The Influence of Executive Leadership on Community College Completion Rates

by

Bharadwaj S. Hegde

A Dissertation Presented to
FACULTY OF THE USC ROSSIER SCHOOL OF EDUCATION
UNIVERSITY OF SOUTHERN CALIFORNIA
In Partial Fulfillment of the
Requirements for the Degree
DOCTOR OF EDUCATION

May 2019

ACKNOWLEDGEMENTS

I would like to thank my dissertation advisor, Dr. Helena Seli, and dissertation committee members, Dr. Douglas Lynch and Dr. David Stout for their support, patience, and dedication. Their guidance and input were invaluable. The final product benefitted greatly from each of their unique perspectives. Most importantly, working with them made the process of completing the dissertation engaging, enjoyable and educational.

I would also like to thank my parents. I think I finally completed my education! Thank you for forty-six years of support, encouragement, and guidance.

Most importantly, I would like to thank my family. Going back to school presented many challenges. Without the support of my wife Beth and our two wonderful children, Sarah and Lucas, I never could have overcome those challenges. Thank you. I love you.

ABSTRACT

Community colleges have long been lauded for significantly increasing access to postsecondary education for individuals who may have few other options due to academic difficulties, financial constraints, or other factors (American Association of Community Colleges, 2017). The rate at which students complete degrees and certificates, however, has remained essentially unchanged over the last 10 years (National Center for Education Statistics, 2017). While organizations employ a variety of metrics to measure student completion, all have demonstrated a stubborn stability.

The broad influence of community college presidents uniquely positions them to effect change that can significantly improve student completions. Using the Clark and Estes (2008) gap analytic framework, a qualitative study was designed to explore the interaction of organizational barriers with the knowledge and motivation of community college presidents to gain greater insight into the challenges presidents face when instituting change to improve completion rates. The findings from the study indicate that while presidents are both motivated and knowledgeable, they face significant challenges within the institution and from external entities. External pressures from state mandates drive the types of institutional change efforts in which president engage while strong union protections bolster faculty resistance resulting in significant challenges in creating accountability for student outcomes. The study offers recommendations for practice and encourages presidents to take greater risks in driving student completions, hold faculty accountable for student outcomes, and to focus the institution on student completions by setting and communicating clear goals.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION

Introduction to the Problem of Practice

In 2009, the Council of Economic Advisors produced a report indicating that over the next two decades jobs requiring at least an associate degree would grow twice as fast as those requiring only a high school education. In response, President Barack Obama established the "American Graduation Initiative" calling for an additional five million Americans to achieve degrees and certificates at community colleges by the year 2020 (Obama, 2009). In his announcement, Obama indicated the increase in the educational attainment levels of Americans would be necessary for the United States to lead in the global economy. The Bureau of Labor Statistics confirmed the 2009 prediction showing that jobs requiring postsecondary training grew at nearly twice the rate of those requiring only a high school diploma or less between 2009 and 2013, a trend that is expected to continue (Byun, Henderson, & Toossi, 2015; Richards & Terkanian, 2013). Increased educational attainment strengthens the economic prospects of the nation, as well as local communities and individuals (Barro, 2013; Berger & Fisher, 2013; Jepsen, Troske, & Coomes, 2014; United States Department of Labor, 2015; Woessmann, 2016). The problem of practice addressed in this dissertation is that of unchanging completion rates in public two-year community colleges.

The rate at which community college students completed degrees and certificates has remained essentially unchanged over the last 10 years. The National Center for Education Statistics (2017) indicated that the percentage of first-time, full-time, degree seeking students at public, two-year institutions completing a certificate or associate degree within three years or 150 percent of normal time at their starting institution fluctuated between 23.6% and 19.5% for cohorts starting between 2000 and 2010. A six-year timeframe favored by organizations such as

the American Association of Community Colleges (AACC) and the National Student Clearinghouse Research Center (NSC) indicates that a higher percentage of community college students do eventually complete degrees and certificates (AACC, 2016). Using this broader time frame, the 2007 through 2011 first-time, full-time student cohorts completed a degree or certificate at rates between 36.3% and 39.9% (National Student Clearinghouse Research Center, 2012, 2013, 2014, 2015, 2016). Regardless of how completion rates are measured, the rate itself remains consistent over time.

The national emphasis on increasing community college completion continues to be strong. Rising tuition prices and reductions in state subsidies have increased the pressure on colleges to demonstrate improvements in student completions (Agasisti & Belfield, 2017). Relatively stagnant completion rates and low absolute completion rates contrasted with the potential benefits of increased educational attainment serve to emphasize the importance of addressing the issue. Successful completion of a community college credential is associated with higher individual earnings (Jepsen, Troske, & Coomes, 2014), better health outcomes (Kaplan, Fang, & Kirby, 2017), and a more prosperous economy (Drucker, 2016). Increasing the rate at which students obtain degrees and certificates at community colleges holds the potential to positively impact prosperity nationally, locally, and for individuals.

Community College Background Information

Community colleges are large, complex organizations with multiple missions that serve a diverse student body. In addition to liberal arts and technical training offerings, the mission of community colleges includes a strong focus on providing access to postsecondary education to historically disenfranchised populations (Gilbert & Heller, 2013). From an instructional perspective, community colleges address three broad overlapping domains. In the first domain,

the focus is academic, vocational, and remedial education. The second domain focuses on economic and social mobility of the individual and community development. Finally, the third domain focuses the role community colleges as part of the pathway to earning baccalaureate degrees or to entering the workforce (Levin, 2000). Each domain utilizes instructional offerings, student services, and ancillary support while shifting the emphasis of the desired outcome and together for the basis of the overall community college mission. While the instructional mission of community colleges can be shaped into straightforward domains, the access portion of the mission can be more complicated to conceptualize and presents challenges in examining completion as primary metric of institutional success.

Community colleges have long been lauded for significantly increasing access to postsecondary education for individuals who may have few other options due to academic difficulties, financial constraints, or other factors (AACC, 2017). As open access institutions, community colleges are non-selective in their admissions policies and as such, students enter the institution with a wide range of goals, expectations, and academic abilities. Creating completion metrics therefore becomes complex. If, for example, all entering students are considered when calculating completion rates, then performance may appear unduly low as some students may never have intended to complete a degree or certificate (Goldrick-Rab, 2010). Similarly, there is no agreement within the education community as to the window of time within which students should complete a degree or certificate when measuring completion. The Department of Education uses a three-year timeframe, while professional organizations such as the American Association of Community Colleges and the National Student Clearinghouse Research Center prefer a six-year timeframe. Regardless of which measure is used, completion rates have not

improved significantly or consistently over time despite the significant amount of research examining various aspects of completion.

The research literature on community college student success focuses on broad areas: 1) the effect of entering student demographics and prior educational experience, 2) student behaviors and perceptions particularly related to engagement, 3) the effectiveness of individual intervention programs on improving various measures of student success. Each area of study provides insights into the how institutional factors can interact with students to produce a described outcome. Greene, Marti, and McClenny (2008), for example, note that while White students consistently outperform African-American and Hispanic students in both enrollment and academic performance metrics, the difference in performance is unrelated to effort and suggest that institutional factors are at play. Similarly, extensive empirical evidence demonstrates that student behaviors and perceptions are driven by institutional efforts at engagement which can positively influence student outcomes (Bard, 2016; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; Martin, Galentino, & Townsend, 2014; Shumaker & Wood, 2016; Tinto, 1999; Trowler, 2010). Finally, a wide range of studies demonstrate the efficiency of specific intervention programs such as learning communities, supplemental instruction, first-year experience programs, tutoring programs, and student success courses at improving retention and completion rates (Goldrick-Rab, 2010). While research examining student characteristics and behavior as well as student interactions with institutional programs are plentiful, other factors that likely affect student outcomes are less explored.

Institutional characteristics (size, location, etc.), leadership and curricular offerings have garnered little attention from scholars (Calcagno, Bailey, Jenkins, Kienzl, & Leinbach, 2008). Notably absent in the research literature is the effect of faculty professional development

programs on student outcomes (Jacoby, 2006). In a 2002 assessment of community college faculty development programs, Murray (2002) points out the demand for improved professional development had yet to result in the assessment of program effectiveness connected to desired student outcomes. As late as 2017, scholars were suggesting conceptual evaluation models for faculty development to address the lack of focus on student performance as well as other issues such as poorly developed curricula and ill-conceived evaluation frameworks for faculty development programs (Hines, 2017). Considering the central role classroom faculty play in the student experience, the lack of research is surprising. More broadly, community college research often lacks a strong connection to institutional outcome of degree and credential attainment.

Regardless of the focus of a given study, the student outcome metric used to measure success varies and often does not include completion. Measures such as course grades, term-over-term retention, persistence to subsequent sequential courses, and student and faculty perceptions are frequently applied measures. These metrics are important to measure as the data can be informative in decision-making, program development, and improvement efforts. Inclusion of a clear completion outcome in program evaluation, however, is also necessary since completion of a credential is correlated to benefits beyond school. While evidence that attending college without completing a degree has some positive benefits, the benefits of completing a postsecondary credential are both broad and clearly established in the research literature (Belfield & Bailey, 2011).

Educational attainment affects unemployment rates, median earnings, and health outcomes. In 2015, the unemployment rate amongst those with less than a high school diploma was 8.0% and for those with a high school diploma was 5.4%, both substantially higher than the 3.8% unemployment rate for those holding an associate degree (United States Department of

Labor [USDOL], 2015). Similarly, wages for those with higher levels of education were substantially higher. Median weekly earnings for those with less than a high school diploma, those with only a high school diploma and those with an associate degree were $493, $678, and $798 respectively (USDOL, 2015). Beyond employment and earning, educational attainment can also influence health outcomes.

Cutler, Huang, and Lleras-Muney (2015) reported that people who are more educated are substantially less likely to report they are in poor health, less likely to report they suffer from depression or anxiety, and less likely to miss work because of illness. These health outcomes are important for individuals, families, and communities as well as economy at large since absenteeism among employees is a significant drain on productivity (Wada et al., 2013). Increasing community college success rates holds the potential to increase an individual's ability to earn a living wage, achieve better health outcomes, and to be productive members of the workforce.

Importance of Addressing the Problem

The problem of flat completion rates within community colleges is important to address for individuals, local communities, and from the national perspective. First, from the perspective of the individual, gainful employment prospects and health outcomes increase significantly with higher levels of educational achievement. Jepsen, Troske, and Coomes (2014), for example, show that those earning community college degrees experience increased average quarterly earnings of $2000 for women and $1500 for men. Additionally, higher levels of educational attainment are associated with lower risk tolerance for health care related issues, more regular visits to primary care physicians, and overall health outcomes even when controlling for age, race, economic standing, and marital status (Kaplan, Fang, & Kirby, 2017). Second, from the

perspective of local communities, economic growth, particularly that based on attracting companies to the area, often requires postsecondary-level trained workers (Drucker, 2016; Porter, 2000). From the broadest perspective, the economic prosperity of the country is, at least in part, contingent on an educated workforce (Woessmann, 2016). Coupled with the political emphasis of increasing postsecondary educational attainment via the community college, addressing completion rates of approximately 7.3 million credit students or 45% of undergraduate student enrollment in the US, becomes a critical task (AACC, 2016). Considering the relatively low rates of completion seen today, the potential breadth and scope of the impact made by improving this rate is could be very significant.

Global Goal

The American Association of Community Colleges seeks to engage community colleges in "the completion agenda" by asking institutions to commit to increase the number of students who hold degrees and certificates by 50% by 2020 (AACC et al., 2010). The goal was established in coordination with five other national organizations (Association of Community College Trustees, National Institute for Staff and Organizational Development, League for Innovation in the Community College, Phi Theta Kappa, and Center for Community College Student Engagement) and annually measures the number of degrees and certificates granted by member colleges. Member colleges who accepted the AACC challenge pledged to increase both the number of degrees and certificates awarded as well as the graduation rate. This study focused on the graduation rate because the gross number of degrees and certificates is not necessarily contingent on the institutional improvement. If, for example, the number of students enrolled at a given community college grows, the institution may produce more degrees and certificates while maintaining status quo performance. Additionally, community college

enrollments tend to be strongly affected by the broader economy. Higher community college enrollments are typically associated with higher unemployment rates and may result in more degrees conferred but may not represent improved institutional performance (AACC, 2015). The corollary is that lower unemployment rates typically result in depressed enrollments which could result a lower absolute number of degrees and certificates granted. Completion rates, however, are not contingent on enrollment volume so may provide a better understanding of institutional performance.

The rate at which students obtain degrees and certificates is important for both individual community colleges as completion rates are a critical measure of success that drives funding at the federal and local level. More broadly, educational attainment level plays a key role in the economic well-being of individual communities as well as the country as a whole (Barro, 2013). The AACC member colleges committed to this goal either explicitly or implicitly. Identifying colleges with a commitment to the goal set forth by the AACC and examining the provision of leadership in relation to their success rates was the goal of this study.

Description of Stakeholder Groups

There are several significant stakeholders involved in improving community college completion rate. Parents of students, P-12 partners, four-year partner institutions, and local businesses all have a vested interest in seeing more students achieve degrees and certificates at community colleges. The three groups that hold the most potential to directly impact the completion rates, however, are the community college faculty, deans and vice presidents, and chief executive officers, who often hold the title of president. While there are other groups who contribute to improve student completion rates, faculty, students, and administrators are the primary change agents.

As stakeholders, students are critical. The actions taken by faculty, staff, and administrative leaders are designed to modify the behavior of students in a manner that will increase completion rates. As such, the consideration of student needs is central to understanding and addressing the issue of low completion rates. Students must play a central role in identifying these needs and, to some significant extent, must be involved in identifying the type of instruction, support services, and resources needed to change behavior. Ultimately, students are responsible for their success, and faculty, staff, and leadership are responsible for creating environments and systems that facilitate their success.

Faculty members are responsible for delivering instruction through a combination of content and pedological expertise and as such, can profoundly affect student experience and outcomes. While faculty members are not the sole institutional agents responsible for teaching and learning, they are the primary actors putting them in an influential position for achieving the increased completion rates through improved instructional practices. There are very few empirical studies broadly examining the quality of instruction either at individual community colleges, districts, or states. While numerous studies explore the efficacy of pedagogical approaches, particularly in developmental education and the community college setting generally, the impact of instructor quality on student outcomes is largely unexplored in community colleges (Twombly & Townsend, 2008). In addition to their primary responsibility for instruction, faculty also perform important leadership roles particularly as department chairs where curricular decisions, teaching assignments, and course schedules are often developed (McArthur, 2002; Scott, 1990). Since these responsibilities are shared with deans and vice presidents, faculty must work closely with administrative leadership to affect any desired change. Bjugstad, Thach, Thompson, and Morris (2006) point out that the relationship between followers

and leaders (in this case faculty and deans, vice presidents, and presidents) plays a central role in achieving desired organizational outcomes. As such, administrative leaders at every level need to engage faculty in any significant organizational improvement efforts in a way that allows for the development of common values, a shared understanding of desired outcomes, and organizational trust to successfully move forward (Gardner, Avolio, Luthans, May, & Walumbwa, 2005).

Community college vice presidents and deans serve as mid-level managers with significant oversight in their respective scope of responsibility. The positions are highly operational in nature and are typically responsible for the day-to-day operation of the community college (Shults, 2001). Because vice presidents and deans have regular contact with faculty and chief executives, they can influence key administrative and instruction decisions. The operational nature of these positions allows vice presidents and deans to direct initiatives designed to improve student success (Bragg, 2000). The veracity with which they approach their tasks can thus have a profound influence on the effectiveness of these efforts. As a result, these blended operational and leadership roles can have a significantly affect the outcome of institutional improvement efforts.

Overall leadership and management authority at community colleges resides with the president. Within the context of this dissertation, only chief executive officers were examined. Many community colleges operate within the context of multi-campus district with each campus having a president who reports to a chancellor. Chief executives serving in a multi-campus district were not considered for participation in the study as final authority in for decisions in operational areas such as budgeting, human resources, administrative services, and institutional planning, all of which can potentially impact student outcomes, often rest with the chancellor.

Presidents serving in single-campus districts and reporting directly to a governing board hold responsibility for all operational areas and as such have a greater ability to directly affect institutional outcomes. Of particular importance, incumbents in these positions are typically influential in determining funding levels for specific areas of a college and guiding the development of college-wide goals, which together can determine the focus of the institution. While presidents typically have oversight of these areas, additional responsibilities around development and fundraising as well as lobbying efforts at the state level often draw attention away from internal institutional leadership (Eddy, 2005; Glass & Jackson, 1998). Despite strong external demands for their time, presidents hold the formal authority and leadership responsibility to improve community college student outcomes (Plinske & Packard, 2010).

A single, best approach to leadership has yet to be identified in the academic literature. Empirical studies have, however, identified certain key leadership activities that consistently demonstrate efficacy (Northouse, 2015). The broadest of these activities is the establishment of a vision for the college. Community college presidents must guide their institutions in developing a common vision with a mutually agreed upon definition and understanding of institutional success in order to make significant progress towards achieving any significant goal (McDonald, 2007). A common vision provides inspiration to engage in the work necessary to increase student completion rates, while the development of measurable objectives provides a tangible goal to assess success (Hallinger & Heck, 2002). The development of these two constructs is central to the role of community college leaders in improving student completion rates.

Stakeholder Performance Goals

Table 1 presents the global goal set forth by the American Association of Community Colleges and the assumed stakeholder goals in relation the global goal.

Table 1

Global Goal and Assumed Stakeholder Performance Goals

Global Goal		
By 2020, the American Association of Community Colleges seeks to increase the rate at which students earn degrees and certificates by 50%.		
Presidents	Deans and VPs	Instructional Faculty
By 2020, presidents will lead organizational change efforts that result in a 50% increase in student completion rates.	By 2020, academic deans and VPs will implement programming focused on student completion that leads to a 50% increase in fall-to-fall retention rates.	By 2020, community college instructional faculty will increase course success to 90%.

Stakeholder Group for Study

While the contribution of all stakeholders impacts the ability of community colleges to achieve the global goal of increasing student completion rates by 50%, it is the community college presidents who leadleads the effort. A complete analysis of student completion would take into consideration all stakeholders. For practical purposes, this study focuses on the presidents and their ability to lead organizational change efforts that result in a 50% increase in student graduation rates on their respective campuses by 2020. Presidents provide leadership that helps establish the culture of the institution, set institutional goals, allocates funds, and creates and enforces institutional policy. These functions hold the greatest ability to influence the overall completion rate at individual institutions. Without enough emphasis on student completion by college presidents through the establishment of aggressive goals, allocation of

funds for completion initiatives, and comprehensive planning to improve completions, it is unlikely that the faculty or deans at a community college could increase the rate at which degrees and certificates earned.

Failure to address student completion at community colleges is potentially damaging from the societal level to the individual level. From the broadest perspective, the economic prosperity of the country is, at least in part, contingent on an educated workforce (Woessmann, 2016). Since community colleges enroll approximately 7.3 million credit students and account for 45% of undergraduate student enrollment in the US, these institutions must increase completion rates to produce a workforce that can meet employment needs (AACC, 2016). For individuals, the importance of completing community college degrees and certificates is directly tied to their ability to be economically self-sufficient. Earning a community college degree can increase average earnings by as much as $8000 annually, which can mean the difference between self-sufficiency and reliance on social service support (Jepsen, Troske, & Coomes, 2014).

Purpose of the Project and Questions

The purpose of this project was to explore the degree to which community colleges are meeting the goal of increasing the rate at which students attain degrees and certificates by 50% over the 2010 baseline by the year 2020. The analysis focused on the knowledge, motivation, and organizational influences related to increasing student completions. While a complete performance evaluation would focus on all stakeholder groups, for practical purposes the stakeholder of focus in this analysis was community college presidents. In particular, the study focused on presidents who serve as the chief executive officer of their respective institutions. For the purposes of this study, to be considered a chief executive the incumbent needed to report directly to the governing board of the institution and have broad, unilateral oversight of all

college operations. Presidents serving within the context of multi-campus community college district in which they report to an individual such as a chancellor, for example, were excluded from consideration. Presidents in a position to guide the development of the vision of the college and had significant oversight to operationalize that vision are best positioned to drive significant organizational change to achieve the stated goal.

As such, the following questions will guide this study:

1. To what extent are community colleges on track to achieve the goal of increasing student degree and certificate attainment rates by 50% by 2020?
2. What knowledge and motivational factors related to leading organizational change influence the ability of presidents to effect a 50% increase in student completion rates in community college environments?
3. How does the interaction between organizational culture and context with the knowledge and motivation of community college presidents affect student outcomes?
4. What are the recommended knowledge and skills, motivation, and organizational solutions for presidents to increase student completions?

Methodological Approach and Rationale

This dissertation was a field study that focused on the ability of community college presidents to influence the primary metric of student completion rates by providing organizational leadership to their respective college communities. The questions that guided the study lend themselves to an "emergent" research design that can be responsive to the information presented by study participants (Merriam & Tisdell, 2016). Because there is no predefined, singular path to achieving higher rates of student completions, study participants provided multiple perspectives regarding the knowledge and motivation necessary to achieve the stated

goal. Participants also provided insight into how their own knowledge and motivations interact with the organizational opportunities and barriers within their institution. By engaging in a qualitative field study examining the interaction of executive leader knowledge and motivation with organizational influences that may hinder successful organizational change, a broader understanding of the common gaps in leadership knowledge and motivation that negatively influence community college completion rates may be brought to light.

The goal of a qualitative study, as with any study, is to provide accurate, dependable, and reliable data and analysis (McEwan & McEwan, 2003). Central to answering qualitative research questions is the notion of human perspective (Guba & Lincoln, 1994). Through an in-depth, holistic exploration of the topic at hand with a carefully selected cohort of participants, the researcher seeks to bring to the fore common themes on the nature of the problem. More specifically, the study sought to explore potential gaps in contextual knowledge that may prevent community college presidents from achieving stated goals. Similarly, the study asks how motivation affects leaders' desire to engage in goal attainment behavior. To establish a higher degree of credibility, multiple sources of data are valuable. Creswell (2014) suggests that using multiple data sources can increase credibility in qualitative studies. Thus, this qualitative study will rely on interviews as well as document analysis to enhance credibility.

Organization of the Project

This dissertation is organized in five chapters. The preceding chapter provided an overview of the issues associated with community college completion rates. The global goal of increasing the rate at which degrees and certificates are awarded as well as the stakeholders' roles in achieving that goal were also introduced. Chapter Two provides a review of the literature in community college reform efforts to improve completion rates, an examination of

research-based best practices in this area, and a brief examination of best practices in change management. Chapter Three provides an analysis of the interaction of the assumed knowledge, motivation, and organizational issues preventing goal attainment, as well as methodology used to establish the study participants, data collection, and analysis methods. Chapter Four presents results from the data analysis. Finally, Chapter Five presents suggested solutions based on the data from the study and existing literature. Recommendations for closing the perceived gaps in performance are presented using an implementation and evaluation plan.

CHAPTER TWO: REVIEW OF THE LITERATURE

The literature review examines the research associated with community college completion rates. This effort is undertaken to understand the breadth of reform efforts from which community college executive leaders can draw in their own attempts to improve completion rates. The review begins with an overview of the development of the current reform environment. A closer examination of current research on the role of administrative functions, curricular efforts, and student affairs, non-academic support programs is then presented. The review will then move to a more focused examination of the knowledge, motivation, and organizational influences experienced by executive leaders using a Gap Analysis framework (Clark & Estes, 2008).

Community College Completion Rates

Leadership plays a critical role in improving the outcomes of any organization (Carter & Greer, 2013). Leaders must apply specific content knowledge in combination with appropriate leadership skills to successfully move organizations forward (Noruzy, Dalfard, Azhdari, Nazari-Shirkouhi, & Rezazadeh, 2013; Thomas, 1988). Community colleges are multifaceted organizations with numerous stakeholders who may hold significantly different perspectives on how to improve the institution. Increasing the rate at which students complete an associate degree or certificate at community college is complex and multi-tiered problem requiring executive leaders to have a broad range of knowledge and competencies (Nevarez & Wood, 2012). This complex set of skills needs to be brought to bear within the context of the current reform environment if the goal of increasing student completion rates of degrees and certificates by 50% by 2020.

Despite the AACC challenge, completion rates have remained stagnant. While measures of completion rates vary across organizations, the literature shows each measure has remained consistent over time. For example, the United State Department of Education defines community college completion rates as the number of first-time, full-time students beginning in the fall term and completing a degree within 3 years at the original institution of enrollment. By this measure, completion rates have remained between 19.5% and 23.6% between 2000 and 2010 (National Center for Educational Statistics, 2014). In comparison, the National Student Clearinghouse examines student cohorts after six years and allows for students to complete their degree at any institution. For full-time students, this measure, while much higher at 40% +/- 2%, has also remained consistent since the 2006 cohort (National Student Clearinghouse Research Center [NSCRC], 2012, 2013, 2014, 2015, 2016, 2017). Regardless of the preferred metric, community college executive leaders have a crucial role to play to achieve the stated goal.

