, frequent, and consistent communication with institutional subgroups builds mutual understanding of the rationale for change and provides stability during a change process. | Proactive, frequent, and consistent communication across campus subgroups provides stability for members of the college community during times of disruption.  
Ensuring that organizational members have access to consistent information about a change process promotes broad understanding and reduces anxiety as the change unfolds. This conclusion is consistent with the literature, which demonstrates that open communication across subgroups builds capacity for change as members engage in frank dialogue around the information that has been shared. | Community college leaders should develop and maintain written communication plans to ensure proactive, transparent, and consistent communication about learning and change. **Suggestions for College Leadership Teams:**  
• Carefully consider the style(s) of communication that will best suit the unique college culture and needs of major subcultures and stakeholder groups  
• Formal communication plans should outline multiple channels that the college will use to communicate about learning and change (e.g., campus-wide email blast, all-college forum, informational newsletter, committee report, YouTube presentation, etc.)  
• Communication plans should clearly specify the frequency, purpose, and primary audience of each type of communication, as well as the individual or group responsible for delivering the message  
• Develop a general communication plan for the college first; afterward, it can be used as a template and tailored to specific learning and change initiatives as needed |

| **Communication, Finding 2**  
Communication and trust are interdependent: honest, proactive communication builds trust within the culture, and trust allows for more authentic learning and facilitates deeper dialogue about change. | | |
<table>
<thead>
<tr>
<th>Major Findings</th>
<th>Conclusion</th>
<th>Implication for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intentionality, Finding 1</strong></td>
<td><strong>Community colleges that develop proactive, intentional practices of organizational learning and inquiry that support learning from experience will have more success managing disconfirming information and adapting to disruptive changes.</strong></td>
<td>Community colleges should actively cultivate a learning mindset within their culture by developing intentional opportunities for organizational learning.</td>
</tr>
</tbody>
</table>
| An institutional mindset that views organizational learning as an ongoing practice involving intentional inquiry and learning from experience – including the experiences of others – improves the degree to which learning activities are proactive, productive, and supportive of second order change. | Colleges with a learning mindset intentionally reflect on past experience through practices that emphasize curiosity, inquiry, and continuous improvement. In addition, this mindset reflects openness to learning from other institutions and willingness to take calculated risks in order to learn from the results. As noted in the literature, these traits indicate a broader practice of questioning of assumptions about institutional performance and behavior and help to facilitate double-loop learning. | Suggestions for College Leadership Teams:  
• Develop and support opportunities for learning, such as organized or ad hoc inquiry groups  
• Model a learning mindset by celebrating lessons learned from failure and providing positive reinforcement for calculated risks  
• Work with institutional research offices to develop regularly scheduled presentations of institutional data and outcomes, so that institutional performance can be safely explored and questioned  
• Implement practices for learning and inquiry well in advance of a major change process, in order to build institutional habits of mind related to productive organizational learning that can be relied on in times of change  
• Ensure that change processes include opportunities for intentional learning and inquiry |
<p>| <strong>Framing, Finding 2</strong>             |                                                                                      |                                                                                        |
| Institutional data can support proactive inquiry and facilitate dialogue about change when they are presented in culturally resonant terms and framed as a starting point for dialogue, rather than an end-point for individual or departmental evaluation. |                                                                                      |                                                                                        |</p>
<table>
<thead>
<tr>
<th>Major Findings</th>
<th>Conclusion</th>
<th>Implication for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing, Finding 1</td>
<td>Culturally resonant framing helps community college leaders illuminate</td>
<td>Community college leaders should be intentional about framing and sensemaking when</td>
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<tr>
<td></td>
<td>interconnections between internal and external systems and communicate the</td>
<td>communicating about change processes.</td>
</tr>
<tr>
<td></td>
<td>rationale and urgency for learning and change.</td>
<td>Suggested for College Leadership Teams:</td>
</tr>
<tr>
<td></td>
<td>This is largely the work of college leaders, as interconnections between</td>
<td>• Intentionally articulate connections between external change initiatives and the</td>
</tr>
<tr>
<td></td>
<td>complex internal and/or external systems may not be largely apparent to</td>
<td>espoused values of the college, in order to help personnel build shared understanding of</td>
</tr>
<tr>
<td></td>
<td>individual members of the culture. Framing change initiatives in culturally</td>
<td>the rationale and urgency for change</td>
</tr>
<tr>
<td></td>
<td>meaningful terms helps organizational members understand the change and</td>
<td>• Discuss framing with a small group of trusted members (including all subgroups) in</td>
</tr>
<tr>
<td></td>
<td>make sense of complex processes, and provides motivation for action and</td>
<td>order to test for cultural resonance and gain feedback prior to campus-wide</td>
</tr>
<tr>
<td></td>
<td>engagement. Clearly framed messages with strong cultural resonance can also</td>
<td>communication (especially recommended for leaders who are new to their campuses)</td>
</tr>
<tr>
<td></td>
<td>increase engagement in organizational learning activities connected to the</td>
<td>• Use consistent framing in communication and messaging throughout the duration of the</td>
</tr>
<tr>
<td></td>
<td>change, including interaction with institutional data. Additionally, the</td>
<td>change process, in order to reinforce understanding of the vision, rationale, and</td>
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<tr>
<td></td>
<td>literature notes that framing changes in meaningful cultural context increases</td>
<td>urgency</td>
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<tr>
<td></td>
<td>the likelihood that they will be sustained over time.</td>
<td></td>
</tr>
<tr>
<td>Framing, Finding 2</td>
<td>Internal/External Alignment, Finding 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clearly framed interconnections between internal priorities and factors in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the external environment help an organizational culture make sense of complex,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>systemic changes.</td>
<td></td>
</tr>
<tr>
<td>Major Findings</td>
<td>Conclusion</td>
<td>Implication for Action</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Intentionality, Finding 2</strong></td>
<td>Community colleges that believe they have the institutional resources, abilities, and leadership required for adaptation and change are better positioned to engage members of the culture in organizational learning activities.</td>
<td>Community college leaders should increase capacity for organizational learning and change within their culture by expanding resources required to support these activities.</td>
</tr>
<tr>
<td>Shared beliefs about institutional capacity for learning and change, including beliefs about resources needed to support reflection and experimentation, may impact the development of organizational learning practices and engagement in activities related to organizational learning and change.</td>
<td>Developing broad engagement in learning and change activities is challenging. However, cultures that believe they have the time, finances, energy, and ability to learn and change are better able to decrease learning anxiety and increase confidence. Research indicates that decreasing learning anxiety is particularly important during processes that support unlearning of old behaviors.</td>
<td>Suggestions for College Leadership Teams:</td>
</tr>
<tr>
<td><strong>Framing, Finding 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared perceptions of organizational identity affect the development of organizational learning practices and the facilitation of second order change.</td>
<td></td>
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</tbody>
</table>

**Suggestions for College Leadership Teams:**

- Look for opportunities to expand time and energy allocated to change processes, in addition to seeking opportunities for expanding additional funding.
- Empowering other formal and informal change leaders – both through formal training and by publicly celebrating the results of learning and change as they occur.
- Ensure that the number of priorities and change initiatives underway at any one time is realistic and manageable (given system constraints).
- When hiring new personnel, look for candidates who demonstrate curiosity, adaptability, and flexibility in times of change (especially recommended when hiring tenure-track faculty).