The National Reform Environment

Significant reform efforts in community colleges were set in motion by the release of "Higher Education for Democracy: A Report of the President's Commission on Higher Education" in 1947. The influence of this document on the higher education landscape is difficult to overstate. The report made sweeping recommendations for increasing participation, ending discrimination in college enrollment practices based on race, religion, and gender, and eliminating financial barriers to postsecondary education access. The commission clearly indicated that postsecondary programs should be open to all individuals capable of completing a given course of study. While inclusive of all levels of postsecondary education, the report emphasized the importance of community colleges in achieving these ambitious goals.

Because the recommendations highlighted community colleges and were closely linked to the community college mission, the sector saw unprecedented growth in the decades following the release of the report (Gilbert & Heller, 2013). Between 1961 and 1970, 497 community colleges were opened in the United States. The rapid growth in the sector brought continuing and ongoing calls to improve the quality of education from the academic community and focused primarily on organizational structural reform and pedagogical improvements (Clark, 1960; Cohen, 1969; Dougherty, 1991; McCabe, 1981). The nature of these ongoing efforts created the environment from which a broader approach to reforming the community college system emerged.

The current reform environment requires community college leaders to be well-versed in the history, theory, and research literature in the field. The creation of this environment began in 1996 when community colleges prominently reentered the national political discourse. President Bill Clinton proposed tax credits and deductions that would meet the cost of community college and every president since that time has included community colleges in their education policy agenda ("Bill Clinton 1996: On the issues: Improving education," n.d.). This political spotlight increased the pressure on community colleges to show improved completion outcomes, an effort that generated significant interest among philanthropic, non-profit organizations as well as the national community college organizations (Lester, 2014).

One of the most prominent and influential national reform efforts is "Achieving the Dream" (AtD). This is a privately funded, non-profit initiative that partners with community colleges and community college support organizations and emphasizes a careful examination of institutional data for decision-making in the areas of program development and funding, and the implementation of research-based best practices specifically focused on increasing completion

rates ("Achieving the Dream," n.d). As a participating and founding partner in AtD, the American Association of Community Colleges' (AACC) subscribes closely to this approach. Further, the AACC "Completion Agenda" which calls for the participating colleges to increase the number of degrees and certificates awarded by 50% between 2010 and 2020 closely mirrors the goals set forth by AtD shaping the current reform environment in which community college leaders must operate (Bailey, 2016; Boggs, 2011; Maxwell & Person, 2016). By shaping the community college reform environment to emphasize the use of data for decision-making, AtD created a need for community college leaders to be well-informed of the research literature in this area (McNair, Duree, & Ebbers, 2011). Critical areas for executive leader consideration that influence student completion rates include student support programs inclusive of developmental education, and readiness for organizational change.

Student Support Programs

Empirical research in the area of non-academic student support service programs is extensive. Studies have been conducted examining the effectiveness of a wide range of student services programs designed to improve outcomes such as term to term retention, course completion, transfer to a four-year institution for continued study, and completion of a community college credential (Kuh, O'Donnell, & Schneider, 2017; Martin, Galentino, & Townsend, 2014; Price & Tovar, 2014; Sandoval-Lucero, Antony, & Hepworth, 2017; Saxon & Morante, 2014; Scrivener et al., 2008). Much of this research, however, focuses on the implementation of a specific program adapted for the characteristics of a given institution. Other institutions may implement a program of the same name but change program characteristics for their perceived needs. No broadly accepted framework for understanding the commonalities and differences across institutions has yet emerged (Hatch, 2016). Several literature reviews (Bailey

& Alfonso, 2005; Brownell & Swaner, 2009; Crisp & Taggart, 2013; Price & Tovar, 2014) have sought to identify promising or high-impact practices that demonstrate efficacy in increasing persistence and completion metrics in community colleges. Numerous practices are identified in these reviews. Consistently identified practices include first-year experience programs, college success strategies courses, extended orientation programs, learning communities, and supplemental instruction. Despite the consistency with which these programs appear in reviews as promising or high-impact programs, providing a uniform definition of each program and its components remains a challenge making it difficult to provide information to individual institutions on how to develop, implement, and scale such programs (Hatch, 2016).

The Center for Community College Student Engagement (CCCSE) developed a student timeline framework that categorizes student support programs into three areas: 1) planning for success, 2) initiating success, and 3) sustaining success (CCCSE, 2012). While the CCCSE framework does not provide program characteristics for each category of program, several key design principles are offered that are supported more broadly in the literature. These design principles include early integration into college life, the provision of coherent academic pathways, integrated classroom and support services, intensive student engagement, and faculty professional development (CCCSE, 2012, 2013, 2014). An examination of programs that offer students an early integration to college life, coherent academic pathways, and ongoing intensive student engagement programs is presented to garner a deeper understanding of the factors that impact student success. There is very limited research that explores the relationship between professional development and student outcomes and so is not addressed as part of this review. While countless other factors impact students' ability to succeed, the goal of this review is to present factors over which community college executive leaders have influence.

Early integration into college life. Within the CCCSE (2012) framework, programs within the "planning for success" area focus on integrating students into college life. Early integration into college life is viewed as activities that occur prior to students matriculating and the initial three to four weeks of the students' first term. Practices included in this area include assessment and course placement, course registration, and orientation. Each of these practices has demonstrated efficacy over time.

Assessment testing and mandatory placement are positively correlated to higher grade point averages and increased persistence particularly in the areas of developmental education (Boylan, Bliss, & Bonham, 1997; Morante, 1998; Saxon & Morante, 2014). More recently, the efficacy of placement instruments has come into question particularly in the popular media (Scott-Clayton, 2012). While scholars acknowledge these criticisms, the practice of placing and mandating coursework is largely supported when assessment is conducted in an effective manner (Saxon & Morante, 2014). Connected closely with assessment and placement practices are registration practices.

Ample evidence indicates that students who enroll prior to the start of course perform better in the class and are more likely to be retained into the following term and year (Smith, Street, & Olivarez, 2002; Burns, 2010). Further, Crosta (2014) found that enrollment intensity and continuity were correlated to successful transfer to four-year institutions and credential completion. That is, students who enroll term over term without interruption (enrollment continuity) are more likely to complete a community college credential. Similarly, students who enroll in full-time course loads are more likely to successfully transfer to a four-year institution. The planning process by which students determine their schedules also affects student outcomes.

Academic advising provides students with knowledge, guidance, and support within the community college environment to select a program of study. Early selection of a program of study with appropriate and skilled guidance demonstrates a positive effect on student completion (O'Banion, 1994; Price & Tovar, 2014). While guidance may be provided through varying mechanisms, early student advising often occurs through new student orientation programs. Program components vary widely for orientation and academic planning programs in terms of duration, mandatory versus optional, and intensity (contacts with program faculty and staff). The overall intent of these programs, however, is to engage students with the college early in their student experience as early engagement has shown positive effects on retention and persistence measures (Sandoval-Lucero, Antony, & Hepworth, 2017; Terenzini et al, 1994; Townsend & Wilson, 2006). Closely related to academic planning efforts are institutional practices that provide students a coherent academic pathway.

Coherent academic pathways. The CCCSE (2012) framework indicates that institutions should provide students with clearly defined activities, inclusive of multi-term course planning, that lead to a specified outcome such as a credential, degree, or transfer to a four-year institution. Applying this principle, the American Association of Community Colleges launched the Pathways initiative in 2015 intended to support member colleges in the design and implementation of structured academic and career pathways. The project encourages colleges to develop clear program maps that students can follow to achieve their stated goals. The initiative further emphasizes that colleges should assist students in selecting a pathway upon entry into the institution (AACC, n.d.). Both activities are broadly supported by theory and research.

The principles on which the AACC Pathways initiative and CCCSE framework are grounded firmly in motivation theory. Selecting a clear program of study is based on the notion

that goal setting improves motivation and thus performance. The positive influence of goal setting on motivation is established in several theoretical frameworks including social cognitive theory (Bandura, 1977), goal orientation theory (Kaplan & Maehr, 2007), expectancy-value theory (Eccles, 2006) and others, all of which have been served as a frameworks for empirical studies to demonstrate a positive effect on student outcomes (Moeller, Theiler, & Wu, 2012; Pajares, 1996; Pintrich, 2000). In a meta-analytic study examining the psychological factors that influence community college student outcomes, Fong et al. (2017) found that student persistence and achievement were more strongly correlated with motivation and self-perception than other factors examined. Jenkins and Cho (2013) demonstrated the efficacy of the approach more directly. In a longitudinal study spanning five years, they found that community college students who entered a clearly defined program of study within their first year of college were more likely to complete a credential or transfer. While the pathways approach appears to produce positive results for community college students who self-identify as seeking a degree, credential, or transfer outcome, the research generally does not take into consideration students who may have other primary reasons for attending college. Since student intent may influence completion outcomes, a broader consideration of intent is necessary to garner a broader understanding of the effect of pathways.

There are very few studies that examine how non-degree or certificate seeking students affect community college completion rates overall. Studies exploring how student intent affects the likelihood of degree or certificate completion are available and shed some light on the topic. In a review of the community college trends, Bryant (2001) notes several studies found students enroll in community college for the reasons other than obtaining a credential at a rate of 10% to 12%. Just five years later, Bailey, Leinback, and Jenkins (2006) conducted a study that found

17% of students reported “personal enrichment” as their primary reason for college enrollment. Both 2001 review and the 2006 study generally support the conclusion that student intent to complete a degree or certificate affects outcomes. The critical difference in the data presented by these two studies is the number of students reported as “personal interest” or “personal enrichment” and likely results from the data sets used for analysis.

In their 2006 study, Bailey, Leinback, and Jenkins used the Beginning Postsecondary Student data set from National Center for Education Statistics (2003) and found a correlation between completion rates and students’ primary reason for enrollment. The study found that 17% of students reported “personal enrichment” as their primary reason for enrollment, 23% said “job skills,” 36% said “transfer to a 4-year program,” and 21% said “obtain an Associate degree or certificate.” Not surprisingly, those reporting that “obtaining job skills” as their primary reason for enrollment completed degrees or certificates at substantially lower rates over a six-year term, 30% compared to the average of 36% for all students. Interesting to note, however, is that students reporting their primary reason for enrolling as “personal enrichment” and “obtain a degree or certificate” completed degrees and certificates at the same rate.

Horn, Nevill and Griffith (2006) use data from the 2003-2004 National Postsecondary Student Aid Study to examine the effect of intent and commitment on student persistence. They use enrollment intensity and stated intent to classify students as either “more committed” or “less committed” to completing a credential. Students enrolled in a formal degree program attending classes at least half time and reporting an intent to obtain a credential or transfer were classified as “more committed” while students enrolled in a formal degree program for less than half time or not reporting intent were classified as “less committed.” Those not enrolled in a formal degree program were classified as “not committed.” Application of this criteria results in 49% of

students showing as “more committed,” 39% as “less committed” and 12% as “not committed.” In this study, only the “not committed” group was defined as “non-degree seeking.” Additionally, the study population included all students eligible for federal financial aid enrolled between July 1, 2003 and June 30, 2004, and not an exclusive cohort of students beginning in a specific academic year. Their findings are consistent with those of Bailey, Leinback, and Jenkins (2006). The analysis indicates that students in the “more committed” group were more likely to have either obtained a credential or persisted to the subsequent fall semester than those in the “less committed” or “not committed” groups (83%, 70%, and 58% respectively). Regardless of the methodology, there is support for the notion that student intent can affect student completion metrics.

The conclusions reached in these studies as well as in broader studies of goal setting and motivation serve to point out that taking into consideration student intent may change student completion outcome metrics for community colleges. Research on the effectiveness of creating coherent academic pathways may also be affected in that comparison groups may have more students who do not have a strong intention to complete a degree or certificate and thus do not select a pathway or major. Two additional dimensions of the Pathways initiative include, “Help students stay on the path,” and “Ensure students are learning” (AACC, n.d.). Activities that support these dimensions align with programs which the CCSSE (2012) framework categorizes under “intensive student engagement.”

Intensive student engagement. The “initiating success” portion of the CCCSE (2012) framework focuses on practices that foster intensive student engagement particularly within students’ first year of course work. Within the context of the community college environment, the first year of course work may occur over multiple years since many students enroll part-time.

The most salient definition of student engagement within the context of the CCCSE framework and for the current study is the extent to which students participate in educationally effective practices in and out of the classroom that produce measurable, desired outcomes (Finley, 2011). A broad range of programs that emphasize student engagement have demonstrated efficacy in improving student outcomes particularly related to course success, persistence, and retention (Dudley, Liu, Hao, & Stallard, 2015). Two programs broadly adopted within this framework at community colleges include first-year experience programs and developmental education (CCCSE, 2012).

Developmental education is intended to enhance the academic and college success skills of students who demonstrate deficiencies in the areas of math, reading, and writing. Many programs intentionally incorporate college success skills into the math, reading, and writing content areas although there is significant variation in the degree of emphasis placed on such skills (Bailey, 2009). Jaggars and Stacey (2014) estimate that a full 60% of entering community college students require at least one developmental course. The success of developmental education programs is central to a college's ability to increase completion rates in large part because of the percentage of students who require remediation. Accelerated developmental coursework coupled with academic supports such as tutoring are considered highly effective practices (Hodara & Jaggars, 2014). Despite these findings, there is significant disagreement on the efficacy of developmental education.

More recent research has called into question the benefit of developmental education particularly in studies that focus on completion of college-level course work in math and English as the primary benchmark for the success of these programs (Crisp & Delgado, 2014; Xu, 2016). Of particular note is research conducted by the RP group for the California community college

system. Bahr et at. (2017) concluded that students who completed high school within the last 10 years are substantially more likely to complete college-level courses in math and English if they never enroll in a developmental course regardless of placement results. This study is of importance as the state legislature of California passed legislation (Assembly Bill 705) directing colleges not to impede students from enrolling in college level coursework unless the institution can demonstrate a high likelihood of failure without remediation. The California Community College Chancellor's office subsequently developed placement rules and suggested student support based on the study to ensure compliance with the new legislation. The new guidance indicates that any student who completed high school within the last 10 year be placed into a college-level coursework in both math and English (Hope & Stanskas, 2018). The effects of the legislation and new placement rules are yet to be seen as implementation of the is not required until the 2019 academic year. Over the next several years, support programs for students who traditionally enroll in developmental coursework may take on far greater significance. First-year experience programs which often run in parallel with developmental education programs are an excellent example.

Notwithstanding a common name, there are countless program designs in the first-year experience arena. Kuh, O'Donnell, and Schneider (2017) indicate that high quality first-year experience programs "emphasize critical inquiry, writing, information and media literacy, collaborative learning, and other skills that develop students' intellectual and practical competencies" (p. 10). Regardless of specific program design elements, students who participate in first-year experience programs show increased positive relationships with faculty, understanding of college resources, involvement in campus activities, and better time-management skills than non-participating peers (Hatch & Bohlig, 2016). Typical elements of

first-year experience programs found to influence student success positively include student support programs such as supplemental instruction, learning communities, and study skills or student success courses (Fike & Fike, 2008; Scrivener et al., 2008; Windham, Rehfuss, Williams, Pugh, & Tincher-Ladner, 2014).

Supplemental instruction is an integrated academic support program widely adopted in the community colleges. Typically, supplemental instruction offers voluntary study sessions facilitated by trained student or faculty tutors. Variations of supplemental instruction are numerous and include VSI which offers study session virtually and structured learning assistance which makes sessions mandatory (Bettinger, Boatman, & Long, 2013; Huang, Cui, Cortese, & Pepper, 2015). The success of students is largely predicated on student attendance and participation. For participating students, supplemental instruction has consistently demonstrated positive student outcomes related to both retention and completion (Crisp & Taggart, 2013). Learning communities are another popular integrated support structure in community colleges.

In general, learning communities create cohorts of students who take two or more classes together and provide at least one integrated curricular component between the courses (Jackson, Stebleton & Laanan, 2013). Once students have matriculated into a community college, early engagement with the college community show positive effects on retention and completion. While Learning Communities take on various programmatic structures, vary in the level of curricular integration, and differ widely in student requirements, the strategy is consistently identified as a best practice for student engagement. Despite being identified as a high-impact practice by CCCSE (2012), the empirical evidence on learning communities is mixed. Some studies have showed a moderate impact on course completion and course performance (grades) but evidence demonstrating longer term effects on persistence and completion is lacking (Crisp

& Taggart, 2013; Visher, Weiss, Weissman, Rudd, & Wathington, 2012). Sometimes integrated into learning communities, study skills or student success courses have demonstrated efficacy in improving some student outcomes.

The intent of student success courses is to help students build knowledge and skills necessary for success in college. Common topics range from study and time-management skills, test taking, exploration of learning styles, campus facilities and support services, motivation to succeed, and college and career planning (Derby & Smith, 2004). Note that while the application of learning styles to improve student outcomes is not supported in the academic literature (Kirschner & van Merriënboer, 2013; Pashler, McDaniel, Rohrer, & Bjork, 2008), many community colleges continue to use this terminology and framework particularly within the context of student success courses. Regardless of the varied topics covered, research has consistently demonstrated positive student outcomes for those who participate in such courses. Students who enroll in success courses are more likely to be retained in the following term and year, more likely to complete degree-applicable coursework in their first year, and more likely to transfer to four-year institutions (Zeidenberg, Jenkins, & Calcagno, 2007). According to Cho and Karp (2013), positive effects are stronger when students enroll in these courses during their first term at community college.

Readiness for Change

Organizational readiness for change (OCR) is an important factor in the successful implementation of new policies, programs, and practices designed to improve student outcomes (Shea, Jacobs, Esserman, Bruce, & Weiner, 2014). Despite a large body of research, an agreed upon definition or measure of OCR has yet to emerge. Nonetheless, an examination of the literature can provide insight into the need for laying the groundwork for successful change

efforts in community colleges. The OCR literature is examined from three perspectives. First, OCR is used as a lens to examine resistance to change within organizations. Second, the role of leadership in preparing organizations for change is examined using Weiner's (2009) theoretical framework. Finally, the role of the community college president and perceived necessary competencies is briefly explored.

Organizational readiness for change. Increasing the number of students who complete a degree or certificates at community college by 50% by 2020 will require significant organizational change (McClenney, 2013). Organizational readiness for change (ORC) plays a significant role in the success or failure of initiatives to achieve desired outcomes. McNabb and Sepic (1995) defined ORC within the context of organizational culture and organizational climate. The culture of an organization is defined the deeply rooted set of value and beliefs that define behavioral norms within the organization (Schein, 1996, 2004). Organizational climate refers to behaviors or actions which are expected, supported, and rewarded (Schneider & Rentsch, 1988). Defining ORC within the constructs of organizational culture and climate provides a window into the broader reasons for why change efforts fail. The failure of change efforts is often attributed to leaders, but the reasons may be more closely tied to deeper cultural values and beliefs and the associated operating environment that together produce significant organizational resistance to change (McNabb & Sepic, 1995).

The resistance to change efforts is well documented within the community college environment. McArthur (2002) and Levin, Jackson-Boothby, Haberler, and Walker (2015) indicate that a lack of faculty to participate in decision-making processes particularly in matters of perceived importance causes resistance. Ford, Ford, and D'Amelio (2008) see resistance as a "sense making" activity that could be better utilized by the agents of change. They also suggest

that change agents often violate trust of constituents through broken agreements raising the level of resistance. Locke and Guglielmino (2006) suggest that subcultures within community colleges experience institution-wide change initiatives differently and that they in turn can influence the success or failure of the change often unbeknownst to leadership. While a comprehensive examination of the reasons for resistance to change is beyond the scope of this project, it is important to note that significant resistance is present. As such, examining executive leaders' understanding of and readiness for organizational change is pertinent.

The role of leadership in organizational change. While a broadly accepted framework for organizational readiness for change has not yet emerged, Weiner (2009) provides a theoretical framework suggesting that ORC is a multi-level, multi-faceted construct reliant on change commitment and change efficacy. He defines change commitment as the level of members' shared resolve to execute the change and change efficacy as shared belief in their collective ability to successfully execute the change. Other considerations such as an organization's financial, technical, human, and other material resources play important roles in an organization's readiness as well. Weiner's (2009) theory examines how perceptions of these structural factors affect members' change commitment and efficacy. When considering the circumstances necessary to generate readiness, consistent messaging and actions from leaders, social information sharing, and a shared vision and value of the change are cited by Weiner (2009) as well as numerous other researchers in varying contexts (Armenakis & Bedeian, 1999; Battilana, Gilmartin, Sengul, Pache, & Alexander, 2010; Holt, Armenakis, Feild, & Harris, 2007; Van Dam, Oreg, & Schyns, 2008; Van der Voet, Kuipers, & Groeneveld, 2016). The evidence seems to suggest executive leadership plays a critical role in preparing organizations for successful change efforts.

An examination of studies exploring OCR reveals a consistent underlying assumption that it is the responsibility of executive leaders to prepare the rest of the organization for change. As the chief executive, community college presidents are organizationally positioned to initiate and sustain change. They are positioned to interpret and communicate the mission and vision of the college, establish institutional outcomes, direct resources, and as such to change faculty and staff perspectives on both change commitment and efficacy. Further, the board of trustees and community stakeholders often expect college presidents to work intensively on improving student outcomes (Burrows, 1999; Donahue, 2003). The combination of the expectations of community college presidents' performance, the central role executive leaders play in the creating an environment of successful organizational change, and the structural positioning of the presidency, suggest that it is appropriate to hold incumbents in these positions accountable for the primary metric of student completion rates.

Community college president competencies and roles. The core role of the community college leaders has remained fixed over the last fifty years. As early as 1960s, scholars were characterizing the role of the community college president is one of the most difficult and complex leadership positions in American society. Gillie (1967) indicated campus planning for the physical plant, economic planning inclusive of fundraising, program planning to meet student and community needs, and merging of institutions to become a comprehensive community college as key areas of responsibility that made the position so complex and for which a president is likely to be held accountable. The goal of each of these activities is to improve the student experience and ultimately, student completion outcomes. While executive leaders' goal of improving student outcomes has remained fixed, the scrutiny under which they work, and the organizational issues faced have changed significantly.

Between 1969 and 1989, calls for greater accountability and the advent of broader collective bargaining signaled a meaningful change in the role of community college leadership. The role of the president shifted from a highly autonomous decision-maker to that of a political leader who needs to demonstrate flexibility, thoughtfulness, and vision to his or her followers and lead in ways that include numerous stakeholders in the decision-making process (Lewis, 1989; Sullivan, 2001). A 2012 report issued by the AACC highlights four areas of competencies necessary for community college leaders to succeed: 1) organizational strategy, 2) institutional finance, research, fundraising, and resource management, 3) communication, and 4) collaboration (AACC, 2012). The AACC competencies at once reflect the unchanging core role of community college leaders, that of improving student success, and the changing environment in which presidents lead. While community college boards of trustees and presidents themselves generally agree that the AACC framework identifies the appropriate skill set (Dupree & Ebbers, 2012), researchers and presidents alike have questioned the likelihood of one individual developing all the competencies (Gille, 1967; Goff, 2003). Considering the complexity of the framework, it is reasonable to assume that presidents need a deep knowledge of community college practices in numerous areas to develop a coherent organizational strategy and direct its resources towards achieving the stated goal. Further, they must be motivated to enact change in a complex, changing context.

The current study sought to examine the underlying knowledge requirements and motivation necessary for presidents to deliver leadership to effect organizational change leading to increased student completion rates. Examining these factors within the organizational context of community colleges and exploring how knowledge, motivation, and organizational factors influence one another is intended to expose gaps that can potentially be systematically addressed

(Clark & Estes, 2008). A more focused examination of knowledge and motivation factors that may influence presidential leadership, as well as the organizational context of how community colleges operate is presented using the Clark and Estes (2008) gap analytic framework.

Clark and Estes Gap Analytic Framework

Clark and Estes (2008) indicate that organizational performance issues are caused by influence factors related to knowledge, motivation, or organizational causes. If a gap exists between actual performance and desired performance, a close examination of the knowledge and motivation of stakeholders, and the organizational factors that influence the stakeholder can identify the specific causes for the performance gap (Clark & Estes, 2008). Krathwohl (2002) provides a revision of Bloom et al.'s (1956) *Taxonomy of educational objectives* in which the knowledge dimension is formed by four distinct categories – factual, conceptual, procedural, and metacognitive – that provide a useful frame through which to explore potential performance issues related to knowledge. Similarly, Rueda (2011) describes three components of motivation that can each influence stakeholder performance. These include active choice, a conscious decision to actively pursue a specific goal, persistence, the decision to pursue a specific goal in the face of distractions or competing goals, and mental effort, the willingness to exert the required mental energy appropriate for completing the task at hand. Lastly, organizational influences such as a lack of effective, efficient work process, lack of resources, or organizational culture elements can all impact stakeholder performance (Clark & Estes, 2008). Examining the literature that explores the knowledge and motivation necessary for successful executive-level leadership and the organizational context of community colleges underpins the conceptual framework developed for this study.

Knowledge, Motivation, and Organizational Influences Affecting Community College Presidents

The stakeholder group of study are community college presidents. As such, the knowledge specific to presidents that, if acquired, can help leaders positively impact completion rates is important to explore. Similarly, motivation plays a key role in the actions or lack of actions in which individuals engage (Rueda, 2011). The constructs of self-efficacy and utility value were selected to explore the motivation of executive leaders. Finally, understanding the organizational context in which leaders act and how that context influences their ability and motivation to enact change towards the desired goal rounds out the preparation for a study utilizing the gap analysis framework (Clark & Estes, 2008).

Knowledge Influences

Leaders must apply specific content knowledge to successfully lead organizational change and improvement efforts (Noruzy, Dalfard, Azhdari, Nazari-Shirkouhi & Rezazadeh, 2013; Thomas, 1988). Deficiencies in the necessary knowledge and skills among executive leaders can potentially hinder the ability to successfully move organizations toward the stated goal (Rueda, 2011). Understanding the knowledge and skills executive leaders currently possess in the areas of community college best practices and leadership is a necessary step in determining areas of deficiency. An examination of the existing research literature can help determine the critical skills leaders need to successfully lead organizational change. Comparing empirically validated skill sets to current knowledge and skills of executive leaders can help determine if critical gaps exist that are impacting performance (Clark & Estes, 2008). Specifically, increasing the number of students who complete an associate degree or certificate at their community college requires executive leaders to have a broad range of knowledge and

skills (Nevarez & Wood, 2012). The ability to apply research-based knowledge and leadership skills within their specific institutional context is central to achieving this goal (Goldrick-Rab, 2010; Eddy, 2005).

Knowledge of institutional context. Contextual knowledge of the institution type and the specific institution are required to improve performance under two specific circumstances; first when individuals do not know how to achieve their performance goal, and second, when developing a solution will require novel problem-solving strategies (Clark & Estes, 2008). An appropriate framework should be used when addressing performance issues affected by the change agent's lack of knowledge. Krathwohl (2002) provides a revision of Bloom et al.'s (1956) Taxonomy of educational objectives in which the knowledge dimension is formed by four distinct categories, factual, conceptual, procedural, and metacognitive. Each category of knowledge can be examined to help determine the cause of performance issues and the ability of individuals to address those issues (Rueda, 2011).

Factual knowledge refers to the commonly accepted facts within a given field or area of study and includes axiomatic knowledge required to understand and function within a given discipline (Krathwohl, 2002). Metacognitive knowledge refers to a self-awareness of cognitive process that allows individuals to consider the context of a given problem, including why and when one should engage in a specified behavior and is critical for executive leaders (Rueda, 2011). This category of knowledge is particularly important for academic leaders to make adjustments to their behavior that may be required to achieve the desired outcome (Kok & McDonald, 2017; Langley, Smallman, Tsoukas, & Van de Ven, 2013). Factual knowledge and metacognitive awareness are critically important for executive leaders and can be considered foundational to providing community college leadership. The current study, however,

emphasizes conceptual and procedural knowledge to evaluate the extent to which community college presidents are actively engaging in leadership activities to increase the rate at which student complete of degrees and certificates. Understanding of successful models, organizational structures, theories, and principles that affect community college completion rates, for example, is considered conceptual knowledge and is required for executive leaders to conceive of potential solutions to the issue (Goldrick-Rab, 2010; Krathwohl, 2002). Similarly, procedural knowledge, or knowledge that refers to steps taken to accomplish a task, is required when implementing organizational changes to achieve a different outcome (Bertram, Blase, & Fixsen, 2015; Krathwohl, 2002).

Knowledge of research-based best practices. Executive leaders need to have a thorough conceptual understanding of research-based best practices in student success at community colleges. The body of research knowledge relating to community college student success examines a wide range of factors that impact student completions. These factors include organizational structure and governance, curriculum design and delivery models, instructional practices, student demographics, and numerous program-specific interventions. Goldrick-Rab (2010) suggests three broad categories of research to consider when examining factors that impact student success and provides the framework for examining the conceptual knowledge of research-based best practices needed by executive leaders. The categories include macro-level opportunity structures, institutional practices, and student attributes. While community college presidents are unlikely to be expert in all areas, a novice level understanding in all areas and an expert level of knowledge in some areas may facilitate the ability to provide leadership to the broad constituencies involved in efforts to achieve higher levels of student completions (Nevarez & Wood, 2012).

Macro-level opportunity structures are defined as external factors such as state and federal governance structures and federal financial aid policy that either limit or facilitate community colleges ability to increase student completions (Goldrick-Rab, 2010). Executive leaders need to have some level of understanding that such external factors can significantly impact student completions. State governance structures, for example, can significantly impact community college funding and the ability of students to access higher education (Doyle & Zumeta, 2014). As states engage in revising funding formulas and focus more on outcomes-based funding models, executive leaders need to understand and respond appropriately (D'Amico, Friedel, Katsinas, & Thornton, 2014; Lahr et al., 2014). Similarly, the ability and ease with which students can access federal financial aid impacts students' ability to complete community college degrees and certificates (Boatman & Long, 2016; Scott-Clayton, 2015). Understanding the impact of policy changes on students and other how other colleges have changed institutional practices to successfully manage these challenges is critical knowledge for executive leaders to advance the cause of increased student completions.

Institutional practices are defined as policy and practice that can be shaped within the institution and affect student completion rates at the college in question (Goldrick-Rab, 2010). Examples of institutional practices include course offerings, faculty selection, organizational learning practices, and student support programs. Presidents need to have a clear understanding of which program offering might be most effective in addressing the issues associated with student completion and how those programs impact a diverse student body. For example, first-year experience programs that include a college success course are a popular intervention to address student retention. Research indicates that first-year experience programs show a positive effect on year-to-year retention but that such programs are more impactful on women (Windham

et al., 2014). Similarly, the type, timing, and cancelation of course offerings, faculty selection, and professional development opportunities for faculty all hold the potential to affect student completion rates. (Aragon & Johnson, 2008; Eagan & Jaeger, 2009; McAfee & Finch, 2013; Turner, González, & Wood, 2008). Understanding how individual programs affect student completion outcomes, as such, becomes a critical knowledge competency for executive leaders.

Finally, student attributes refer to characteristics and challenges with which students enter the institution that affects student completion rate and can include level of student demographics, academic preparation, economic circumstance, level of information regarding college, and social support structures (Goldrick-Rab, 2010). Executive leaders need a clear understanding of the school-work-life balance needs of diverse student populations to promote programs that can successfully increase retention and completion (Ingram & Gonzalez-Matthews, 2013). Social capital, in this context considered the network of family, friends, and college faculty and staff from whom a student can garner assistance, for example, impacts Hispanic and African-American students' ability to successfully persist and complete degrees and certificates (Sandoval-Lucero, Maes, & Klingsmith, 2014). First-generation college students present a broader challenge that presidents must understand. Engle and Tinto (2008) indicate that these students are four times more likely to leave college without completing a degree or certificate than students with parents who hold a college degree. In part, this disparity is due to first-generation students' lack of understanding of college systems and processes (Moschetti & Hudley, 2015). Similarly, academic preparation and socio-economic status of incoming students affect students' likelihood of successful degree and certificate completion (Bahr, 2007; Crisp & Delgado, 2014; Windham et al., 2014). To address the complex issue of community college completion rate, executive leaders need to understand how this multitude of issues interact to

create student experiences that lead to success or failure (Nevarez & Wood, 2012). The application of that knowledge requires that community college presidents have procedural knowledge of change management and leadership.

Knowledge of change management and leadership. Executive leaders must have the procedural knowledge necessary to successfully implement changes that produce improved student completion outcomes (Cloud, 2010). The ability to take the conceptual knowledge related to best practices in student completion and apply that knowledge within the context of a specific organization is a necessary skill when attempting to improve student outcomes (Levin, 1998; Lok & Crawford, 1999). In applying these skills, community college presidents must necessarily overcome resistance and create commitment among stakeholder groups as part of the change process (Matos Marques Simoes & Esposito, 2014; Dent & Goldberg, 1999). A complex mix of approaches is likely necessary. Understanding how and when to apply a directive versus collaborative leadership approach, how to adjust organizational funding priorities and institutional policy, and how to successfully make the case for change are requisite skills to successfully lead institutional change that results in increased student completion rates (Malm, 2008). From a leadership perspective, communication facilitates the successful application of all strategies.

The need for leaders to communicate clearly to stakeholders during the change process is well established and has been demonstrated to reduce resistance and uncertainty, increase readiness, and gain commitment among stakeholders (Allen, Jimmieson, Bordia, & Irmer, 2007; Brashers, 2001; Kitchen & Daly, 2002). Each of the factors are issues facing community college presidents as they engage in change efforts. A strong understanding of how to use these tools and techniques to successfully make the case for change is necessary (Caldwell, 1993). Within

the context of community colleges, renewed calls for greater accountability from accreditation agencies and lawmakers have resulted in the need to gather, analyze, and communicate data effectively (Ewell, 2011). National and local data are broadly available in community colleges and are commonly used by community college faculty and administrators (Jenkins & Kerrigan, 2008). The vast amount of data available can prove problematic causing biases in the decision-making process leading to conflict (Bawden & Robinson, 2009; Van Knippenberg, Dahlander, Haas, & George, 2015). Community college presidents are well-positioned to help provide context for the available data which can reduce the issues associated with information overload (Mayer, 2011). As such, the ability to distill and communicate relevant information can be seen as a key skill in community college change management.

Table 2 shows the two knowledge influences identified in the literature review.

Table 2

Assumed Knowledge Influences

Knowledge Influence	Knowledge Type
Presidents need to know research-based best practices in the areas of community college student success as it relates to course success, persistence, and completion.	Conceptual
Presidents need to master the implementation principles associated with successful organizational change efforts.	Procedural

Motivation Influences

Motivation is defined as a set of processes that lead an individual to initiate sustained, goal-directed behavior (Mayer, 2011). Motivation theorists strive to explain individuals' goal selection, their ongoing persistence, and the level of effort allocated to tasks required to achieve those goals (Wigfield, Eccles, Fredricks, Simpkins, Roeser, & Schiefele, 2015). The ability of

community colleges to significantly increase success rates is dependent on the motivation that executive leaders exhibit in driving change towards the identified goal. Within the context of a work environment, there are three primary components of motivation which are (a) active choice, a conscious decision to actively pursue a specific goal; (b) persistence, the decision to pursue a specific goal in the face of distractions or competing goals; and (c) mental effort, the willingness to exert the required mental energy appropriate for completing the task at hand (Clark & Estes, 2008). Examining the motivational influences that affect how executive leaders develop and exert leadership through active choice, persistence, and mental effort in service to the goal of increasing student completion can provide useful insights in identifying specific performance gaps (Clark & Estes, 2008).

There is extensive evidence that higher levels of motivation lead to better work performance making the examination of leader motivation a critical step in identifying performance gaps (Van Iddekinge, Aguinis, Mackey, & DeOrtentiis, 2017; Clark & Estes, 2008; Kuvaas, 2006). Executive leadership performance is most frequently judged through organizational performance and more specifically through follower performance. Research indicates that leadership directly impacts follower performance (Bellé, 2013; Dumdum, Lowe, & Avolio, 2013). If executive leaders are not motivated, follower and organizational performance will be diminished. As such, examining the mediating and moderating variables that affect the level of motivation of executive leaders can expose potential causes of overall organizational performance. While there are numerous motivational theories and constructs that can be applied to examine the efforts of executive leaders, this study focuses on expectancy-value theory and the self-efficacy theory. Expectancy-value theory provides a framework to explore executive leaders' perceptions regarding the value of the stated goal, and their expectations in achieving

the goal, while self-efficacy theory facilitates an exploration of leaders' perceptions of their ability to achieve the goal (Eccles, 2006; Pajares, 2006).

Expectancy-value theory. Expectancy-value theory examines achievement-related choices by considering the value individuals assign to a task or goal and the expectations individuals have for success (Eccles, 2006). The value that one assigns to a task can be characterized as the level of desire to complete the task and influenced by four related constructs which are (a) intrinsic value, the pleasure one associates with a task, (b) attainment value, task consistency with self-identity, (c) utility value, task value associated with obtaining short or longer-term goals or rewards, and (d) perceived cost, potential emotional or social cost associated with a given task (Eccles, 2006). The research literature broadly supports the influence of value on motivation and performance (van Knippenber, 2000; Wigfield & Eccles, 2000, Mayer, 2011). Examining the constructs that influence value can therefore provide insight into motivation-related performance issues (Clark & Estes, 2008).

Expectation, or formally, expectancies, are defined as an individual's belief regarding how well he or she will perform on a given task either in the near or long-term (Wigfield et al., 2015). Though closely related, ability beliefs are distinguished in this model and are defined as one's self-perception of his or her current competency in completing a task. The distinction between ability beliefs and expectancies is two-fold. First, expectancies focus on how well one believes he or she will do on an identified task whereas ability focuses on belief of one's level of competency. Second, expectancies focus on tasks that have yet to be completed while ability focuses on perceived current competency.

The value of student completion as a goal. Assigning a high value to a task or goal can significantly increase motivation to achieve that goal (Eccles, 2006). If executive leaders assign

the goal of increasing completion rates with a high utility value, it is more likely that they will engage the problem with greater mental effort and will persist in attempts to achieve the goal in the face of significant challenges (Clark & Estes, 2008). The challenges community college presidents face are numerous, come from diverse stakeholders, and can result in conflicting priorities (Beehler, 1993; Jones & Johnson, 2014; Kubala & Bailey, 2001). As such, the value that executive leaders place on increasing completion may be tempered by competing priorities. Malm (2008) identified seven challenges perceived by community college leaders: (a) fiscal, (b) internal culture, (c) employee recruitment and retention, (d) community relations, (e) infrastructure, (f) demand for new programs, and (g) student access to baccalaureate degrees. An examination of the internal culture of community colleges identified a corollary challenge as executive leaders noted that "embracing the value of results" was a challenge (Malm, 2008, p. 618). Presidents noted that generating commitment among stakeholder groups to focus on defined outcomes proved a significant challenge which is indicative of both resistance and lack of follower commitment to the goal. In addition to competing priorities and challenges, the history of community college may affect the value that executive leaders assign to the increasing student completions.

Community colleges have a long history of focusing on creating student access with considerably less emphasis on student completions (Gilbert & Heller, 2013; Dassance, 2011). While access to postsecondary education has increased significantly, many community college leaders believe this should remain a primary focus of the institution (Bragg & Durham, 2012). While increasing completion rates and simultaneously maintaining and improving access is possible, financial issues are often seen as hindering the ability to achieve both goals (Mullin, 2010; Belfield, Crosta, & Jenkins, 2014). The combination of competing priorities and historical

influences point to the possibility that presidents may place less value on completion rates than other priorities making it a viable line of inquiry. A lack of emphasis on the goal itself may reduce the motivation of executive leaders to work specifically on improving completion rates.

Self-efficacy theory. Self-efficacy refers to the extent to which an individual believes he or she can successfully complete a task (Pajares, 2006). A large body of research evidence indicates that the belief that one holds regarding their ability to bring about a desired outcome shapes their motivation to take the necessary action required to do so (Bandura, 2000). Because self-efficacy has such a strong influence on motivation and thus action, examining the how the efficacy beliefs of individuals attempting to achieve a specific goal can help expose performance issues related to motivation (Clark & Estes, 2008). Bandura (1977) notes four sources of efficacy expectations each of which can affect an individual's self-efficacy: (a) performance accomplishment, past experiences, successful or unsuccessful, (b) vicarious experience, the observation of peers who either succeed or fail at similar tasks, (c) verbal or social persuasion, intentional or unintentional messages sent by others, and (d) emotional states or arousal, an individual's physiological or emotional state (Bandura, 1977; Pajares, 2006). Each of these influences can have either a positive effect on an individual's self-efficacy; successful experience increases self-efficacy while a negative experience can reduce it, seeing peers succeed can increase self-efficacy while seeing them fail can lower it, and so on. Of the four influencers, Bandura (2000, 1977) indicates that performance accomplishments tend to be the most powerful.

Self-efficacy beliefs of presidents. Over the last 16 years, extensive research has shown a clear connection between leader self-efficacy and organizational and employee performance outcomes (Fitzgerald & Schutte, 2010; McCormick, 2001; Paglis & Green, 2002; Ramchunder & Martins, 2014). Examining each of the four influencers of self-efficacy, performance

accomplishment, vicarious experience, social/verbal persuasions, and emotional states, as they relate to community college executive leaders may provide valuable insight into how executive leader motivation is affecting completion rates. Executive leaders who have had previous success increasing success rates may demonstrate higher levels of self-efficacy than those who have not. Leaders who have been a part of teams that have increased completion rates may similarly demonstrate higher self-efficacy because they have vicariously experienced success. Similarly, the positive social persuasion and positive emotional state response that leaders experience over the course of their career is likely to influence their self-efficacy positively while negative experiences will decrease their self-efficacy (Whitt, Scheurich, & Skrla, 2015). Determining the influences that affect the self-efficacy and the executive leaders' level of self-efficacy can shed light on the motivation of executive leaders to engage in sustained efforts to increase student completion rate (Clark & Estes, 2008; Whitt, Scheurich, & Skrla, 2015, Pajares, 2006,). Table 3 shows the assumed motivation influences identified in this literature review.

Table 3

Motivation Influences

Assumed Influence	Construct
Presidents need to see the utility value in establishing and achieving high completion rate targets in achieving both their own professional goals and institutional goals.	Utility Value
Presidents need to have confidence in their ability to lead organizational change to drive increases in student completion rates.	Self-Efficacy

Organizational Influences

In addition to knowledge and motivational factors, organizational factors such as work processes, availability of material resources, and organizational culture are critical dimensions in

addressing performance gaps (Clark & Estes, 2008). As such, it is important to explore the extent to which organizational factors affect the ability of executive leaders to implement changes that can improve student completion rates. A cultural model and cultural settings framework can be utilized to examine the organizational influences on performance.

Cultural models represent the implicit values, beliefs, attitudes, and norms within an organization that guide the behavior of individuals, and ultimately the organization, while the cultural setting is defined as the tangible manifestations of that culture (Gallimore & Goldenberg, 2001). Cultural models facilitate the exploration of major assumptions among key stakeholders that can impact performance, while examination of the cultural setting exposes the observable behaviors and artifacts that impact performance (Clark & Estes, 2008; Schein, 2004). Consequently, community college executive leaders' awareness of the key cultural elements plays a critical role in their ability to effectively provide leadership that improves student completion rates.

Cultural model for increasing student completions. Cultural models can be described as the shared mental schema within an organization that shapes how individuals perceive their current circumstance (Gallimore & Goldenberg, 2001). Because individuals exist within the culture, these schemata are often taken for granted and not perceived as important. While community colleges across the country have signaled a desire to increase the number of degrees and certificates awarded in their mission statements (Ayers, 2015), the culture within community colleges may resist the changes necessary to do so. Instituting organizational changes that could result in significant increases in student completions is often perceived by presidents as being met with significant resistance from faculty (Cook, 2012).

Resistance to change, however, is not limited to a single level of an organization (Pardo del Val & Martínez Fuentes, 2003). In a survey of 3000 mid-level managers, Spreitzer and Quinn (1996) found that senior level managers were consistently noted as resisting change efforts. Indeed, a desire to maintain the status quo by people in positions of authority such as community college presidents is broadly supported in the research literature (Kay et al., 2009). Consequently, it becomes incumbent on community college executive leaders to examine the cultural model of resistance in a manner that is inclusive of its influence on their own behavior.

Cultural setting for increasing student completions. Cultural settings are tangible expressions of the cultural models present within an organization (Gallimore & Goldenberg, 2001). Clark and Estes (2008) gap analysis model identifies work processes and material resources as important, tangible areas to examine when exploring performance gaps. Work process can be defined as the interaction of people and material to achieve a stated goal over time. Material resources refers to the availability of supplies, equipment, and by extension, funding available to achieve the stated goal (Clark & Estes, 2008). Within the context of the community college environment, work process and material resources can be considered key cultural settings when examining executive leaders' ability to increase student completion rates.

Decision-making work process. Community college work processes are most clearly expressed in policies and documented practices. The process through which institutional decisions are made influences the ability of leaders to affect change and consequently the ability to improve student completion rates. If, for example, the prescribed decision-making framework requires consensus among various stakeholder groups, executive leaders may feel their ability to make what they perceive to be the "right" decision is limited.

A common decision-making framework employed in community colleges is that of shared governance (Kater & Levin, 2004). The practice of shared governance engages faculty and staff in decision-making in academic areas such as curriculum, faculty evaluation, and tenure recommendations, as well as non-academic areas such as budget and program growth and elimination of programs (Levin, 2000). Effective shared governance practices can help create buy-in and better shape ideas while poorly practiced shared governance can lead to firm adherence to the status quo (Lucey, 2002).

Shared governance structures, particularly when legislated by state law, are important for community college presidents to consider (Morphew, 1999). The state of California notably passed legislation in 1988 that mandated and outlined shared governance throughout the statewide community college system. Schuetz (1999) posited that the implementation of shared governance can promote distrust among faculty, staff, and management groups resulting in fragmented agendas, politized budgets, and increased resistance to change. An examination of 25 community colleges, showed nuanced results that indicate that while shared governance resulted in a greater sense of trust between faculty and administration, that cooperation did not necessarily follow, and each group tended to pursue their own agendas that often did not coincide (Piland & Bublitz, 1998). In a review of the literature examining the relationship of effective governance to structure, processes, leadership, and trust, Kezar (2004) argues structure and process are subordinate to leadership that develops trustful relationships. The tension created by mandated structures and evidence that leadership can overcome that tension exposes the need for community college presidents to have a sophisticated understanding of how to overcome resistance and build commitment to successful organizational change. The efficacy of

the shared governance decision-making process is then likely contingent on the ability of community college presidents to build trust and overcome resistance.

Material resources. Two aspects of the material resources that can affect executive leaders' ability to affect change include the amount of available resources and the ability to allocate those resources as leaders deem most effective. The Center on Budget and Policy Priorities found that as of 2014, funding for community colleges had not yet climbed back to pre-recession levels in 48 states (Mitchell, Palacios, & Leachman, 2014). This lack of funding may diminish access and hamper colleges' ability to achieve desired completion outcomes (Mitchell, Palacios, & Leachman, 2014; Waller, Glasscock, Glasscock, & Fulton-Calkins, 2006). The mechanisms by which funds are allocated within the institution also influences executive leader decision-making.

Since 1970, at least 30 states have implemented a performance-based funding model to allocate state-level funds. While performance-based funding has not been demonstrated to improve student outcomes, it has altered the behavior and perceptions of community college presidents (D'Amico, Friedel, Katsinas, & Thornton, 2014; Tandberg, Hillman, & Barakat, 2014; Lahr et al., 2014). Executive leaders indicate increased cost of compliance, a narrowing of institutional mission, greater restrictions on underprepared students, and lower academic standards associated with performance-based funding (Dougherty et al., 2014). In addition to the noted increase in cost for compliance, other changes show a shift in priority for executive leaders. This imposed shift may hamper the autonomy of executive leaders to make decisions based on perceived local need and consequently impede their ability to successfully increase student completion rates.

Table 3 shows the organization mission, global goal, and stakeholder goal, and the

organizational influences that can impact executive leaders' ability to increase student completion rates identified in this literature review.

Table 4

Assumed Organizational Influences

Cultural Model/Setting	Organizational Influence
Cultural Model 1: Resistance	Community colleges need to embrace organizational change efforts to overcome resistance.
Cultural Setting 1: Shared governance	Community colleges need to successfully employ the shared governance decision-making process to successfully drive organizational change.
Cultural Setting 2: Financial allocation	Community colleges need to manage the organizational barriers associated with internal and external funding allocation mechanisms to provide appropriate resources for change efforts.

A conceptual framework represents the concepts and theories that are taken as axiomatic for a given study (Maxwell, 2013). Merriam and Tisdell (2016) indicate that every study has a conceptual or theoretical framework and that it permeates the process of the study. Within the context of a dissertation in practice, the concepts and theories used to form the framework are derived both from academic literature in relevant fields as well as the practical experiences of the researcher.

The academic literature examining student completion rates presents a wide range of programs and interventions that can positively affect student performance outcomes and completions including academic and non-academic support programs, curriculum redesign, and academic advising programs (Crisp & Taggart, 2013; Dawson, van der Meer, Skalicky, &

Cowley, 2014; Hatch, 2016; Hodara & Jaggars, 2014; Goldrick-Rab, 2010; Price & Tovar, 2014). At the same time, the evidence shows that the rate at which students achieve degrees and certificates remains stagnant nationally (AACC, 2016; NCES, 2014; NSCRC, 2012, 2013, 2014, 2015, 2016). When taken together, these two ideas lead directly to the question of why completion rates have remained flat if there are programs that can positively affect the outcome. It is this observation that leads to the research questions of the current study specifically examining the role of executive leaders in improving completion rates. While many stakeholders have the potential to impact student completion rates, community college presidents hold the formal authority to implement the systemic change required to improve completion rates and so are the focus of the study.

The present study employs Clark and Estes (2008) gap analysis framework described in Chapter Two to garner a greater understanding of the knowledge and motivation of the community college executive leaders and potential organizational issues that impede progress towards increasing the rate at which students achieve a degree or certificate. Key knowledge issues selected for examination in this study include the executive leaders' understanding of research-based best practices in improving completion rates and an understanding of organizational change implementation. The motivation constructs used in the study include executive leaders' perception of the utility value of degree completion and an examination of the self-efficacy of presidents as it relates to improving completion rates. Similarly, the organizational issues were identified using a cultural models/cultural settings framework (Gallimore & Goldenberg, 2001). As described in Chapter Two, resistance to change serves as the primary model while community college decision-making policies and material resource policy issues serve as the primary cultural settings. While the literature review presents each of

these elements independently, it is the interaction of the stakeholder knowledge and motivation with identified organizational issues that form the conceptual framework and lens for this study.

Figure one (following page) presents a visual representation of this conceptual framework. The figure shows that the executive leader knowledge and motivational factors reside within the overall organization. Executive leaders then bring to bear their knowledge of the problem being addressed and ability to initiate and sustain goal directed behavior to affect the organizational issues impeding goal attainment (Clark & Estes, 2008). It is this interaction between the stakeholder knowledge and motivation to affect organizational issues that holds the potential to affect the specified outcome represented by the stakeholder goal.

The interaction between the selected knowledge, motivation, and organizational issues outlined for this study is straightforward. Executive leaders must be motivated to increase student success rates. Their motivation can be influenced by their perceived ability to affect the change or assumed utility value in accomplishing the task, as noted in the literature review, but can also be impacted by organizational resistance and their own knowledge of how to address that resistance (Mayer, 2011). Similarly, executive leaders must have a strong understanding of how to programmatically effect change. Not having this knowledge can significantly reduce their motivation and increase organizational resistance (Cook, 2012). These interactions then influence the degree to which the outcome is achieved.

Examining the interaction of the knowledge and motivation issues of executive leaders with the related organizational issues provides an appropriate lens through which to potentially identify key factors that result in unsatisfactory performance (Clark & Estes, 2008). The goal of this study is to engage in a structured process that can identify what executive leaders are doing

to positively or negatively affect their institutions' achievement of student completion goals and then suggest areas for further research.

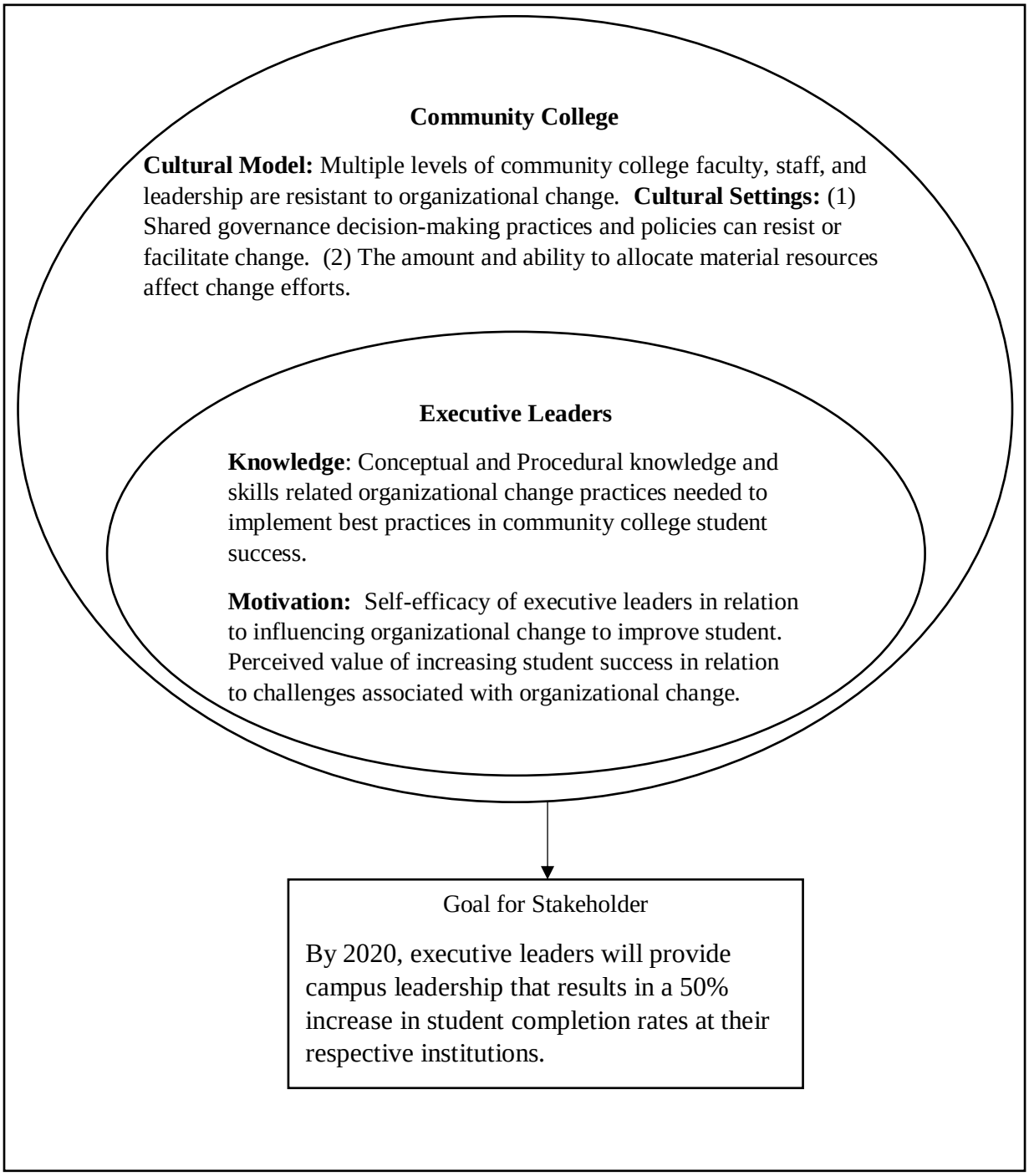

Figure 1. Conceptual framework for interaction of leader knowledge and motivation with organizational culture.

Conclusion

Community colleges have a long history of reform efforts and have developed numerous programs that demonstrate the ability to positively affect student outcomes. Despite these successes, the national graduation rate has remained stagnant. This study examines the role presidents can play in increasing the rate at which student earn degrees and certificates conferred by community colleges. The literature review provides a brief history of reform efforts followed by an examination of the role of organizational and leadership change readiness on the ability to achieve desired outcomes. The review then explores a range of commonly adopted programmatic efforts to improve student completions and concludes with a more focused examination of assumed knowledge, motivation, and organizational influences that shape community college executive leaders' ability to engage in reform efforts. Chapter Three provides a detailed description of the methods and tools used to collect and analyze data to examine the research questions presented in Chapter One.

CHAPTER THREE: METHODS

The purpose of this study was to examine the extent to which community college presidents can influence student completion rates. Community college presidents exert broad influence on institutional goals through such mechanisms as planning practices, internal funding decisions, personnel decisions, communication with faculty and staff, and program emphasis in all areas of the college (Eddy, 2005). As such, this study examines executive leaders' knowledge of practices that can improve completion rates, their motivation to do so, and how the organizational culture and setting assist or impede those efforts. The development of the methodology and analysis were developed based on the research question for the study.

1. To what extent are community colleges on track to achieve the goal of increasing student degree and certificate attainment rates by 50% by 2020?
2. What knowledge and motivational factors related to leading organizational change influence the ability of presidents to affect a 50% increase in student completion rates in community college environments?
3. How does the interaction between organizational culture and context with the knowledge and motivation of community college presidents affect student outcomes?
4. What are the recommended knowledge and skills, motivation, and organizational solutions for presidents to increase student completions?

Chapter Three discusses the methods and tools used to collect and analyze data for the study. The chapter begins with a brief description of participating stakeholders, details the rationale for the selection of data collection methods and participants, and provides a description of the instruments used. The chapter then moves to a discussion on credibility and

trustworthiness of the current study, ethics associated with qualitative research, and concludes with a section outlining the limitations and delimitations of the study.

Participating Stakeholders

Many constituencies are significant stakeholders when considering community college completion rates. Parents of students, four-year partner institutions, and local businesses all have a vested interest in seeing more students achieve degrees and certificates at community colleges (Jordan, Cavalluzzo, & Corallo, 2006; Yamamura, Martinez, & Saenz, 2010). Beyond students, the three groups that hold the most potential to directly impact the completion rates, however, are community college faculty, academic and student services deans, and executive leadership. This study focuses on the ability of executive leaders to bring to bear their knowledge, skills, and motivation to influence change to existing systems and overcome organizational barriers in order to increase student completions. The study focused on community college presidents who served in single campus districts and served as the chief executive for the institution. Presidents working in a district structure who reported through a chancellor and not directly to a governing board were not identified as chief executives and so not considered for participation. Participants were selected by sending an email request for participation to presidents serving at institutions that met the study criteria. All participants provided data through interviews. Additionally, document analysis consisted of an examination of resumes provided by all participants and relevant publicly available institutional planning documents.

Interview Sampling Criteria

The following criteria guided sampling.

Criterion 1. Individuals serving as president within a publicly funded community college system.

Criterion 2. Individuals serving as the chief executive for their institution defined as reporting directly to the governing board of the institution.

Criterion 3. Individuals serving as president at institutions who were member colleges of the American Association of Community Colleges.

Interview Sampling Strategy and Rationale

Individuals were selected for this study using a non-probability, qualitative, convenience sampling method. All single district community colleges in California, Oregon, and Washington states where the president served as the chief executive were identified through an examination of online institutional and state documents. Email invitations to potential study participates were first sent to the fifty colleges in California. Fifteen California presidents indicated a willingness to participate. As the study sample was to consist of 10 to 12 participants, additional invitations were not extended. The initial design of the study intended to include presidents from multiple states, however, the response rate from California presidents was very high. This sample was accepted for several reasons. First, the purpose and underpinnings of the study did not include a geographical component. Similarly, the initial design of the study did not emphasize the effect of statewide governance on the ability of presidents to deliver leadership to affect outcomes. Since all respondents met the study criteria, and because the state of California is deeply connected to a wide range of national community college initiatives, highly engaged in AACC initiatives, and represents one in four community college students nationally, the sample was accepted. In total, the study consisted of 13 California community college presidents. Two volunteers were unable to participate within the given time parameter for the study.

The purpose of this study is to understand how leaders can affect change in the community college environment. Because the goal of the study is to understand the

meaningfulness of leadership activity within the given environment, a qualitative approach is employed. To examine this issue, 13 community college presidents were interviewed. Since the study seeks to examine specific constructs of knowledge and motivation of executive leaders and how those interact with organizational issues to affect student completions, a guided interview approach that focused on those specific topics was employed (Johnson & Christensen, 2015). The study explored how leaders use their knowledge and motivation to construct leadership to face organizational issues in order achieve the desired outcome – that of increased student completion rates. Examining the interaction between organizational culture and context with the knowledge and motivations of community college presidents was, in essence, the examination of how leadership is constructed. Within the context of the conceptual framework presented in Chapter Two, the goal of the stakeholder under examination was to facilitate program development and provide change leadership to increase student completions. This activity was broadly defined as leadership within the community college environment. The examination of leadership can be conducted through numerous lenses (Bolman & Deal, 2013). This study seeks to make meaning of the experiences of executive leaders and as such a qualitative approach was deemed most appropriate.

The sampling criteria developed for the study were both broad and simple. The focus of the study was how executive leaders apply their knowledge and motivation to address organizational issues to influence community college completion rates. Examining the knowledge and motivation of leaders directly provided first-hand insight into the perceptions that leaders hold of their ability to affect the desired outcome. The use of only public institutions who are members of the AACC is intended to provide a basic consistency in context. While the organizational cultures of these institutions varied, public institutions share significant

commonalities in that they receive public funds, utilize federal financial aid funds, and are open access institutions. Membership in the AACC was selected as a sampling criterion because it is the establishing organization of the global goal under investigation. Non-member organizations may not have committed to the stated goal. Finally, only presidents who served as the chief executive officer for their institution were considered for the study. Presidents working in a district structure who did not report directly to a governing board were not considered to be chief executives as their ability to influence college operations is likely tempered by reporting structure.

Document Review Sampling Criteria and Rationale

The criteria below guided document selection.

Criterion 1. Documents were publicly available on college websites, state or federal regulators (Department of Education, Statewide community college system sites, or similar).

Criterion 2. Individuals serving as the chief executive for their institution willingly provided resumes to be reviewed as part of the research project.

Document Review Strategy and Rationale

Document review occurred in two stages. The first stage occurred prior to interviews. Publicly available planning documents with titles such as “strategic plan,” “master plan,” or “educational master plan,” were sourced from participating college websites. Additionally, data provided to the department of education via the Integrated Postsecondary Education Data System (IPEDS) was used to identify student degree and completion rates. These data were used to formulate interview questions regarding institutional goals and goal setting and presidents’ perception and knowledge of current institutional performance. While the domains in the

interviews remained consistent across participants, questions regarding goal setting, organizational resistance, and governance were more focused by this initial document review.

After the completion of interviews, resumes provided by presidents were examined to explore the professional experience of presidents particularly in the areas of community college program implementation and change management and leadership. Personal documents also provided insight into the personal perspectives and viewpoints of study participants (Merriam & Tisdell, 2016). Within the context of the conceptual framework for this study, the knowledge and skills of executive leaders were central to the examination of how participants perceived and addressed organizational issues. A review of the professional experience and skill as perceived by the participant as observed on resumes were then considered in relation to interview responses.

Survey Sampling Criteria and Rationale

The criteria below guided survey sampling selection.

Criterion 1. Individuals serving as president within a publicly funded community college system.

Criterion 2. Individuals serving as the chief executive for their institution defined as reporting directly to the governing board of the institution.

Criterion 3. Individuals serving as president at institutions who were member colleges of the American Association of Community Colleges.

Survey Strategy and Rationale

Survey instruments are often used to quantify the perspective of groups and are most often utilized in quantitative research. In the present study, this was not the case. The Leadership Efficacy Survey was delivered to participants electronically and participants were made aware

that results would be visible to the researcher in order to shape participant-specific interview questions. Completed surveys were returned via email and so results were clearly tied to individual participants. Individual results from the survey were used to tailor interview questions regarding motivation and self-efficacy for individual participants. In total, eight of 13 participants completed the survey prior to the interview. Presidents who responded to the survey were asked more specific questions regarding self-efficacy based on their individual survey results. Those not completing the survey were first asked generally about their self-efficacy beliefs followed by questions relating to the specific constructs measured by the Leadership Efficacy Survey. The limited number of participants and respondents made quantitative analysis of the data inappropriate (Salkind, 2017).

Data Collection and Instrumentation

The primary purpose of this study was to determine how the organizational culture and context interact with the knowledge and motivation of community college presidents to affect student completion rates. Data for this study was collected using document analysis and interviews. The survey instrument was used only as means to sharpen interview questions to make data collection more efficient. These methods were selected to garner a greater understanding of the interaction of the stakeholders' knowledge and motivation with organization culture, context and barriers, and how this interaction affects the desired outcome of increased student completions. While surveys are often used as a quantitative tool, the small number of participants made it unlikely that quantitative analysis would lead to compelling findings.

The intent of the study is to inform practice. A two-phase data collection process was employed. The first phase of the study consisted of two parts. First was the collection and

analysis of publicly available institutional planning documents and documentation stating the individual college completion rates. The analysis of documents was intended to explore the stated goals of the institution in terms of completion metrics and desired outcomes and to document the past completion rate for each institution. In addition to document analysis, the Mind Garden Leadership Efficacy Questionnaire (LEQ) was used to survey executive leaders' self-perception of efficacy with granted copyright permission from Mindgarden Inc. The survey results were not incorporated into analysis but rather used as a method to focus interview questions. The LEQ parses self-efficacy into Leader-Action, Leader Self-Regulation, and Leader Means. The survey components are described in detail in the Instrumentation section. Responses allowed for more specific inquiry in regard to self-efficacy. If a participant scored low on the Leader-Means self-efficacy scale, for example, then self-efficacy questions were focused on resource availability, institutional policy, and support from colleagues.

The second phase of the project consisted of semi-structured interviews focused on the interaction of culture and context with leaders' knowledge and motivation. The interview protocol is provided in Appendix A. The questions in the protocol were used as a starting point for each topic explored and follow-up questions were asked for the purposes of clarification and depth. During the interviews, all participants were asked to provide a resume and all did so. Analysis of resumes was then conducted to examine leaders' prior knowledge and years of experience in the areas of organizational change management, administrative functioning of a community college, and best practices in community college student success. A researcher - developed scoring rubric for this analysis and is provided in Appendix B. Results of this analysis were then used to contextualize interview responses during the analysis phase.

Developing a robust and integrated understanding of the knowledge and skills, motivation, and organizational issues to provide actionable recommendations requires a multi-tiered examination of current practice. The surveys and institutional document analysis were used to gather data on the context in which presidents served to inform the interview process. More specifically, the surveys gathered information regarding participants' self-efficacy while the document analysis provided insight into the goals and past outcomes of the institutions in which presidents served. This data was then used to inform the direction of individual interviews. The analysis of the experience of presidents via resumes then provided context for examining interview data and served as a validation measure of interview responses. For example, if a president expressed a higher degree of self-efficacy in raising completion rates, past experience either as a leader or a follower in an environment where completion rates were improved could provide a degree of support for the importance of self-efficacy within the context of the study. In this way, the use of multiple data collection methods allowed for verification and triangulation of data to increase the level of credibility and trustworthiness of the findings (Merriam & Tisdell, 2016). Together, these data collection methods provided a rich data set to illuminate how community college executive leaders can make gains in completion rates at their institutions or what factors might be preventing them from doing so.

Survey: Leadership Efficacy Questionnaire

The 23 item Leadership Efficacy Questionnaire (LEQ) provided by Mind Garden Inc. was delivered to participants via email. Expected completion time for the survey was approximately 10 minutes. All participants were asked to complete the survey. The study consisted of 13 participants and eight completed the survey. According to Salkind (2017), quantitative analysis using small sample sizes increases the likelihood that analysis can lead to

erroneous conclusions. As such, quantitative analysis of the LEQ was not conducted. Rather, the results of the document analysis and LEQ survey were used to shape the individual interviews. The results from these data collection techniques allowed for the interviews to focus primarily on the interaction of executive leaders' motivation and knowledge with the organizational context in which they were working. Specific questions regarding how each executive leader applied his or her knowledge and skills to the organizational issues at their institution were developed for the interview process.

Because the study sought to examine how executive leaders' knowledge and motivation interact with organizational issues (see conceptual framework in Chapter Two) to influence leaders' ability to affect student completion rates the LEQ was an appropriate instrument. The LEQ has successfully demonstrated that leadership efficacy is comprised of three components predictive of positive leader outcomes (Hannah, Avolio, Walumbwa, & Chan, 2012).

- Leadership Action Self-Efficacy—perceived capability to effectively execute critical leader actions including motivating, coaching and inspiring others as well as the ability engage followers with organizational goals and vision.
- Leader Self-Regulation Efficacy—perceived capability to lead through complex situations, generate effective solutions to leadership problems, and interpret context and followers.
- Leader Means Efficacy—leaders' perceptions that the organization's policies, resources, and colleagues (peers, senior leaders, and followers) can be leveraged to impact their leadership.

These three leadership efficacy constructs from the LEQ fit closely within both the KMO framework (Clark & Estes, 2008) as well as the conceptual framework developed for this study.

More specifically, leadership means efficacy allowed for the exploration of how organizational culture and settings impact leader motivation, while action and self-regulation efficacy allowed for the exploration of the potential impact of leader motivation on organizational issues. Note that the full copy of the LEQ instrument is not provided per the copyright agreement with Mind Garden Inc. Sample items are provided in appendix C.

Documents and Artifacts

Two types of documents were examined during this study: those pertaining to individual participants and those relating more broadly to the institution. Documents pertaining to student completions were collected and analyzed from four sources. These sources included the United States Department of Education (DOE), the National Student Clearinghouse Research Center (NSCRC), the American Association of Community Colleges (AACC), and the individual institutions at which participants worked. This dissertation in practice was conducted as a field study and so data from national organizations such as DOE, NSCRC, and AACC were used to examine one of the research questions of the study, that is, the extent to which community colleges are increasing the rate of community college completions. Because DOE, NSC, and AACC all use different measures for student completions, all three sets of documents are examined (see Chapter Two for specific definitions). Documents from individual institutions pertaining to student completions were also examined.

Individual institutional documents included in the study were only those that were publicly available and retrievable from each school's website. Documents that included any indication of student completion rates, as well as institutional documents that note goals for student completions, such as educational master plans or strategic plans were of primary interest. Study participants were asked during the interview about their level of influence in setting

institutional goals. The examination of institutional documents allowed for the opportunity to connect these goals with the self-efficacy belief of executive leaders (results in Chapter Four).

In addition to institutional documents, an analysis of participants' resumes was conducted. Resumes from individual participants provided a clearer picture of the knowledge and skills with which participants entered community college presidencies. Resumes were obtained from each participant on a voluntary basis and all participants provided the document. Because executive leaders enter these positions with a wide range of backgrounds and professional experiences, a validation of skills through an examination of the resume is appropriate (McNair, 2015). Specifically, the review of resumes sought to determine the level of knowledge and skill in community college instructional, student services and change management upon embarking on these leadership positions and to validate data collected during this study's interview process.

Interviews

Thirteen semi-structured interviews were conducted with community college presidents. The semi-structured interview process was selected because it allowed for a flexible format. The goal of a semi-structured interview is to allow each participant to provide his or her unique perspective (Merriam & Tisdell, 2016). Furthermore, the interview questions were designed to encourage participants to consider the interaction of the knowledge, skills, and motivation with major institutional barriers and how that interaction hinders or facilitates progress towards goal attainment. The interviews were conducted via video conference or phone. The video conference platform Zoom was selected for the sake of practicality, cost, and utility. As with phone calls, the Zoom platform also allows for the interviews to be recorded for documentation purposes. All participants served within the California Community College system and were

scattered across a large geographical area making it both impractical and costly to conduct face-to-face interviews. While the online video format was preferred because, according to Krueger and Casey (2009), it allows for both the researcher and participant to receive at least some non-verbal ques to heighten communication and understanding of both questions and responses, participants were given the option of the phone. Most participants (nine of 13) preferred to be interviewed by phone. Interviews occurred during various times of day based on the availability of the participants. The interview protocol is provided in Appendix A.

Data Analysis

Data analysis is the process through which raw data is translated into coherent and relevant information and aligned with the research questions that guide the study. The analysis for this study began along with data collection and continued until all relevant data had been analyzed. Initial document analysis of the completion rates of colleges at which participants served as well as publicly available planning documents was conducted prior to the interview. Additionally, for participants who completed the LEQ survey, results were examined and noted. These data were examined prior to each interview and guided follow-up questions during the interview protocol. For example, if a president worked at a school that demonstrated relatively high completion rates, then the participant was asked what types of actions he or she had taken to produce those rates or what institutional characteristics they felt contributed.

Interviews constituted the primary data set for the study. As is common with qualitative studies, analysis of interviews began during the data collection process. In this initial phase, brief analytic memos were written that noted potential themes, points of interest within each interview, and explicitly noted the level of student success at each institution based on document analysis. The intent of these memos was to provide opportunities to examine possible

connections between leadership knowledge and motivation of presidents to institutional performance. Coding of interviews began after completion of three interviews and continued after the completion of each interview. Two phases of analysis were used.

After interviews were transcribed, the first phase of coding consisted of a combination of open coding and the application of a priori codes based on the Clark and Estes (2008) KMO gap analytic framework and conceptual framework developed for the study. Knowledge, motivation, and organizational issues were used as the broadest a priori codes and were supplemented by specific constructs in each of those areas based on the assumed influences developed as part of this study. For example, "utility value of the associate degree," "resistance to change," and "best practices in community college completion" were each pulled directly from the conceptual framework to serve as initial coding constructs. Phase two of the analysis sought to identify emergent ideas, develop axial codes, and shape the themes from the data to address research questions.

The development of axial codes and themes initially progressed through a careful examination of a priori codes from phase one. Responses were examined for commonalities and differences between participants. This review was conducted multiple times to expose emerging themes that addressed the research questions and to provide supporting or contradictory evidence for potential themes arising from a priori coding. This analysis provided the basis for the development of axial codes that aggregated open codes and a priori codes. Finally, axial codes were used to shape themes that best addressed the research questions of the study.

Throughout the process of analysis, conversations with community college faculty and leaders from institutions that did not participate in the study were conducted. Initial conclusions and supporting data were discussed to identify gaps or biased conclusions. Reflective memos

from these conversations were then produced and used as part of the process to create the final themes discussed in Chapter Four.

Finally, because this was a field-based study, examining the extent to which the field is making progress towards achieving the global goal of increasing community college success rates by 50% by 2020 required the examination of a broader set of data. Completion results reported to the Department of Education and the state of California as well as studies conducted by the American Association of Community Colleges were used for additional analysis. These data are presented separately in Chapter Four and a discussion of potential implications is provided in Chapter Five.

Credibility and Trustworthiness

Qualitative research can produce challenges to credibility and trustworthiness around issues of small sample size, researcher bias, generalizability, and replicability (Merriam & Tisdell, 2014). These issues were addressed within this study in three ways. First, three methods of data collection were utilized including, survey, document analysis, and interviews to collect data focused on the knowledge, motivation, and organizational barriers facing community college presidents. Data gathered during interviews was validated through document review to the extent documentation allowed. Data triangulation, as this type of validation is referred to, during the data collection phase of the study is specifically utilized to increase the credibility of qualitative studies (Casey & Murphy, 2009). Second, the selection of the study participants was intentionally diverse. Presidents were selected from colleges that vary in size, geographical location, and student demographics. This variance allowed for the study to focus centrally on the role that executive leaders play in completion rates. While data triangulation, member checking, and intentionality of study participants helps build the credibility of the study, trustworthiness is

more strongly tied to the researcher bias (Cope, 2014). Finally, initial results were discussed with a range of experts within the community college and leadership area. Individuals included community college faculty members, deans, and staff as well as executive leaders from other fields of practice. These discussions were intended to increase results' coherence and provide insight into the potential generalizability of the results (Sousa, 2014).

The premise of trustworthiness is to demonstrate that findings of the study emerged from the data and not from the predisposition of the researcher either towards study participants or the topic of investigation. One basic level of bias is reduced because the researcher in this study does not work at or with any of the institutions or participants. However, since the researcher was deeply involved in community college work for 20 years, it was important to address other potential biases. To enhance the overall trustworthiness of the study, the researcher carefully examined his positionality, the results of which are presented in the next section. This process includes a critical examination of assumptions, biases, and theoretical orientation regarding community college leadership resulting in findings being more grounded in the data collected for this study.

Ethics

In the context of qualitative research, the perception that the researcher engages in ethical practices plays a significant role in producing trustworthy results (Merriam & Tisdell, 2015). As such, it becomes incumbent on qualitative researchers to address primary areas of potential ethical concern. There are four primary areas for ethical consideration when working with human subjects: 1) well-being and safety of study participants, 2) informed consent of participants, 3) protection of participant privacy, and 4) transparency of study purpose with research participants (Krueger & Casey, 2009). The nature of adherence to ethical behavior in

each of these areas is debated in the social science research community (Lincoln & Guba, 1989). While the nuances of ethical behavior can be contested, there is broad agreement that the safety and well-being of participants is a paramount and that well-being is often contingent on informed consent, privacy, and transparency.

Viewed from the broadest perspective, the current study sought to examine the impact that community college presidents can have on student completion rates. While faculty, staff, and junior level managers all offer valuable insight into how executive leaders influence student completions, the stakeholder group selected for this study was presidents themselves. To garner a data set that could shed light on the specific research question of the study, a field study employing individual interviews with 13 college presidents was conducted. Participants were selected by sending a broad email to presidents who were employed at colleges that met the study parameters. The lack of a pre-existing relationship minimized potential concerns of how data might be affected by any perceived power dynamics between researcher and participants. Additionally, all participants were in positions of significant formal authority, further limiting concerns of coercion. These dynamics limited the potential for direct harm to study participants. To further limit potential for harm, the researcher worked closely with experienced qualitative researchers to develop probing but thoughtful questions that brought forward useful data while limiting concerns of harm to participants.

To fully address the major areas of ethical consideration, including informed consent, protection of privacy, and transparency of purpose, additional steps were taken. All participants were verbally informed at the start of the interview that the interview would be recorded, transcribed and that data files would be stored on a laptop in the researcher's possession. Additionally, participants were informed that data would be anonymized including participant

names, name and specific location of institution, and other specific information garnered from interviews that could be easily linked to specific participants. Lastly, all participants were provided the research questions for the study and offered an opportunity to ask clarifying questions via email and during the interview. The voluntary nature of participation, the limited relationship between the researcher and participants, lack of power differential between the researcher and participants, and the transparent communication of the purpose of the study limited potential ethical issues in terms of participants. To further address ethical concerns, it is important that the researcher consider their own biases on the topic being studied.

As a researcher no longer employed at a community college, I have limited vested interest in the result of the study. Twenty years of work experience in the community college field have, however, left me with two significant biases that were important for me to take into consideration when designing and conducting the study. First, I believe leadership holds primary responsibility for institutional improvement. While state and federal lawmakers, faculty, staff, and students can all take steps to improve student outcomes, I believe it is the role of the president to create circumstances that compel those stakeholders to act. Although this belief is supported by the research literature in education and other areas of study, the potential to ask leading questions or questions that would lead to a specific conclusion was heightened by this bias. Working closely with experienced researchers allowed me to address this concern. In addition, I asked colleagues in the community college field who did not participate in the study to review anonymized data and recommendations to see if the conclusions I drew were reasonable. My second primary bias revolved around the idea of possibility. I believe community college performance can significantly improve across all geographic and demographic domains. Put more directly, I believe community colleges can and must do better.

The idea that institutions can broadly improve student success rates is not well supported as there are very few institutions who have successfully raised and sustained completion rates beyond 40%. To control for this bias, it was important for me to consider the possibility that community colleges are performing at a very high level and that completion rates had reached something close to their upper limit. Doing so made it easier to explore not only deficiencies in community college leadership but also what presidents were doing well.

Limitations and Delimitations

The current study was a qualitative examination of how the knowledge and motivation of community college executive leaders interacts with their specific organizational context to affect student completion rates. The study included 13 participants limiting the scope of study to only those perspectives and the organizational context in which they work. Even with a focus on public community colleges who are members of the AACC, there was a high degree of variance in the individuals and institutions studied. Further, only the perspective of presidents was examined. The value of the study relies on the truthfulness and completeness of responses from participants and the ability of the researcher to accurately gauge responses. Finally, since change efforts involve numerous stakeholders, the study was far from complete. Examining only the perspective of presidents limited the inquiry in that leader perceptions are not always the same as perceptions held by those they lead (Cogliser, Schriesheim, Scandura, & Gardner, 2009). As such, readers should take care to compare their specific organizational context with those described here, carefully consider the knowledge and motivation of their own leaders and explore if the conclusions reached from this research apply to their environment before generalizing findings to their context.

The characteristics that limit the utility of this study also provide intentional boundaries or delimitation for the study. Only public community colleges that are members of the AACC were considered. Public community colleges share a commitment to open-access education, are funded by tax dollars, and serve students with a wide range of academic need (Ayers, 2017). Additionally, only presidents serving as the chief executives with broad formal administrative authority and leadership status participated in the study. The commonality of these characteristics can potentially make the study results more generalizable.

CHAPTER FOUR: FINDINGS

The purpose of this study was to explore the knowledge and motivation necessary for community college presidents to increase student completion rates by 50%. In 2010, American Association of Community Colleges collaborated with the Association for Community College Trustees, the Center for Community College Student Engagement, the League for Innovation in the Community College, the National Institute for Staff and Organizational Development, and the Phi Theta Kappa Honor Society to establish the Completion Agenda. The completion agenda sought to produce 50% more students with degrees and certificates by 2020 and brought increased emphasis to the examination of completion rates (McPhail, 2011). This study focused on completion rates because the number of degrees and certificates can fluctuate with factors that are unrelated to the improved delivery of education such as enrollment and changes in institutional offerings.

Community college presidents were selected as the primary group of study. To achieve substantially different outcomes which a 50% increase in completion rates represents, institutions would need to perform differently. Presidents were seen to have the greatest level of organizational influence to effect changes at scale that could produce this vastly improved outcome. As such, this study sought to explore the knowledge, motivation, and organizational issues that affect the ability of community college presidents to engage in change efforts that led to an increase in completion rates. The research questions that guided this study were:

1. To what extent are community colleges on track to achieve the goal of increasing student degree and certificate attainment rates by 50% by 2020?

2. What knowledge and motivational factors related to leading organizational change influence the ability of presidents to affect a 50% increase in student completion rates in community college environments?
3. How does the interaction between organizational culture and context with the knowledge and motivation of community college presidents affect student outcomes?
4. What are the recommended knowledge and skills, motivation, and organizational solutions for presidents to increase student completions?

To explore potential answers to question one, completion reports from the National Student Clearinghouse Research Center, the National Center for Education Statistics (NCES), and the American Association of community colleges were explored. Additional exploration of available data from the NCES was also conducted and is presented. In an effort to answer questions two and three, data were collected through interviews with 13 community college presidents. An analysis of institutional planning documents and resumes of participants was conducted to provide further insight into institutional issues and prior knowledge and skills of participants respectively.

While the research questions guided the study, the qualitative nature of the investigation resulted in themes and insights beyond that of the assumed influences discussed in the literature review. The qualitative data were carefully and systematically reviewed, and every effort was made to reach conclusions that were based on the collective understanding and perspectives of study participants.

Findings

The theoretical framework developed for this study places the knowledge and motivation of presidents inside the organizational context and culture of their individual institutions. It was

within the interactions that the findings for this study emerged. The framework, however, underestimated the role of external factors largely outside of the scope of community college presidents to influence. Specifically, state legislation and funding-incentivized programs proved to be far more influential both on the knowledge and motivation of presidents and the internal functioning of each college.

The four themes that emerged from the study integrated knowledge, motivation, and organizational issues. The emergent nature of the qualitative study led to findings focused primarily on the interactions of the assumed influences. As such, findings are presented thematically. Theme one focuses on the complexity of measuring student completions and considers how this complexity affects participants' perception of completion rates. Theme two explores presidents' knowledge of best practices in improving community college completion and contextualizes that knowledge in terms of the broader reform efforts and state legislation. Theme three discusses presidents' perception of the causes of resistance to change, the relationship between resistance and accountability, and the strategies that presidents employ to address the resulting issues. Finally, theme four examines the value presidents place on the associate degree, completion metrics, and institutional goals.

Theme 1: The Complexity of Measuring Completion

Answering the question of progress towards achieving increased completion rates is unfortunately not straightforward. The diverse backgrounds and academic goals of students and the open access nature of the community college create several challenges in defining a broadly accepted completion rate. Questions regarding the appropriate timeframe in which to measure completions, if the completion should be from the starting institution, and defining the cohort of measurement are all challenges. Data and reports from the National Center for Education

Statistics and the National Student Clearinghouse Research Center are the most commonly used sources of national data. A brief examination of completion data from these sources serves to demonstrate the complexity of measuring student completions and does not clearly indicate if community colleges are improving from an aggregate perspective. Study participant perceptions of completion rates is then presented.

National Data Sources and Metrics

The data used for analysis of completion rates comes from two different sources; National Student Clearinghouse Research Center (NSCRC) and the Department of Education's (DoE) National Center for Education Statistics (NCES) each collect their own data from community colleges. Data collection methods and data sets vary slightly and result in variations in calculated completion outcomes. For example, the NSCRC (2018) shows a three-year completion rate of first-time, full-time, credential seeking students at public two-year community colleges at their starting institution for the Fall 2011 cohort at 20.4% while NCES calculates the same metric at 20.0% (NCES, 2017). A closer examination of these differences is beyond the scope of this study. Detailed descriptions of NSCRC and NCES data collection methods are available from both organizations (Dundar & Shapiro, 2016; Ginder, Kelly-Reid, & Mann, 2018). For the purposes of this study, both measures are considered sufficiently reliable and valid for examining change over time of completion rates.

The measure long favored by the NCES is the number of first-time, full-time, credential (degree or certificate) seeking students who complete their degree at their starting institution within 150% of "normal" time. For an associate degree, the assessment is completed after three years as two years is considered "normal." The NSCRC presents a six-year measure that considers both part-time and full-time, first-time, credential seeking students and counts first

credential completion from any institution. Both NCES and NSCRC are beginning to offer additional measures of completion disaggregating the data by enrollment intensity and offering four and eight-year completion outcomes. Because the six-year and three-year rates have a longer history of measurement, they are the most viable metrics to use to explore improvement over time. Adding to the complexity, the American Association of Community Colleges (AACC, 2017) does not present a consistent goal choosing to emphasize completion rates in some documents (Juszkiewicz, 2017) and the number of degrees and certificates granted in others (AACC, 2016). The three performance measures noted here, the three-year completion rate, the six-year completion rate, and the number of degrees and certificates granted annually, each provide different insights and challenges when trying to determine the performance of community colleges.

Available analysis from the NSCRC, the NCES, and the AACC are presented. Tables 5 and 6 provide a summary of cohort completion rates by metric and reporting organization followed by a brief discussion of each.

Table 5

NSCRC: Percent of First-Time Students at Public 2-Year Institutions Completing a Degree/Certificate Within Six Years at Any Institution by Enrollment Intensity

Cohort year (fall term)	2006	2007	2008	2009	2010	2011
Ending year (spring term)	2012	2013	2014	2015	2016	2017
Overall (PT, FT, and mixed intensity)	36.3	39.9	39.1	38.2	39.3	37.5
Exclusively full-time	52.6	57.6	57.0	54.6	54.5	58.4
Exclusively part-time	18.4	19.9	18.8	18.3	20.4	18.6
Mixed enrollment intensity	33.2	36.5	35.9	32.6	36.9	32.6

The NSCRC provides these data in annual reports and does not compare results over time. The data presented in the Table 5 are drawn from six separate reports (NSCRC, 2012,

2013, 2014, 2015, 2016, 2017). Reports of additional cohorts are not available. The reports clearly articulate that community college students are achieving their credential attainment goals at higher rates than are expressed in the NCES three-year measure and emphasize that examining students who complete at only their starting institutions significantly depresses rate of attainment measurements. In general, NSCRC does not seek to provide research that speculates on the future performance of community colleges or to establish causal or correlational factors that affect completion rates. Rather, their stated purpose is to better inform practitioners and policy makers about the various pathways by which students complete their education. The NCES takes a similar informational approach.

Table 6 provides completion rates for first-time, full-time students who started at public two-year intuitions and completed a degree or certificate at their starting institution within 150% of the "normal" time (NCES, 2017). The NCES has collected this measure for a substantially longer timeframe and as such, ten years of data are provided.

Table 6

NCES: Percent of First-Time, Full-Time Students at 2-Year Public Institutions Completing Within 150% of Normal Time at Their Starting Institution

Cohort year (fall)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Ending year (spring)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Completion Rate	20.3	20.6	20.4	20.3	20.2	19.8	19.5	20.0	21.9	23.6

Neither the NCES nor the NSCRC data provide clear evidence of improving or declining completion performance from the national community college perspective. It is hopeful to see a more than 3% increase in the 150% completion rate measure between the 2010 and 2013 cohorts but provides little insight in terms of improvement over time. The completion rate for the 2000 cohort, for example, was also 23.6%. Noting this challenge, the AACC takes a different

approach and examines the number of degrees and certificates awarded annually by public two-year institutions.

As an advocacy organization for community colleges, the AACC takes stronger positions on the meaning of completion data. Reports by the AACC have made comparisons between enrollment volume, degrees and certificates awarded, and completion rates. Their perspective on enrollments and student completion rates is rapidly evolving. In 2016, the AACC's "Trends in community college enrollment and completion data" stated:

> College enrollment has declined since its peak in fall 2010, and completion rates have either held steady or declined slightly, depending on the cohort and measure. Declining enrollments, particularly in institutions that educate a high proportion of nontraditional age students, are not unusual as the economy recovers. But stagnant completion rates are disappointing. (Juszkiewicz, 2016)

The 2017 version of the same report takes a different tone:

> Community college enrollment has declined sharply since its peak in fall 2010, but completion rates have either held steady or increased slightly, depending on the cohort year, student demographics, and other variables. The tremendous work invested in increasing completion rates makes the positive change in completion rates a particularly welcome development. (Juszkiewicz, 2017)

In earlier reports, the AACC has also explored using the number of degrees and certificates awarded as a potential metric. A 2015 report titled, "Community college completion: Progress toward goal of 50% increase," examined trends in awards. The number of degrees and certificates is important to examine for two reasons. First, presidents in this study showed significant interest in examining the number of credentials granted. One participant, for

example, indicated, “I tend to look at the raw numbers . . . Our completions in the last five years have grown by a thousand degrees and certificates.” Similarly, a second participant noted:

> We haven't moved the needle on graduation rates. My, my take on that is, it’s more important to move the number on graduates, right? . . .We've increased the number of graduates both with associate degree, the associate degree for transfer and, and a high-quality certificate.

While the number of graduates did increase at the institution, it was later clarified that the participant was specifically referring to the number of awards and assumed an increase in number of students.

The second reason the number of awards is of importance to examine is financial. Degrees and certificates awarded play an important part in performance-based funding formulas. In California, a weighted point system will be used to provide performance funding. For example, every associate degree for transfer produced by an institution will result in additional funding of $1760 for the subsequent fiscal year. Similarly, a general associate degree will be funded at $1320, certificates of 18 or more units at $880, and so on (California Community Colleges, 2018). This portion of the California funding formula accounts for 20% of the overall state allocation of funds for community colleges and incentivizes the production of degrees as opposed to the production of graduates. As such, a cursory examination of degrees and certificates produced compared to graduates produced is provided using data from the NCES.

Data were available for 2011-2012 through 2016-2017 academic years. Because all participants in this study were from California, a breakout for the state is also provided. Tables 7 and 8 below show the aggregate degrees and certificates granted (referred to in aggregate as

awards), the unduplicated headcount of students receiving degrees, and the rate of increase over the previous year of each for the US (California excluded) and California respectively.

Table 7

US Degrees and Certificates Awarded Compared to Students Receiving Awards

Completion Year	2017	2016	2015	2014	2013	2012
Total awards	980458	963196	950889	916557	874725	851799
Unduplicated student headcount	815354	804904	799304	779822	755974	739250
% change in students receiving awards from previous year	1.30%	0.70%	2.50%	3.15%	2.26%	
% change in awards given from previous year	1.79%	1.29%	3.75%	4.78%	2.69%	

Table 8

California Degrees and Certificates Awarded Compared to Students Receiving Awards

Completion Year	2017	2016	2015	2014	2013	2012
Total awards	193040	178929	162455	150075	140333	124805
Unduplicated student headcount	124980	119232	112916	107996	103674	93099
% change in students receiving awards from previous year	4.82%	5.59%	4.56%	4.17%	11.36%	
% change in awards given from previous year	7.89%	10.14%	8.25%	6.94%	12.44%	

These data indicate the number of students completing degrees and certificates is increasing slower than the number of degrees and certificates being awarded. This phenomenon appears to be stronger in California community colleges. Between 2012 and 2017, the number of students receiving degrees increased by 34.7% in California while the number of awards

increased by 54.4%. Outside of California, those rates were 10.30% and 15.1% respectively. This suggests that students are completing community college with multiple credentials more frequently, particularly in California. Considering the nature of the state's funding formula and the perspectives presidents in this study expressed in terms of examining completions, further examination of this trend may be called for. A discussion of possible causes and further analysis of this topic is provided in Chapter Five. The utility of these measures in increasing student completions, however, is contingent on the practitioner's perception of applicability and accuracy.

Perception and Utility of Completion Measures

Participants in this study conceived of completion metrics substantially differently than those used by either the Department of Education's National Center for Education Statistics (NCES) or the National Student Clearinghouse Research Center (NSCRC). They expressed greater alignment with the American Association of Community Colleges (AACC) in that the number of degrees and certificates awarded was of greater interest. The number of degrees and certificates also aligned with the California community college funding model. Participants uniformly agreed that student intent as indicated by "degree or certificate seeking" was not sufficiently accurate noting that students may have different reasons to self-identify as credential seeking. Reflecting a consensus opinion, one participant said:

> I think there's definitely a disconnect between what we expect and what is really going on. That misinforms our calculations on completion and success. There is no box to check that says, 'I want to take one class because I want to improve my accounting skills.' I think people have aspirations, they've been told they need to get a degree so they check that box and so we count them as individuals who said they wanted to transfer

> even though they probably didn't have the intention of transferring. I think the counselors and financial aid folks and the students know that if they don't check that box then it's going to impact their ed plan, and if they don’t have an ed plan with a stated goal then they’re going to struggle for financial aid.

Similarly, presidents’ perceptions of completion were substantially broader than those expressed in the formal metrics. Several presidents gave examples of students who gained skills and improved their professional status without completing a degree or certificate. For example:

> For me it's based on what your own goals are and then we can move from there. I'd have people that come to us from the workplace and just want to upgrade workplace skills so they get a promotion or get a salary increase and for me that's a success and that's a completion.

When asked to consider student success broadly, presidents thought about student completion primarily from the student perspective and less as a fixed outcome measure. Notably, they consistently pointed to metrics they felt could inform institutional practice. Presidents felt that the role of the institution was to help students discover and articulate their goals and then provide the services necessary for students to achieve that goal. Asked how he conceived of completion, one president succinctly indicated, “I think about how we ensure students set a goal and how do we facilitate them achieving that goal?”

Participants felt that retention, persistence, and equity data were most useful in terms of informing practice. When asked about how they think about student success, participants tended to move to more specific measures. For example:

> When I think about student success rates, I look at course completion rates and I look at degrees and certificates – who’s completing? If I go down a little bit from that, then I

> look at things like who's staying, who's here, and who dropped out and why? Then I drill down to look at equity . . . so that I can figure out the barriers and who isn't passing and who is.

Another president quickly transitioned from discussing the three-year completion measure to indicate that, "You're also going to look at how the persistence, so in other words, term to term retention, fall to fall, retention, number of credits attained for each student versus the number of credits they take." She then provided an extensive explanation of how these types of measures were used to increase overall student success.

Despite this emphasis on examining completions from the student perspective and examining metrics to inform practice, all participants acknowledged the importance of formal completion metrics particularly in relation to funding. As one president noted, "With the new kinds of ways that we're being urged to look at completion and the numbers that are going to be used for possible funding, we'll be paying more attention." Presidents also seemed to recognize that taking the broader perspective on student success presented challenges in terms of developing a consensus on campus of how to consider student success. Another participant articulated the challenge, saying:

> What's important is that the students get what they . . . not even intended . . . what they ultimately want when they are successful . . . when they say they're successful . . . they've gotten the skills, they've gotten the certificate, then I've got a completer, I'm pleased. The harder sell is when I'm funded by completion.

Overall, presidents felt that the formal completion metrics put forward by state and national organizations did not sufficiently take into consideration student intent. Perhaps more importantly, presidents felt that these metrics were not useful in informing practice. At the same

time, they also clearly understood that degree and certificate attainment was important for students, and that formal completion metrics were important to track and improve in light of state funding practices.

Finding in Context

From an examination of the reports produced by two of the major reporting groups on community college completion, no conclusion could be definitively drawn in terms of improvement. There is evidence to suggest that more students are completing credentials nationally and in California. There is also evidence to indicate that students are completing more than one credential as part of their community college and that this phenomenon is more pronounced in California. Data for this measure was limited to six years making it difficult to draw a broader conclusion. The rate at which students are completing, however, seems to have remained within longtime bounds. The recent spike in the national three-year completion rate of first-time, full-time students to 23.1% matches the completion rate for the 2000 cohort. Additional data will reveal if the increase is a trend or simply an increase within normal bounds.

Theme 2: Best Practices, the Reform Movement, and State Legislation

A strong understanding of best practices in improving community college completion rates is necessary to guide an institution to improve student completion. Study participants demonstrated high-level knowledge of best practices associated with completion. The uniformity with which participants described practices was notable. Every participant discussed institutional reform efforts to improve student completions through the development of the Guided Pathways initiative, and secondarily, the institutional response to Assembly Bill 705 (AB 705). The data indicate that presidents are knowledgeable of best practices associated with

student completions and that major change efforts on campuses are driven primarily by statewide initiatives.

Goldrick-Rab (2010) suggested community colleges should examine student attributes, institutional practices, and macro-level opportunity structures when considering factors that affect student outcomes. Student attributes refers to characteristics such as past academic experience, demographics, and economic circumstance with which students enter the institution that can affect student outcomes. Institutional practices are those policies and practices that can be shaped with the institution such as program offerings and instructional practices. Finally, macro-level opportunities are defined as external factors such as state and federal policies that either limit or facilitate colleges' ability to increase student completions. Presidents' demonstrated understanding of the effect of student attributes and institutional practices on student completions serves to validate their conceptual knowledge of research-based best practices in student completions. A discussion of macro-level opportunities, specifically the Guided Pathways initiative and AB 705, demonstrates the influence of the broader reform movement on presidents' selection of campus-based reform.

Student Attributes

Reducing the equity gap is an articulated goal of the California Guided Pathways initiative (Hope, 2017). Despite this, participants generally discussed issues of equity outside of the Guided Pathways initiative. One president did indicate that his campus community developed a broader umbrella program under which "our guided pathways initiatives are going, our SSS [Student Support Services] and equity blend is going." More typically, participants discussed issues of equity as important in and of themselves. When asked generally about improving student completion rates, a second participant noted the value of programs targeting

specific populations, saying, “We have a program here to Hispanic serving institution grants. We have 100 students who started this year, the first-year experience. Of those 100, we had 89 back after the first year.” He went on to indicate that such programs played a secondary role and that the focus to improve outcomes for historically disenfranchised populations needed to be in the classroom, saying, “That interaction between the students and the faculty member in every discipline is more important than anything we talk about, do counseling, financial aid or anything else and that is where we need to go to improve completion.”

Closing the equity gap was specifically noted as a significant priority in improving completions by seven participants and discussed in more general terms by all others. Interestingly, when discussing issues of equity and closing the achievement gap, participants shifted their primary emphasis from academic and support programming for students to the knowledge and attitudes of faculty. In discussing a growing Hispanic student population at her college, one president indicated that the willingness of faculty to adjust to changing student demographics was mixed. While she was impressed with many faculty members’ willingness to adapt, she also acknowledged that “there’s going to be some faculty where there’s no way in the world that we can break through an unwillingness to see it differently.” A second president indicated the importance of closing the equity gap and noted substantially more resistance from some faculty members:

> Now, the other thing that you need to look at, and this is the data I make available to the faculty also, is equity data. That is to say, what percentage of their students are of various groups and how all those students are doing in their class. I mean, I have faculty who fail all Latinos.

Both presidents indicated that there was relatively little that could be done to remedy this situation. The prevailing attitude is conveyed in the following statement made by a third president:

> I hate to say it, but sometimes . . . well, what I try to do as an administrator is to encourage those voices that are very positive and see positive effects and see that all groups can do better. And for those who aren't willing to change, to be honest they retire, and we just refresh the faculty.

Two presidents explicitly discussed proactive approaches to address issues of equity. One indicated that she had brought in equity speakers that she felt the faculty would respect and respond to positively. The other described an internal professional development program in which his vice president of instruction annually led 15 to 20 faculty through a year-long equity and inclusion training. Additionally, he indicated that "The board has to be educated about equity, social justice issues," expressing the need for the problem to be addressed from the institutional level. The speakers were seen as ineffective while the year-long workshop in conjunction with board engagement was seen as an effective approach over time.

Participants acknowledged the importance of closing the achievement gap between ethnic groups. They demonstrated a thorough knowledge of the scope of the issue with some connecting the issues to broad institutional change and others with specific intervention programs. Coalition building and professional development opportunities for faculty were the primary strategies participants used to address the achievement gap. The prevailing understanding of the issue was clearly expressed by one president leading a college with quickly changing student demographics. He noted that, "The demographics of the students in California

has changed tremendously over the last 20, 30 years. The instruction hasn't changed. Instructors haven't changed."

The empirical research demonstrating how to successfully close the achievement gap is limited. A study by Greene, Marti, and McClenney (2008) eliminated student effort as the cause of the achievement gap and suggests that institutions should take greater responsibility to ensure that lower performing student groups access high-quality programs. Other studies identify factors that predict likelihood of retention in specific groups. High school grades, number of courses, and early identification of a college major all seem to predict higher retention in African American males (Hagedorn, Maxwell, & Hampton, 2001) but also predict retention among the general student population (Fike & Fike, 2008).

The importance of addressing issues of equity, however, was not tied directly to the need to increase overall completion rate. One participant explicitly articulated his perspective, saying:

> When you see African Americans just exceeding 30%, Latinos at 33 and that perpetuates itself decade after decade and the faculty have been saying the same thing for decades. You have, and this is my personal opinion, you have an ethical and moral and professional obligation to change it.

The data from this study did not establish the reason presidents perceive closing the equity gap as important. The lack of directly connecting issues of equity to overall completion rates suggest that other factors may be at play. Ethical and moral obligation is the only direct perspective given and so is noted.

Institutional Practices

Study participants were aware of institutional practices that impact student completion rates. Programs that address the lack of academic preparedness were discussed by all

participants throughout the interviews and were seen as a central factor in students' ability to succeed. Every participant mentioned at least two individual programs noted as a best practice in the literature review including supplemental instruction, learning communities, first-year experience programs, and intrusive counseling. Expressing the importance of these programs, one president said, "anything we can do [with] learning communities, the support that's available in our learning commons library area, to our math lab, English writing lab, our overarching learning resources, the tutoring program, supplemental instruction . . . will help students succeed."

While aware of targeted programs, presidents were more interested in institutional programs affecting the student experience and ultimately classroom performance. When referring to programs developed over the last fifteen years, one president noted "even when we saw lots of movement in terms of innovation and activities, there was still no real change for students." Another was more detailed:

> We've spent millions and millions and millions of dollars on the basic skills initiative for 10 years. Did not move the dial. They've spent billion dollars, whatever the numbers are, on all the students access money and student equity money. We are all getting it. We've all added counselors and we've added tutors and support systems. Now we're getting free tuition, we're doing everything to me on the student services side and none of that matters if they aren't passing classes.

These programs were mentioned within the broader context of supporting students throughout their student experience. As a third president noted, "I like to talk about the overall student experience and within the overall student experience is supporting students in meeting their academic goals." Taking this broader perspective of the student experience is supported by

both longitudinal studies as well as programs that engage students for one or more years (Dudley, Liu, Hao, & Stallard, 2015; Horn, Nevill, & Griffith, 2006; Kuh, 2011). A second key factor that arose from the interviews was that of efficiency.

Presidents discussed two related aspects of efficiency that they felt could significantly improve student outcomes. First, presidents discussed degree and certificate efficiency referring to the practice of limiting the number of courses and credits needed to complete a degree, as a key factor. One participant said, "What we really need to be focused on is units to degree, and units taken, you know, the number of units taken by a student [to complete]." This sentiment was reflected by six participants when discussing how best to increase student completions.

Second, presidents were keenly aware of student enrollment patterns and issues of course availability. "We need to get students to take 15 units . . . not just 12," was a sentiment expressed by five presidents and has been shown to be an effective practice (Crosta, 2014). In general, participants showed substantial interest in the enrollment process. Individual presidents separately emphasized the need for students to enroll prior to the start of a course, adjust the number of units taken, and minimize the number of non-degree applicable classes as strategies to increase student throughput. When asked about strategies, one president noted the importance of the academic calendar, rhetorically asking, "How it's set up [in terms of] course sequencing? Can students move easily through a program?" A second president indicated the importance of having "curriculum that will directly articulate into a university or into a job" in order to keep students motivated to complete programs.

The need for efficiency as a strategy to increase completion was counterbalanced by the need to maintain access for students. Presidents felt that ensuring access was a vital part of the institutional mission and were willing to accept lower completion rates to achieve that part of the

mission. One president noted that, “It's important that we continue to provide access for the nontraditional students or the students that are less prepared that, that is going to have an impact on our completion rate.” Other presidents were stronger in their articulation of what completion means in terms of the access mission:

> Why shouldn't I be able to call somebody that comes here and increases their job skills as a completer when that's their goal? They are getting a better job which increases their income and we have committed resources to making sure that that sort of training and education is available. So in my head, that's a completer.

These comments were echoed by all participants and indicate a willingness and desire to accept and serve students who are unlikely to obtain a degree or certificate but are perceived to benefit from taking advantage of the services offered by the college.

Macro-Level Opportunities

Macro-level opportunities are external factors that either hinder or support an institution’s ability to achieve their desired outcome. There were two external factors every participant discussed as critical, Assembly Bill 705 (AB 705) and the Guided Pathways Initiative. In aggregate, the components of these two external factors encompassed every best practice discussed by presidents in interviews.

AB 705 addresses developmental education within the California community colleges. The bill requires that community colleges maximize the probability that students complete transfer-level coursework in English and math within one year. To accomplish this, the regulation requires that students are not placed into developmental courses unless the college can show evidence that suggest the student is highly unlikely to succeed in college-level courses

without remediation. The implication, as presidents noted, was that the vast majority of students would directly enter college-level coursework. As one president noted:

> I've talked to a couple of friends of mine who on the institutional research side. There's no way anybody could actually develop a viable plan and have data to support it, given that we've never done this before. So the option from our perspective, we're going to place most of our students in the college level classes and then we're going to have to figure out how to provide requisite support.

Overall, presidents were supportive of the mandates placed on their institutions. Speaking from experience at a different institution, one indicated that "we quadrupled the number of students who we placed into transfer level, but they succeeded at the same levels as students who [faculty] felt more comfortable with because they were placed with the Accuplacer test." Several presidents saw the legislation as a way to move faculty forward in improving developmental education:

> It's interesting because we don't want a million laws, but it seems to take laws to make movements . . . if there's a law like AB 705, we just had a district wide meeting with our English and our math faculty with counselors and staff, trying to figure out how we're going to meet the law and for the group of faculty who were saying 'I refuse,' somebody was able to stand up and say, 'You may not like it, but it's the law. You have to do it. So let's figure out how we're going to do it.

This sentiment was shared by presidents who felt faculty resisted changes regardless of what data were presented and saw AB 705 as an opportunity to further infuse the use of data into college practices:

> Now when the faculty are saying, you know, 'We're not comfortable. Only 20 percent should go to transfer level.' First of all we have the legislation. We have to prove that they're unlikely to succeed at transfer level, which is going to be hard to do, so I'm going to rely on the data . . . I understand and fully appreciate faculty care about students. They're not intentionally trying to set students up for failure, but in fact, when we look at the data, that's exactly what we've done.

Presidents further understood that AB 705 would require extensive support for students enrolling in college-level courses who historically enrolled in developmental courses. Presidents discussed institutional practices focusing on student support most often within the context AB 705. Primarily, the focus was on providing academic support through tutoring, supplemental instruction, and co-requisite classes designed to address student content deficiencies and support the development of college success skills.

There is evidence that students who are placed into developmental education classes but nevertheless enroll in college-level math and English classes are more likely to complete college-level math and English than those who enroll in developmental classes (Fong & Melguizo, 2017). There is also extensive evidence to indicate that accelerated developmental education pathways are more effective (Hern & Snell, 2014; Hodara & Jaggars, 2014; Jaggars, Hodara, Cho, & Xu, 2015; Scrivener, Weiss, Ratledge, Rudd, Sommo, & Fresques, 2015). As noted by the study participant above, there is very little evidence that would indicate the result of placing the vast majority of students into college level classes. A study conducted in support of AB 705 by the RP Group (Bahr et al., 2017), a research consortium focusing on California community colleges, produced estimated completion rates of students who placed into developmental course work should they be placed directly into college-level course work. Their analysis indicated that

students have a 42% chance of completing college-level English if placed directly as opposed to a 12% chance if placed into a developmental class one level below college-level. Similar estimates were made for transfer-level math classes based on students past academic experience and indicating that the likelihood of passing a college-level math course increased at least threefold by bypassing remedial classes (Bahr et al., 2017). Overall, presidents interviewed for this study were supportive of the project, were willing to accept that significant curtailing of developmental offerings was a reasonable way to proceed and indicated that the external requirement was effective in moving reluctant faculty forward. Guided Pathways is a broader initiative influencing community colleges.

The Guided Pathways is an initiative at both the California Community College Chancellor's office as well as at the AACC. The AACC partnered with several research and policy organizations to develop and launch their project. Several California community colleges participated in the pilot project. Inspired by AACC, the California Community College Foundation launched a 20-college pilot program in 2017 in partnership with AACC and others. At the same time, the California state legislature passed a budget that earmarked $150 million dollars in one-time funding to be expended over five years to expand Guided Pathways. This funding strongly incentivized presidents across the state to engage in the project. All participants in this study indicated that their colleges were highly engaged in the state Guided Pathways project.

The California Guided Pathways project is intended to provide colleges a framework for developing clear course-taking patterns for students, assisting them in making better enrollment decisions and selecting a specific course of study, and integrating support services for easier and more timely access. The state chancellor's office, which is administering both the program and

the legislatively allocated funds, is also developing performance indicators for which institutions will provide data. Presidents showed significant interest in this project. Expressing the overall sentiment of the study group, one president said, “I do believe the concept and the research is solid on that and that's why among other reasons we’re charging full bore into the guided pathways.” One aspect of the project that presidents liked was the relative flexibility it afforded institutions in keeping a wide variety of academic and support programs:

> Each of the components of the four pillars [of Guided Pathways] is about closer connection to the students and helping guide them. And I don't think that lessens the need or value for a variety of special success efforts. Through the guided pathways we're going to be able to, I hope, better assure that [students] know ‘this is available for you.

In fact, the Guided Pathways project was seen by the participants as an excellent tool to breach topics that were perceived as challenging. One participant indicated that “the more we can make sure that our faculty and counseling staff are really helping students understand you need to finish your degree and that means, you know, taking more units. We’re working on that with [Guided] pathways.” Curriculum, metrics and outcomes, equity, impact of performance-based funding, demand-based scheduling, increasing units per term taken by students, framing change for the campus, and changes to the enrollment process were all cited as areas that could be addressed through the Guided Pathways project. One president addressed curriculum, demand-based scheduling, units taken per term by students, and enrollment processes simultaneously, saying:

> Guided pathways are prescribed and have to have curriculum that will directly articulate into a university or directly articulate into a job. So it's industry demand. So for example, you pick your top 10 industries . . . in LA, health care, IT, logistics and say, ‘Okay, I'm

> going to design a path, a curricular path of courses that will get [students] a job in that industry at a high wage.' Then you work with the faculty and you create those pathways and then you build a block schedule, a two-year schedule so students do not have to walk in four times . . . to register.

Presidents saw the program components for the Guided Pathways project as well-grounded in research on student success. The project was also seen as valuable as a vehicle to engage their colleges in change efforts and presidents had formulated ways in which to use the project to engage in the organizational changes they saw as necessary to increase student completions.

Finding in Context

Theme two indicates that every component of institutional change that presidents discussed during the interview process was directly tied to either to AB 705 or the Guided Pathways initiative. No participants indicated current programming designed to improve student completions that was not directly related to these two factors. This absence is notable and suggests that change initiatives are primarily driven from outside of the institution. Presidents noted that the Guided Pathways initiative and AB 705 were useful tools in driving significant organizational change and overcoming resistance to change.

Theme 3: Faculty Resistance to Change and Accountability

Community college presidents need to apply change management and leadership skills to overcome resistance to improvement efforts in order to successfully improve completion rates. All participants discussed resistance to change initiatives from the faculty. Four presidents made mention of change resistance from administrators and then indicated that those administrators were removed from those positions typically within two years of the presidents' tenure.

Resistance to change from other administrators is not addressed further because presidents indicated the ability to take direct action to eliminate it. Interestingly, there was no mention of community college staff exhibiting resistance in any of the interviews.

Faculty resistance to change and various causes of the resistance are well-documented in the community college and higher education literature (Levin, Boothby-Jackson, Haberler & Walker, 2015; Levin, Jackson, & Guglielmino, 2006; McArthur, 2002; Tagg, 2012). Every participant in this study acknowledged resistance to change amongst the faculty. Presidents invariably followed statements expressing resistance to change with potential ways to address that resistance.

The data from this study suggest that presidents perceive the role of unions and collective bargaining agreements to be a significant cause of resistance to change efforts and that their ability to address this source of change was limited. Of central concern to participants was the resulting lack of faculty accountability for student performance. Participants also noted a lack of trust between management and faculty caused by previous leadership as a significant cause of resistance and described strategies they felt were successful in address it.

Faculty Accountability

Participants in this study attributed faculty resistance to the role of the union and distinguished between union involvement and shared governance policy. All participants noted issues with unionized faculty. Reflecting the consensus, one president indicated that “I mean it's union, it's resistant to rigorous evaluations and just, you know, authentic self-reflection and using data.” Numerous specific examples were given of faculty behavior based on their union protections. Several examples were given that seemed to be outside of typical behaviors associated with faculty resistance to change. For example, one president indicated that the union

refused to participate in institutional accreditation reporting and had not “signed off” on the accreditation reports. Another president said, “I can't even begin to explain how militant a faculty union leader I had the last two years.” He went on to describe several ways in which the faculty leader worked not only to undercut change efforts but engaged with the college’s board of trustees to undermine confidence in his leadership. The president expressed great relief at the faculty member losing the union leadership election. Similar examples were omitted from this finding as they lacked typicality.

Perhaps more critically, faculty union strength appeared to affect how presidents work with faculty on a day-to-day basis. Each of the comments provided below were given within the context of discussing faculty resistance to change in the light of union protections. The following sentiment regarding accountability and the faculty was shared by 10 of 13 participants:

> To me the area is we need to be looking at our faculty and we need to be looking at our classes and I need to be able to say only 56 percent of our students are passing a math class that's not okay. And I hold you accountable for it, figure out how to be better. Um, but you cannot talk that way to faculty.

The lack of ability to hold faculty accountable for institutional goals was expressed in a variety of ways. For example:

> It would be ridiculous to say that the curricular changes that I'm hoping for will be happening are going to be entirely based on student need and what the research says. I will be lying. Let's be honest. It's going to change based on where the faculty are.

Six presidents noted that providing performance data to faculty was best done by ensuring faculty understood that the leadership of the institution would not take or expect action, as summarized in this comment:

> We looked at course success rates by course and by instructor. Not just the average and the median. And we actually gave them to the instructors and we said no punishment, no retaliation. Take that data and do with it as you wish.

In a more brazen example, another president noted,

> Faculty, you know, will say to managers, 'I'll outlive you. You're the twelfth Dean I've had here. You're the 15th president I've worked with and I've outlived all of them and I haven't made any changes.

The challenges associated with holding faculty accountable for student outcomes is one that participants in the study attributed, at least in part, to the role of unions. Presidents distinguish between union issues and those of shared governance. Overall, presidents were supportive of shared governance processes and perceived faculty involvement in decision-making a strength. "I'm sitting in an administrative chair. I'm not on the ground every day with students. They know better than I do how to solve the problem," said one president of having faculty involved in decision-making.

It is worth noting that shared governance in California community colleges is mandated by Assembly Bill 1705 and that administrative leadership is required to engage the academic senate at each college in defined decision-making processes. While there is no mandate for union participation in shared governance activities, one president noted that, "Even though participatory governance lies in the Senate, the union thinks they have a role in it. The attitude [with the union] was completely one of distrust." This was the only comment in the data that articulated the conflation of union, academic senate, and shared governance and is noted only as a point of interest. More typically, presidents expressed respect for and utility in faculty expertise. When asked about the role of faculty, one president said, "Faculty are amazing. I

don’t have any of the answers, but I know how to put a whole group of faculty in a room and let them go and come up with brilliant ideas.” The approach of creating opportunities for faculty to engage in idea generation was typical. Another president indicated, “You have to be a president that really takes care of your faculty and allows them to come up with the ideas for them to come up with a solution for them to figure out how it's going to be done.” Mistrust between faculty and administration was cited both as a challenge and reason for employing the strategy of engaging faculty in decision-making.

Presidents noted mistrust of administration based on the acts of past leadership as a cause of resistance as well as some level of fear. One president mused, “What kind of trauma are folks holding onto that keeps them from doing their best?” She asked this question in the context of how best to address faculty issues to allow for forward movement in change processes. Another president made a similar observation, saying:

> The faculty actually had been reeling from a lot of change in leadership. And quite frankly, they were feeling quite traumatically stressed so . . . some of the early conversations were around things they had always wanted to do but they hadn't felt supported in doing so.

Both presidents reached the same conclusion in terms of how to initially address the issues of mistrust caused by previous leadership. They identified initiatives that faculty had been interested in and felt unsupported in accomplishing under previous leadership and then provided support and resources. Overall, six presidents explicitly noted mistrust, fear, or both resulting from past experiences with administrators as a cause of faculty resistance.

Participants in this study indicated that unions played a significant role in creating resistance to change. Further, participants cited a lack of trust between management and faculty

as a primary cause of resistance supporting the existing research (Ford, Ford, & D'Amelio, 2008; Kater; 2017; Oreg, 2006; Van den Heuvel, Schalk, & van Assen, 2015). Studies have demonstrated that unionization leads to more adversarial relationships with management (Castro, 2000; Garfield, 2008; Wickens, 2008;). The role that existing unions play in creating resistance to reform efforts is less explored in the literature. Garfield (2008) suggests that the collective bargaining process may result in a less consistent faculty voice in governance. This weakened voice may then result in lowered trust in governance decisions (Kater, 2017) which in turn could lead to increased resistance to reform efforts (Tierney & Minor, 2004). In addressing resistance to reform efforts, presidents did not specifically tie strategies to causes. Rather, their focus was on communicating the centrality of students as the work of the college and providing support for engaged faculty.

Strategy for Addressing Resistance

Community colleges need to embrace organizational change efforts and overcome resistance to achieve higher student completion rates. The AACC (2012) identified organizational strategy, resource management, communication, and collaboration as key competency areas for presidents to succeed. In terms of addressing resistance to change, participants noted the utility of state mandates and funding-incentivized programs as discussed in theme two. The importance which presidents assigned to the use of external pressure to overcome resistance is hard to overstate and is emphasized in theme two. Beyond the use of mandates, presidents noted consistent communication focused on the student experience and the allocation of resources to support engaged faculty as key strategies to overcome resistance.

Communication. Presidents indicated that communication was used to develop a stronger commitment to the success of the student as noted in this comment:

> They're tightly tied to the community. For me, it's getting [faculty] to look at our community, look at the needs that we have in terms of poverty, in terms of lack of focus our young people have. This is the future. I mean it's just getting them to recognize the importance of the work.

Emphasis on the students' ability to succeed was used both as a general and targeted strategy to overcome resistance. One president indicated, "We use that word 'student success' is practically in every sentence. I write it all day along." Her intent in using the words "student success" frequently was to focus the institution on the student experience. A comment from another president illustrates how presidents felt they could use the idea of student success to overcome resistance from small cohorts of faculty:

> When [faculty] got together, they would come up with all of these reasons why they were hesitant, or concerns and it was kind of funny. I thought we had momentum and then we fall back, and I just kept nudging saying, 'how do we get this so you can best serve the students?' Right? That's what it's about. And when we keep the focus laser pointed on that, the objections are there, but they fall to the secondary tier level and not that primary.

Consistent communication behavior from executive leaders as demonstrated by these comments is a key factor in overcoming resistance to change efforts (Armenakis & Bedeian, 1999; Battilana, Glimartin, Sengul, Pache, & Alexander, 2010; Holt, Armenakis, Field, & Harris, 2007; Kitchen & Daily, 2002). Participants consistently indicated that when working with faculty, they work to consistently keep the focus on student success and student outcomes.

Communication of an organizational vision for success is also cited as a critical factor in generating the conditions necessary for organizational change (Kottter, 2009; Matos Marques Simones & Esposito, 2014). The broader vision for success was primarily discussed within the

context of institution-wide initiatives, particularly in the form of external partnership. Five participants indicated that they consistently communicated to the college community about external validations of excellence. The Aspen Institute's College Excellence program was noted by three participants while others mentioned initiatives for which they sought to receive recognition from state, regional, or national organizations. Interestingly, measures imposed by these external entities were used to illustrate what individual colleges wished to achieve. These measures, particularly from the Aspen Institute include overall completion rates and completion rates disaggregated by historically disenfranchised student groups.

Participants indicated they regularly focused conversations with faculty on serving students well. Providing faculty data, with or without associated action, demonstrates at least some level of interest in engaging faculty on the topic of student outcomes. This interest did not extend to formal institutional planning documents. A document review conducted for this study showed that none of the institutions represented in this study published measurable completion goals in publicly available documents such as the educational master plan or institutional strategic plan. In all cases, these documents discussed improving student success without indicating the metric by which that would be measured.

Resource allocation. Research indicates that diminished resources may hamper the ability of community colleges to achieve desired student outcomes (Mitchell, Palacios, & Leachman, 2014; Waller, Glasscock, Glasscock, & Fulton-Calkins, 2006). Nine of thirteen presidents did feel they had the resources necessary to achieve greater student success. Summarizing the majority view, one president said, "we have what we have and I think we can do a lot more with what we do have." Another president was more forceful in her assertion saying, "It's simply using resources right. It's taking what we're doing and doing it right rather

than just doing it." The four presidents who expressed that funding was insufficient also indicated that the funds could be used more effectively. The minority consensus was:

> I don't have enough money to do the systemic changes that I really want to make fast, but I can utilize, prioritize the needs, the resources I have and look for opportunities for people who are interested in innovation and creativity to support that.

The allocation of a small amount of funds to specific faculty to expedite change efforts was common strategy. The notion of supporting faculty with small amount of funds was frequently discussed within the context of supporting change or innovation. After indicating that he felt that overall funding was insufficient to make systemic changes, a second president said, "It doesn't take the money to support faculty . . . I can give a faculty member $500 so they can try a new teaching technique, if they need supplies. I have that kind of money." This sentiment was shared by all presidents regardless of their perspective of overall funding efforts. Asked how to best encourage resistant faculty to engage in change efforts, another president indicated a limited but important role, saying:

> I can feed them and make them feel happy and make them feel glad to come to work. You know, that's about what I can do and I can advocate and fight for them to get resources and go out and find grants and, you know, but my job is to stay out of their way because they're the ones working with students. But it's kind of complicated thing.

Only one president indicated that she actively withheld funds to create changes. When asked how to overcome resistance from a recalcitrant math faculty, she responded:

> I'll tell you exactly how you do it. You withhold faculty positions until they make some movement and that's exactly what I did here. And we got some movement within a semester. I was quite impressed with the faculty.

Overall, presidents felt that funding was sufficient to make progress on improving student outcomes and felt they had significant control over allocations to drive change. The consensus feeling on how presidents could drive change and overcome resistance is summarized in the following comment:

> Presidents set tone, presidents set culture, and presidents move resources around. That's the only thing I can do to move the dial on student success is I can set the tone and say things like 73 percent [course completion rate], is not okay. I can give the resources to help and support [people working to make progress].

Finding in Context

Theme three indicated that presidents perceived that faculty resistance to change was driven by union protections. Presidents also indicated that this resistance was not from all faculty but rather a small yet significant, and vocal, minority. The biggest challenge associated with this resistance was the inability to hold faculty accountable for student outcomes. The tack that presidents employed to address this resistance was two-fold. First, presidents indicated that they worked diligently to keep the focus on students and student success. In many regards, this practice can be considered a focus on the mission of the college. Second, presidents provided funds to faculty members and departments who expressed interest in engaging in a change, a practice that can be characterized as an incentive used by presidents.

Theme 4: Examining Value: The Associate Degree and Institutional Goals

Presidents need to see the utility value in establishing and achieving high completion rate targets in achieving both their own professional goals and institutional goals. The perceptions articulated by study participants regarding the value of the associate degree and institutional goal setting were consistent across participants and shed light on how presidents perceive student

completion at their institutions. The data indicate that presidents have a nuanced view of the value of the associate degree and perceive the value of institutional goals around completion to be relatively low.

The Associate Degree

Participants distinguished between three types of associate degrees when discussing their value: the associate degree for transfer, the general associate degree, and career-technical degrees. The associate degree for transfer was first awarded to students completing their degree in 2012 and provided guaranteed articulation into four-year programs in the California State University system and portions of University of California system. The general associate degree, however, does not provide guaranteed articulation and as two participants noted using personal examples, often results in students having to repeat courses. Career-technical degrees were considered those that provided specific job-related skills and certifications such as nursing, welding, auto mechanics, or landscape design. Participants clearly differentiated between the associate degree for transfer, the general associate degree, and career-technical degrees. The value of the degree was typically tied directly to students' next activity.

When asked about the usefulness of the general associate degree, one president indicated, "We don't need them anymore. We absolutely don't. If you have an [associate degree for transfer], you don't need both." A second president described the general associate degree in the following manner:

> We secretly know that it's not a degree. It is two years of general education classes, period. That's what it is. And we should all be honest about it. When I have students leaving here with an AA degree in psychology, I say them. 'So what do you plan to do?

> Because you know you need to go get at least a bachelor's if not a master's,' because what can you do with that?

The overall sentiment of participants was that career-technical degree and transfer degrees were valuable and should be emphasized. A third president summed it up this way:

> I think we should be talking about how important [transfer and career-technical degrees] are and how much value they have because on the CTE [career-technical education] side they have a lot of value. You've got the one for transfer and then you've got the ones that are to help you get a job.

Despite strongly favoring the technical and transfer degrees, participants also noted the value of general education. Expressing the consensus opinion, one president noted:

> There's still value in a good solid general arts or liberal arts education. While a good portion of our mission is to prepare people for the world of work and/or transfer and then the world of work, it's also helping general education so that they are better citizens and more active within their communities

The value of the general education was also expressed within the context of preparing students for the workforce. Participants felt that the ability to continue learning was tied to the broader skills associated with general education:

> I am hearing from employers that they do value education beyond high school [even] just to the associate's degree or the certification aligned with their specific industry. They also look for entry level folks who then can continue their education to become supervisors and managers and they're looking to community colleges for that.

Finally, two presidents noted the value of a general associate degree based on the educational attainment level of their communities. One indicated that, "The educational

attainment level here is among the lowest in the state. For somebody to have an AA here is a real separator." He then went on to indicate that he did not feel it was a strong differentiator for students in larger urban areas.

Institutional Goals

During the initial document review for this study, it was noted none of the participating colleges articulated measurable goals within their strategic or educational master plan. The need for a clearly stated vision, goals, and the capacity to measure and evaluate progress is well documented in the organizational change and management literature as components of successful change (Al-Haddad & Kotnour, 2015; Lewis, 2011). One participant had clearly articulated measurable goals regarding student outcomes, including completions as part of her presidential goals separate from college-wide plans.

Participants indicated measurable student completion goals were set by the "academic senate annually as required by some [state] regulation." In general, presidents perceived this type of goal setting as not adding significant value or creating significant disagreements. When discussing why measurable objectives were not in his master plan a second president said:

> Each time we've done it, I've gotten partly there. I think the reason I'm still here [employed at the college] after seven years is I involve the key players and I'm satisfied with good enough somethings. So each time we've done a three year strategic plan, I've been able to get it to be tweaked and tightened and get more and more people to say, 'well we want this to be more measurable.

A third president indicated more clearly that specific measurable goal did not provide any significant value within the context of institutional improvement efforts:

> I'm a fan of bold goals and that is if I say our success rate 60 and I'm satisfied there, I shouldn't have a job. I'd rather say I want it to be 100 percent . . . I don't have goals that I've set for the college because I think, 'So what? You meet them.' And then what? The question is, do students feel as if they have made progress and that they have completed their goals?

Presidents' perspectives on institutional goals align closely with findings noted in theme three and with perceptions of how best to consider completions discussed as part of theme four. In general, measurable goals are closely related to accountability and so faculty resistance bolstered by union protections is likely to foster presidents' perception that setting and communicating measurable goals will likely be contentious. In terms of metrics, if presidents perceive completion metrics to be more salient when examined in relationship with student intent, then setting goals using the prescribed metrics from the state or federal government is likely to be unappealing. Regardless of the reason, presidents participating in this study did not value establishing and communicating student completion goals as part of an overall institutional improvement strategy.

Finding in Context

Theme four highlights that presidents viewed the value of an associate degree was tied directly to students' next activity. While presidents did see value in the liberal arts education provided as part of degree completions, associate degrees for transfer and associate degrees that provided job or industry-specific skills were seen to have greatest value. The potential value of institutional goal setting was tempered by the perception that the activity was potentially contentious based on faculty resistance to accountability or as meaningless because the external measures failed to properly account for variance in student intent.

Conclusion

The four themes that emerged from this study highlight the complexity involved with serving as a community college president. Theme one indicates that measuring student completions is complicated. Measuring completion rates presents challenges based on the student population while measuring the number of degrees and certificates granted may distort perceptions of performance. Theme two suggests that while college presidents are highly knowledgeable of strategies that can improve student outcomes, college change initiatives are highly regulated and mandated from both the statewide community college governing board and the state legislature. Theme three suggests that there is substantial faculty resistance to change bolstered by union protections creating circumstances that make accountability very challenging. And finally, theme four implies that presidents' perceived value of the associate degree has shifted based largely on its potential utility for the students after they leave the institution.

The notable commonality in each of these themes is the external factors over which presidents have limited influence. A range of powerful external entities from the Department of Education to local employers had a significant impact on how presidents perceive their work and ability to affect change. Chapter five provides a discussion of findings, recommendations for practice, and suggestions for further research.

CHAPTER FIVE: DISCUSSION

The purpose of this study was to investigate the knowledge, motivation, and organizational issues that affected the ability of community college presidents to lead organizational change efforts resulting in a 50% increase in student completion rates. The American Association of Community Colleges served as the entry point for the study and established the global goal of 50% increase in completion rates. Community college presidents serving as the chief executive at their respective colleges were the stakeholder group of study.

The study framework employed the Clark and Estes (2008) KMO gap analytic framework. The literature review was used to identify assumed knowledge, motivation, and organizational influences that are likely to affect the ability of presidents to achieve the global goal of higher completion rates. Additionally, a conceptional framework denoting the interaction of the knowledge and motivation influences with the organizational influences was developed. Document analysis, interview protocols, and a sample selection protocol were then developed to explore the assumed influences.

External influences presented themselves as significant in each of the four themes derived from the data analysis. The veracity of these external factors has significant implications for practice for community college presidents. In order to contextualize the recommendations, the chapter begins with a broader discussion of the thematic findings from the study to highlight the environment in which community college presidents lead, the strategies they employ to engage in reform efforts, and best practices in organizational change that appear not to be employed. Additionally, because the KMO framework lends itself to the development of learning solutions for problems of practice, a brief discussion on the potential for training activities to enhance the performance of presidents is presented. Recommendations for leadership practice based on the

thematic findings of this study and existing literature are then presented. The chapter concludes with a discussion of strengths and weaknesses of the KMO gap analytic approach (Clark & Estes, 2008) and suggestions for future research.

Discussion

This study sought to explore the motivation and knowledge that community college presidents brought to bear on their organizational setting in order to achieve higher student completion rates. The findings of the study suggest that presidents are motivated to increase student completions, are knowledgeable about best practices to do so, and employ several best practices associated with successful change leadership. The environment created by external mandates and internal relations, however, may be more informative in terms of understanding how presidents can affect completion rates. A more succinct framing of the thematic findings is illustrative.

- Theme one: Community colleges are assessed using student completions by state and federal departments of education, external funders, and external groups. Student completions are difficult to measure and there is not broad agreement on which metric is most appropriate. Presidents see little value in external completion measures and prefer to examine data that they feel is more informative for practice.
- Theme two: Current legislation and funding-incentivized mandates dictate the programmatic approaches that colleges take to improve student completion rates.
- Theme three: Faculty unions facilitate successful resistance to improvement efforts by a vocal minority. Unions and collective bargaining agreements make holding faculty accountable for student outcomes difficult.

- Theme four: The general associate degree in and of itself is perceived to have limited value. Stakeholders perceived value of associate degree, and by extension the community college education, is based on skill acquisition for employment and the ability of the student to successfully acquire a bachelor's degree.

Put together, the leadership environment is daunting. Presidents operate in an environment where external performance measures are perceived as incomplete at best and inappropriate at worst, mandates limit the autonomy of presidents to shape organizational changes, holding faculty accountable for student performance is difficult, and the value of the product, the associate degree, is judged by the ability of students to achieve other goals.

Despite these challenges, participants were optimistic that the changes necessary to significantly improve student completions are feasible and readily articulated strategies aligned with successful organizational change. They utilized state mandates and legislation as leverage to generate a sense of urgency for change, a necessary step in organizational change (Kotter, 2009). As several presidents noted, both AB 705 and the Guided Pathways initiative presented opportunities to insist that faculty engage in creating a different student experience. They expressed confidence in their ability to build a strong coalition of faculty willing to make change. While they indicated significant challenges in holding faculty accountable through administrative action, presidents were confident that recalcitrant faculty members could be replaced with innovative faculty over time through naturally occurring attrition. In doing so, presidents demonstrated a high degree of self-efficacy and an understanding for the need to build strong coalitions when implementing change, both of which are necessary in successful change efforts (Bandura, 1977; Flannigan, Jones, & Moore, 2004). Presidents even expressed confidence in the existing faculty to apply their knowledge and skills to develop and implement innovative

solutions, a behavior and characteristic associated with leaders of successful change (Gilley, McMillan, & Gilley, 2009).

The sense of optimism was further expressed in leadership behaviors supported in a wide range of empirical research. Presidents indicated that they consistently brought the focus of change efforts back to student success, a notion they considered central to the community college mission, particularly when faced with resistance (Hallinger & Heck, 2002; McDonald, 2007). They encouraged innovation and change through financial support, encouragement, and by engaging faculty in shared decision-making processes often beyond mandated requirements (Caldwell, 1993; Kater, 2017; Tagg, 2012). Taken together, presidents employed several leadership strategies closely aligned with research-based best practices in organizational change. Successful reform that results in substantially improved completion rates nonetheless remains elusive and suggests room for the application of additional or different strategies.

Two key elements of successful change efforts were notably missing within the data collected for this study. First, presidents were reluctant to engage in institutional goal setting within the context of organizational change to improve student outcomes. Institutional goal setting related to student completions was perceived as potentially contentious based on faculty resistance to accountability or as meaningless because completion metrics imposed by external entities such as the US Department of Education failed to properly account for variance in student intent. Second, presidents expressed limited ability to hold faculty accountable for performance. This perceived challenge resulted in an emphasis on supporting faculty interested in, and often already engaged in, instructional innovation.

There is extensive evidence to support institutional goal setting as a critical step in achieving successful organizational change (Al-Haddad & Kotnour, 2015; Beer, Eisenstat, &

Spector, 1990; Lewis, 2011; Kotter, 1996). Regardless of which approach is employed, in almost all instances, establishing a clear vision for the change and articulating and communicating measurable and observable goals is considered a necessary part of a successful change effort (Stouten, Rousseau, & De Cremer, 2018). The nature of goal setting, however, can vary. In his widely used eight-step model of change, for example, Kotter (1996) indicates a need to create a sense of urgency for change. He goes on to argue that urgency should imply "boldness" and that goals should reflect that boldness to diminish a sense of complacency, which he argues may hinder change efforts. Participants in this study noted that formal goal setting was challenging not only because of the potential of creating unneeded tension with faculty but also because selecting the goal is complicated. If a goal appears unachievable or extremely difficult to achieve, it tends to be rejected (Locke & Latham, 2002), reducing the likelihood of successful change. If a goal is not ambitious enough, however, it may be interpreted as meaningless which could also result in lower likelihood of successful organizational change (Rousseau & Tijoriwala, 1999). Despite these challenges, goal setting is an activity that is well-supported by both theory and research (Kleingeld, van Mierlo, & Arends, 2011; Locke & Latham, 2002, 2006; O'Leary-Kelly, Martocchio, & Frink, 1994) and could be a useful tool for community college presidents in their efforts to implement change.

Goals and accountability are closely related. The Aspen Institute (2017) indicates that successful presidents lead the process of establishing institutional goals, inclusive of student completion rates, hold themselves accountable to those goals, and delegate both accountability and authority to achieve those goals to subordinate leaders. The report further indicates that such behavior is considered high-risk and is not common among presidents (Aspen Institute, 2017). The environment described by participants in this study, particularly in relation to faculty unions,

supports this conclusion and shows that holding faculty accountable for student outcomes is challenging.

An examination of the collective bargaining agreements between faculty unions and colleges represented in this study confirms that student performance data are not typically an articulated part of the evaluation process. Student, peer, administrative, and self- evaluations that typically comprise the evaluation process provide limited insight into instructional quality (Sain & Williams, 2009) and often serve as the only source of information for community college faculty evaluation (Heller, 2012). Student performance data was consistently absent from the evaluation processes. One contract explicitly forbade the use of student performance data in the faculty evaluation process and one college included the use of retention data, referring to the percent of student who complete the course with any grade. In most instances, peer and administrator evaluations completed through a classroom observation of unspecified length, self-evaluations, and prescribed student evaluations comprise the whole of the formal evaluation process. Participants in the current study consistently indicated that providing faculty with student success data required assurances that no action would be taken further supporting the idea that student performance was not a metric used to evaluate faculty. Further, language in the collective bargaining agreements provide limited guidance for corrective action should evaluators deem it necessary. Typically, evaluators were asked to provide recommendations for a professional development plan and follow up on completion of the plan in the subsequent semester or year. Only two of the 13 collective bargaining agreements included language indicating the potential ramifications for faculty members not adhering to recommendations or showing progress in areas of unsatisfactory performance. Similarly, only one contract specifically indicated that the evaluation process could be used to commend excellent work.

However, there was no indication of potential financial benefit to the instructors if they received an excellent evaluation. Additionally, receiving tenure or a promotion in rank for faculty members required only satisfactory performance. These constraints make holding faculty accountable for student outcomes such as course success, retention, or degree attainment very challenging.

The recommendations for practice consider the findings from this study and the broader academic literature in organizational change, leadership, performance management, and learning. The recommendations are interrelated, far from comprehensive, and require readers to carefully consider their organizational context. They emphasize the need to establish and communicate institutional goals, develop stronger faculty accountability for student outcomes, and focus on first-time, full-time student cohorts while acknowledging that doing so is a high-risk proposition for community college presidents.

The Potential for Training

Several of the presidents who participated in this study had participated in workshops, seminars, and fellowships specifically for community college leaders and presidents. Training for new and experienced community college presidents is offered through the AACC, the Aspen Foundation, the League for Innovation in the Community College, the Community College League of California, among others. The opportunities to access learning opportunities specific to community college leadership are plentiful. Further, nine of 13 participants in this study held doctoral or master's degrees that related directly to educational management and organizational change. Overall, study participants had received substantial formal training in leadership, organizational change, and the community college environment.

This study examined the knowledge and motivation of community college presidents and how those factors interacted with organizational issues. Overall, presidents were knowledgeable about the types of changes necessary to improve student completion rates and were motivated to make those changes. The organizational issues that arose from the study were highly influenced by external factors or factors outside the purview of presidents to influence. For those factors that were within their scope of influence such as faculty resistance to change, presidents appeared to utilize strategies that were supported by empirical evidence. The two areas where presidents did not engage in supported practices were that of institutional goal setting and the use of formal authority to overcome resistance. In both instances, presidents indicated sufficient knowledge to do so while articulating reasons why they did not engage in those behaviors. Taking this into consideration, it is reasonable to conclude that training may not be a strong solution for presidents to overcome the issues associated with creating change in community colleges.

There was some evidence in the data to suggest that a strong professional network of presidents was not in existence. Three participants indicated that they would be interested to know how other presidents thought about the topic being discussed. The evidence is far from strong but is intriguing. The data analysis for this study was structured to find commonalities among community college presidents so strategies to improve student outcomes mentioned by individual presidents were typically not included in the findings. Sharing unique perspectives within a trusted professional network may be of substantial value to presidents particularly as they enter these positions.

Recommendations for Practice

The findings from the current study indicate significant challenges to engaging in organizational change likely to result in increased completion rate. Despite these challenges, presidents employed several best practices noted in the organizational change literature. Institutional goal setting and accountability processes were two notable areas of deficiency when comparing established best practices with strategies presidents indicated they used. These deficiencies appear related to the environment in which presidents lead as described in the findings of this study. Both activities were noted to be difficult because they were likely to cause conflict either as a result of the activity itself or because of strong union protections.

Based on the findings of this study and with consideration of existing evidence, four recommendations for practice are offered. First, take significant but judicious risks to advance student performance. Second, develop and communicate a vision that articulates student success in terms of completion. Third, create faculty accountability systems that take into consideration student outcomes. Fourth, reconsider the level of emphasis placed on serving first-time, full-time, degree-seeking students.

Engage in Risky Behavior

Presidents need to take significant risks to improve student success. While specific actions that constitute high-risk behavior is likely to vary based on the institutional context, generally, 'high-risk' in the current context can be considered behaviors that likely result in significant conflict. In 2013, the Aspen Institute (2013) released a study in which they identified five qualities of exceptional community college presidents amongst which was the a "willingness to take significant risks to advance student success" (p.6). The study goes on to indicate that despite being a quality exhibited by presidents who achieved exceptional results, boards of

trustees commonly favored hiring candidates who are risk-averse in order to avoid potential controversy or conflict particularly with faculty. While the report does not make clear their definition of risk, it is reasonable to infer that actions that result in controversy or conflict are considered high-risk.

The two areas in which risk-taking was most common among exceptional presidents include open acknowledgement of low levels of student success and realigning resources to focus on student success (Aspen Institute, 2013). Measuring and understanding current levels of institutional performance and allocating resources to address the perceived causes to poor performance are fundamentally necessary to improve organizational outcomes (Lewis, 2011). If these fundamental activities associated with organizational change are considered risk-taking behavior, then presidents must consider the ways to manage risk and make it productive.

Conflict is a likely result of any significant organizational improvement effort (Krantz, 2018; Morrill, 1991). The findings from this study indicate that community college presidents understand that conflict is both likely to occur and needs to be managed. Moreover, most participants in this study clearly avoided activities they felt would create conflict; namely institutional goal setting and holding faculty accountable for student outcomes. If conflicts are unavoidable, as they appear to be, then presidents need to take active steps to engage in conflicts that result in institutional improvement. Central to managing risk for community college presidents is garnering the support of governing boards. Governing boards, whether elected or appointed, are responsible for appointing and overseeing college presidents. When conflicts arise regarding institutional changes, support from the governing board may be necessary to carry on with those changes. As such, it is critical for presidents to help governing boards understand the nature of the improvement enterprise, the likely sources of potential conflict, and

collaboratively and pre-emptively develop strategies to overcome objections to change. Since presidents do not typically serve as frontline managers, it is also necessary to train, support, and empower vice presidents and deans to judiciously engage in conflict when deemed necessary.

Community college deans and vice presidents serve as the primary point of contact between faculty and administrators (Bragg, 2000). Significant stress factors for people in these positions include not knowing how their performance is evaluated, feeling like they lack the authority to meet their responsibilities, and managing conflicts involving faculty (Wild, Ebbers, Shelley, & Gmelch, 2003). Presidents can ameliorate these issues by providing opportunities to increase conflict management skills, clarifying expectations and understanding that meeting those expectations will likely involve significant conflict, and empowering managers to engage in risk-taking behaviors in support of student achievement goals.

More broadly, community college presidents need to prepare their institutions to manage the conflicts that naturally arise from organizational change efforts designed to improve student completion rates. Courting the support of the governing body by broadening their understanding of challenges associated with improvement efforts establishes an appropriate institutional perspective. Guiding and supporting leadership teams to take risks and use resulting conflict productively improves the operational likelihood that efforts to improve student completion rates will succeed.

Articulate Student Success

Establishing and communicating student completion goals may benefit institutional commitment to change initiatives. Participants indicated a reluctance to establish and communicate student completion performance goals for the institution. This reluctance was surprisingly uniform across the study participants during interviews and document analysis.

Colleges did not present articulated, measurable student completion goals within their publicly available planning documents and interviews confirmed that this was intentional. As noted in theme four, presidents indicated that establishing measurable goals was likely to be a contentious activity and would add little value in efforts to move the institution forward.

The research literature in organizational change is exceptionally unified in this area. Establishing goals and communicating progress on those goals to stakeholders is a central component in successful change efforts particularly when significant resistance to change is present. Resistance to change can be reduced when leaders set clear, measurable goals aligned with the vision of the organization (Locke & Latham, 2002; Smith, Locke & Barry, 1990). A broad review of the organizational literature by Al-Haddad and Kotnour (2015) shows that defining measurable outcomes plays a critical role in successful change efforts regardless of the specific change methodology. Appelbaum, St-Pierre and Glavas (1998) give organizational goal setting the same centrality in organizational change and further note that unrealized past goals may impede the change process. In this instance, it is reasonable to speculate that if goals were set by previous institutional leaders, they were not accomplished. Moreover, participants in the study indicated that other statewide initiatives were "supposed to solve all our problems but didn't move the needle." While this perspective may help explain why presidents do not set institutional goals, communicate them broadly, and the provide continued reporting on those goals, it does not invalidate the need to do so.

The challenges associated with measuring completions and determining which definition of completion is most relevant adds significant complexity to the task of goal setting. The role of the president is to meet this challenge by clearly communicating the meaning, strengths and weaknesses of each metric, quelling concerns from faculty union leadership, and articulating a

clear purpose for focusing on completion rates. Establishing institutional goals holds the potential to focus faculty, staff, and administrators on strategies that specifically relate to completions. The use of metrics such as retention and persistence remain critically important to inform practice and should continue to be measured and reported. These metrics, however, should serve as leading indicators for completion rates.

Study participants already utilize a variety of established best practices in change management such as consistent communication emphasizing a focus on students, incentivizing specific behaviors, and engaging in shared decision-making. These practices should be utilized to smooth the process of creating institution-wide completion goals. Finally, as institutional goals are established, presidents need to carefully and consistently communicate the summative nature of completion goals, the relationship of leading indicators such as retention, persistence, and course success to the completion goal, and how the combined use of such metrics provides a clearer picture into institutional performance.

Faculty Accountability for Student Outcomes

Community college presidents should work towards incorporating student outcomes including course success, retention, and completion into a faculty accountability system. One participant in the current study indicated that the "interaction between the students and the faculty member in every discipline is more important than anything we do counseling, financial aid or anything else and that's where we need to go to improve completion and persistence." Considering community college students spend most of their on-campus time in the classroom with instructional faculty (Bailey & Alfonso, 2005; Tinto, 1997; Umbach & Wawrzynski, 2005) it is reasonable to reach such a conclusion. Seen in this light, extending accountability for course

success, retention, and ultimately completions to include faculty to a greater extent is necessary to improve faculty performance and student outcomes.

Appropriately holding faculty accountable for student outcomes is both necessary and challenging. Participants in this study clearly indicated that strong protections afforded by union contracts and influential or outspoken union leaders are often successful in limiting accountability for student outcomes. It is, however, far from the only challenge associated with faculty accountability.

There are numerous and complex factors affecting student performance that faculty may feel are beyond their influence to directly affect including family responsibilities, economic status, quality of preparation, and level of external support (Burns, 2010). If faculty perceive accountability measures as unfair because of factors outside of their control, then such measures are unlikely to yield the desired result (Siegel, Post, Brockner, Fishman, & Garder, 2005). In the broader academic literature, employee accountability has been shown to improve both engagement and performance (Smith & Bititci, 2017; Saks, 2006). Gruman and Saks (2011) further argue that alignment between individual and organizational goals is a necessary condition for this to occur. Articulating institutional goals and then creating aligned faculty goals is a necessary step in holding faculty accountable for student outcomes. The ability to do so, however, may require addressing the barriers associated with collective bargaining agreements.

Collective bargaining agreements provide extensive protection for tenured faculty. These agreements typically limit the content of the faculty evaluations as well. The level of limitation varies significantly from one institution to the next. Further complicating matters is the interaction between collective bargaining agreements and state education code. California Education Code EDC 87792, for example, clearly articulates:

> No regular employee or academic employee shall be dismissed except for one or more of the following causes:
>
> (a) Immoral or unprofessional conduct.
>
> (b) Dishonesty.
>
> (c) Unsatisfactory performance.
>
> (d) Evident unfitness for service.
>
> (e) Physical or mental condition that makes him or her unfit to instruct or associate with students

This language indicates that if a tenured faculty member is delivery "unsatisfactory performance" then he or she could be dismissed. For this language to be useful in the context of accountability, collective bargaining agreements must clearly identify the nature of "unsatisfactory performance."

Termination is not a desirable outcome and certainly one of last resort. The intent of clearly defining acceptable faculty performance is to increase accountability for student outcomes. A first and necessary step for community college presidents then is to utilize the collective bargaining process to clearly and collaboratively define the nature of satisfactory and unsatisfactory performance that includes the examination of student outcome data.

Focus on First-time, Full-time Students

In order to increase student completions, presidents should incorporate a specific focus on first-time, full-time, degree and certificate seeking students. There were five primary factors taken into consideration in developing the recommendation that presidents increase institutional focus on first-time, full-time students. First, this population typically accounts for 15% to 17% of incoming cohorts of students and about 33% of the total student population on any given

campus, making it a significant portion of the student population (NCES, 2017). Second, over the course of a six-year study, nearly 50% of students engage in "mixed intensity" enrollment patterns, meaning they enroll full-time in some primary terms and part-time in others (NSCRC, 2016). Third, full-time and continuous enrollment are correlated to higher rates of student completions and transfer rates (Crosta, 2014) and increasing full-time and continuous enrollment is a broadly supported strategy, as seen from the findings in this study. Fourth, the institution has more access to these students since they are typically on campus more often and interact with more faculty members. This access offers the institution an opportunity to develop and delivery highly efficient, cost-effective programming to increase student commitment which is correlated with higher completion rates for all student populations (Greene, Marti, & McClenney, 2008; Sparkman, Maulding, & Roberts, 2012; Woosley & Miller, 2009; Wyatt, 2011). Finally, increasing the completion rate of first-time, full-time students positively effects college funding levels and key stakeholder perception of the institution.

Increasing the focus om first-time, full-time students can be achieved within the Guided Pathways framework that presidents indicated their colleges were adopting. Implementation guidelines for the project do not emphasize first-time, full-time students. Adding a consideration of this cohort into the existing conversations around Guided Pathways implementation is potentially straightforward since encouraging more students to take full-time course loads is already a defined strategy. If possible, institutional data that highlights the number and percentage of first-time, full-time students who continue enrolling full-time over three years should be collected and presented to teams developing programming to fit within Guided Pathways. This data would allow presidents to suggest a two-pronged approach to increasing

more full-time enrollment, one encouraging part-time students to enroll full-time, and a second encouraging students to remain full-time.

First-time, full-time students represent a significant portion of the student population, are uniquely accessible to the institution, and demonstrate an initially high degree of commitment creating a potential opportunity to achieve strong results with relatively limited resources. This recommendation is not intended to suggest that less attention be given to other targeted programming such as those focused on historically disenfranchised student populations. Issues of equity need continued attention as do part-time students. Rather, the recommendation to increase focus on first-time, full-time students is intended to expose an opportunity to improve performance with limited use of resources.

Strengths and Weaknesses of the KMO Framework

The KMO gap analytic framework (Clark & Estes, 2008) was designed to address problems of practice by identifying gaps in knowledge and motivation of key stakeholders and identifying organizational issues that hinder performance. The framework typically lends itself to the development and implementation of learning activities particularly in the areas of knowledge and motivation. If the identified stakeholder lacks the knowledge to complete the task, then providing the appropriate training can address the issue. Motivation issues can often be addressed through incentive programs or environmental changes but can just as often benefit from learning opportunities. For example, if stakeholders do not see the value of a goal or activity, providing a learning opportunity to contextualize the utility may increase motivation (Eccles, 2006). In identifying organizational issues, work processes, material resources, and internal interactions are examined to determine potential causes of performance problems (Clark & Estes, 2008). If issues arise centrally from internal interactions, they can be addressed through

aligning organizational culture with goals and behavior, something often addressed through learning opportunities.

The KMO framework provided two key advantages for this study. First, the process of trying to understand the nature of the problem of practice identified for the study was more productive because the framework provides a highly structured, expansive, and encouraged examination of the issue from multiple perspectives. Knowledge, motivation, and organizational issues were viewed through a multidimensional lens incorporating evidence from a wide range of content areas from learning to organizational development to economics because the three constructs are studied by various disciplines. Second, the framework is designed to result in the development of a solution and so supported the development of a methodology intended to find a solution. In the case of this study, viable solutions were not identified in part because of the very broad nature of the inquiry.

The weakness of the KMO framework for this study was two-fold. First, the structure is designed to examine a single stakeholder group. Second, the framework is not well-suited to examine broader problems of practice. In large, complex organizations, it is unlikely that addressing the needs of a single stakeholder group will fundamentally change the summative outcome, in this case the rate of student completions. When numerous institutions are evaluated because they have the same undesirable outcome, the necessity for specificity becomes apparent. The colleges examined as part of this study all had the same undesirable outcome, that of low student completion rates, but the circumstances in which each stakeholder operated were different, making it difficult to identify unified, common solutions. The structure of this study would likely be more productive if applied at a single institution and across multiple stakeholder groups.

Future Research

Three potential areas for future research are offered. First, research that incorporates a time component of student intent is discussed. The second topic is the potential application of the KMO framework at a single community college. And finally, opportunities for research that arise from the Guided Pathways initiative and the passage of AB 705 are discussed. The breadth of these initiatives provides substantial opportunities for researchers. These initiatives will be watched closely by a numerous stakeholders and research is likely already underway. The discussion below tries to reach beyond the research necessary to maintain those projects.

Student Intent in Measuring Completions

There is very little dispute that absolute completion rates for community colleges across the country are lower than desired. There is, however, substantial disagreement in terms of the relative success of the community college system. The argument has an inherent political component as funding and public perception are both impacted by how completions are reported (Ewell, 2011). As such, considering the additional factor of the time in which students intend to complete a degree or certificate may be a useful line of further research.

Presidents in this study consistently preferred to consider completions from the student perspective; that is, they were most interested in knowing if students achieved their goal. No student completion metrics were identified in the existing literature that took into consideration the time in which students intended or expected to achieve their goal. Considering that most community college students attend part-time, further research in this area may be of significant value.

Adding the dimension of time to student intent may better contextualize completion rates for both the professional community and the public. Doing so may also inform academic and

student support program development. For example, if a significant number of students indicate a desire to complete an associate degree by attending part-time, then it would be reasonable to design programs accordingly.

Single Institution KMO Study

The specificity of the KMO framework is well-suited to the study of a single institution. Knowledge, motivation, and organizational issues are likely to vary from institution to institution. As such, solutions would need to vary by institution as well. The KMO framework and the process used for the study provides a structure that results in identifying a measurable problem of practice, determining gaps that cause the performance gaps, and developing solutions to address those gaps. Participants in this study indicated a wide range of programs that produced no tangible results. It is reasonable that at least some of these programs did not address the right cause of the problem, an issue the framework is suited to address.

The KMO framework would be highly effective in identifying viable solutions and implementation strategies to the problem of practice examined through the course of this study within a single institution. The application of the framework would be particularly useful if multiple stakeholder groups were studied. Examining presidents, vice presidents and deans, and faculty in a single institution with the KMO framework could expose critical misalignments between the stakeholder groups and lead to the identification of strategies to address the misalignment within the specific context. Lastly, since solutions developed using the KMO framework often involve developing and implementing learning solutions, it is ideal for the college environment. Not only are learning solutions likely to be well received by all stakeholders, the infrastructure to deliver such solutions such as teaching and learning centers, professional development expectations, and funding are often present.

Guided Pathways and AB 705

The implementation of Guided Pathways and AB 705 are likely to result in substantial insight into how institutional efforts at organizational reform operate. The extensive nature of reforms required to implement Guided Pathways combined with the fact that the program is being implemented by a wide range of colleges could inform numerous areas of research. Viewed as a single large experiment, opportunities for research emerge in numerous areas. In terms of community colleges, the initiative will allow for the study of how guided pathways affects student outcomes as well as the student experience. As colleges are likely to implement the program differently, the effect of individual program elements could be studied. In general, the scope of the project and its relative uniformity across institutions may provide the opportunity to identify which program, or combination of programs, and under what circumstances, improves the student experience and likelihood of goal attainment.

The initiative could also be used as a vehicle to study leadership more generally. The opportunity to study numerous leaders completing the same complex task with similar access to resources is relatively rare. Studies examining aspects of leadership from behavior to style, institutional and leadership responses to external mandates, the effect of mandates on implementation veracity could all be informative.

AB 705 provides narrower but critical opportunities as well. With the implementation of AB 705, researchers may be able to definitively answer if students are better served by having developmental education or by simply eliminating it altogether. As intriguing as that is, research investigating teaching and learning may be far more useful. AB 705 is likely to generate, at least from the faculty perspective, widely diverse college-level English and math classes. The research opportunities within these classrooms are quite interesting. The rapid rate of change

could facilitate an examination of faculty response to shifting classroom demographics. Study in this area could explore aspects of equity, academic rigor, and faculty instructional flexibility. Students' prior academic experience and course performance could even be used to explore the actual prerequisite knowledge and skills necessary for success in college level coursework.

Conclusion

The purpose of this study was to explore the potential that the position of community college president holds to increase student completion rates by 50%. In 2010, American Association of Community Colleges in collaboration with the Association for Community College Trustees, the Center for Community College Student Engagement, the League for Innovation in the Community College, the National Institute for Staff and Organizational Development, and the Phi Theta Kappa Honor Society to establish the Completion Agenda. The completion agenda sought to produce 50% more students with degrees and certificates by 2020 and brought increased emphasis to the examination of completion rates (McPhail, 2011). This study chose to focus on completion rates because the number of degree and certificates can fluctuate with factors that are unrelated to improving the delivery of education such as enrollment and changes in institutional offerings.

Community college presidents were selected as the primary stakeholder for study. To achieve substantially different outcomes which a 50% increase in completion rates represents, institutions would need to perform differently. Presidents were seen to have the greatest level of organizational influence to effect changes at scale that could produce this vastly improved outcome. As such, this study sought to explore the knowledge, motivation, and organizational issues that affect the ability of community college presidents to engage in change efforts that led to an increase in completion rates.

The KMO gap analytic framework (Clark & Estes, 2008) is designed to address problems of practice by identifying gaps in knowledge and motivation of key stakeholders and identifying organizational issues that limit their ability to achieve the desired goal. A qualitative study design was employed to identify organizational barriers and gaps in knowledge and motivation that prevent presidents from leading institutions to achieve 50% higher completion rates.

The result of applying the KMO framework is typically the development and implementation of learning activities particularly in the areas of knowledge and motivation. If the identified stakeholder lacks the knowledge to complete the task, then providing the appropriate training can address the issue. Motivation issues can often benefit from learning opportunities but can also be addressed through incentive programs or environmental changes. For example, if stakeholders do not see the utility value of a goal or activity, providing a learning opportunity to contextualize the utility may increase motivation. For identified organizational barriers, solutions typically involve adjusting or aligning work processes, adjustments in the allocation of material resources. If the identified barrier is a misalignment between the organizational culture and stakeholder behavior, then learning opportunities can also be used to create alignment.

The theoretical framework developed for this study placed the knowledge and motivation of presidents inside the organizational context and culture of their individual institutions. It was within the interactions that the findings for this study emerged. The framework, however, proved to underestimate the influence of external pressures on the knowledge and motivation of presidents and the degree to which external factors drove the internal functioning of each college. The emergent nature of a qualitative study design provided sufficient flexibility to

examine the research questions. Instead of identifying specific knowledge, motivation, organizational issues, four thematic finding emerged.

The four themes that emerged from the study integrated knowledge, motivation, and organizational issues. Theme one addresses the challenges associated with measuring completion, taking into consideration participants' perception of completion rates. Theme two explores presidents' knowledge of best practices in improving community college completion and how broader reform efforts interact to affect the utility of that knowledge. Theme three discusses presidents' perception of the relationship between faculty resistance to change and accountability and resulting strategies presidents employ. Finally, theme four examines the value presidents place on the associate degree, completion metrics, and institutional goals.

These thematic findings did not result in the development of a learning program that would improve the knowledge and motivation of community college presidents and help them overcome the organizational barriers. In fact, presidents demonstrated high levels of knowledge in the areas of community college best practices and change management strategies and showed themselves to be highly motivated to achieve better student outcomes. Further, the most significant organizational barriers, state mandates and union-bolstered faculty resistance, were seen as largely beyond the scope of participants to significantly influence. Even in these circumstances, presidents were thoughtful and creative in choosing to leverage state mandates to push positive change and building coalitions of faculty who were willing to enact change.

The findings suggest that the complexity of the community college presidency continues to increase. Considering the centrality of state mandates, it would be reasonable to speculate the level of autonomy of colleges, and by extension presidents and faculty, is substantially lower than in past decades. This context made identifying useful recommendations for practice that

were generally applicable even across the study group surprisingly challenging. Three were identified.

Drawing from the organizational change and leadership literature, the first recommendation suggested that presidents engage in more risk-taking behavior. Within the context of the recommendation, risk was conceived as activities likely to result in conflict. The activities that participants avoided because of perceived risk included institutional goal setting and holding faculty accountable for student outcomes. These activities are addressed in the second and third recommendation; establish and communicate student completion goals and incorporate student outcomes measure into the faculty accountability. Of the institutions represented in the study, none presented measurable goals for increasing student completions in their institutional planning documents. The importance of such goals is broadly agreed to be a necessity for successful change efforts. Generating greater faculty accountability requires that community college first set institutional goals for student completions and then develop complementary faculty goals. Notably, one participant indicated that he had a faculty member who consistently failed all Latinx students but that there was nothing he could do as the president, suggesting a need for greater faculty accountability. The final recommendation suggested that presidents reconsider the institutional focus on the 33% of first-time, full-time, degree-seeking students typically found on community college campuses. Providing services to encourage more students in this cohort to remain full-time and to enroll continuously can be cost-effective, accomplished within the current college framework, and potentially increase completion rates substantially.

Overall, this study highlights the complexity of the environment in which community college presidents lead and constraints under which they operate. State legislation and mandates

are fundamentally changing the ways in which colleges operate and the ability of presidents to shape the change agenda on their campuses. At the same time, community college presidents may be able to leverage these mandates to create the substantive change necessary to improve student completion outcomes. Careful research on the effect of these mandates will answer this question soon enough.

References

Achieving the Dream. (n.d). *Our approach.* Retrieved August 12, 2017, from Achieving the Dream website: http://achievingthedream.org/our-approach

Agasisti, T., & Belfield, C. (2017). Efficiency in the community college sector: Stochastic frontier analysis. *Tertiary Education and Management, 23*(3), 237-259.

Al-Haddad, S., & Kotnour, T. (2015). Integrating the organizational change literature: a model for successful change. *Journal of Organizational Change Management, 28*(2), 234-262.

Allen, J., Jimmieson, N. L., Bordia, P., & Irmer, B. E. (2007). Uncertainty during organizational change: Managing perceptions through communication. *Journal of Change Management, 7*(2), 187-210.

American Association of Community Colleges, (n.d.). *AACC 21st century center: Resources for reclaiming the American dream.* Retrieved from https://www.aacc.nche.edu/wp-content/uploads/2017/09/AACC_21stCenturyBro_low.pdf

American Association of Community Colleges, the Association of Community College Trustees, the Center for Community College Student Engagement, the League for Innovation in the Community College, the National Institute for Staff & Organizational Development, and Phi Theta Kappa Honor Society. (2010) *Democracy's colleges: Call to action.* Washington, DC. Retrieved from http://www.aacc.nche.edu/newsevents/news/articles/documents/callaction_04202010.pdf.

American Association of Community Colleges. (2012). *AACC competencies for community college leaders.* Retrieved from: http://dev.aacc.nche.edu/newsevents/Events/leadershipsuite/Documents/AACC_Core_Competencies_web.pdf

American Association of Community Colleges. (2015). *Community college completion: Progress toward goal of 50% increase.* Retrieved from http://dev.aacc.nche.edu/AboutCC/Trends/Documents/completion_report_05212015.pdf

American Association of Community Colleges. (2016). *Fast facts.* Available from http://www.aacc.nche.edu/AboutCC/Documents/AACCFactSheetsR2.pdf

American Association of Community Colleges. (2017). *About community colleges.* Retrieved from http://www.aacc.nche.edu/aboutcc/Pages/default.aspx

Appelbaum, S. H., St-Pierre, N., & Glavas, W. (1998). Strategic organizational change: the role of leadership, learning, motivation and productivity. *Management Decision*, *36*(5), 289-301

Aragon, S. R., & Johnson, E. S. (2008). Factors influencing completion and noncompletion of community college online courses. *The American Journal of Distance Education*, *22*(3), 146-158.

Armenakis, A. A., & Bedeian, A. G. (1999). Organizational change: A review of theory and research in the 1990s. *Journal of management*, *25*(3), 293-315.

Aspen Institute Task Force on the Future of the College Presidency (US). (2017). *Renewal and progress: strengthening higher education leadership in a time of rapid change.* Retrieved from https://assets.aspeninstitute.org/content/uploads/2017/05/Renewal_and_Progress_CEP-05122017.pdf?_ga=2.211694805.1914928902.1546633145-441800057.1546633145

Aspen Institute and Achieving the Dream Inc. (2013). *Crisis and opportunity: Aligning the community college presidency with student success.* Retrieved from

https://assets.aspeninstitute.org/content/uploads/files/content/docs/pubs/CEP_Final_Report.pdf?_ga=2.182858086.1914928902.1546633145-441800057.1546633145

Ayers, D. F. (2015). Credentialing structures, pedagogies, practices, and curriculum goals: Trajectories of change in community college mission statements. *Community College Review, 43*(2), 191-214.

Ayers, D. F. (2017). Three functions of the community college mission statement. *New Directions for Community Colleges*, *2017*(180), 9-17.

Bahr, P. R. (2007). Double jeopardy: Testing the effects of multiple basic skill deficiencies on successful remediation. *Research in Higher Education*, 48(6), 695-725.

Bahr, P.R, Fagioli, L.P., Hetts, J., Hayward, C., Willett, T., Lamoree, . . . Baker, R. (2017). *Improving Placement Accuracy in California's Community Colleges Using Multiple Measures of High School Achievement.* Retrieved from http://rpgroup.org/Portals/0/Documents/Projects/MultipleMeasures/Publications/Bahr_et_al-2017-Improving_Placement_Accuracy_in_California.pdf

Bailey, T. R., & Alfonso, M. (2005). *Paths to persistence: An analysis of research on program effectiveness at community colleges.* Community College Research Center, Columbia University. Retrieved from https://ccrc.tc.columbia.edu/media/k2/attachments/paths-persistence-program-effectiveness.pdf

Bailey, T. (2009). Challenge and opportunity: Rethinking the role and function of developmental education in community college. *New Directions for Community Colleges*, *2009*(145), 11-30.

Bailey, T. (2016). The need for comprehensive reform: From access to completion. *New Directions for Community Colleges*, *2016*(176), 11-21.

Bailey, T. R., Leinbach, D. T., & Jenkins, P. D. (2006). *Is student success labeled institutional failure? Student goals and graduation rates in the accountability debate at community colleges.* CCRC Working Paper No. 1. Community College Research Center, Columbia University.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191.

Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, 9(3), 75-78.

Bard, K. (2016). *Successful rural community college students: examining the association of student demographics, high school environmental variables, and high school outcome variables on community college degree attainment*. (Doctoral dissertation). Retrieved from MOspace Institutional Repository. University of Missouri--Columbia.

Barro, R. J. (2013). Education and economic growth. *Annals of Economics and Finance, 14*(2), 301-328.

Battilana, J., Gilmartin, M., Sengul, M., Pache, A. C., & Alexander, J. A. (2010). Leadership competencies for implementing planned organizational change. *The Leadership Quarterly*, *21*(3), 422-438.

Bawden, D., & Robinson, L. (2009). The dark side of information: overload, anxiety and other paradoxes and pathologies. *Journal of Information Science*, *35*(2), 180-191.

Brashers, D. E. (2001). Communication and uncertainty management. *Journal of Communication*, *51*(3), 477-497.

Beehler, M. C. (1993). The changing role of the community college president in Washington state. *Community College Review*, *20*(4), 17-26.

Beer, M., Eisenstat, R. A., & Spector, B. (1990), Why change programs don't produce change, *Harvard Business Review*, Vol. 68 No. 6, pp. 158-166.

Belfield, C. R., & Bailey, T. (2011). The benefits of attending community college: A review of the evidence. *Community College Review, 39*(1), 46-68.

Belfield, C., Crosta, P., & Jenkins, D. (2014). Can community colleges afford to improve completion? Measuring the cost and efficiency consequences of reform. *Educational Evaluation and Policy Analysis, 36*(3), 327-345.

Bellé, N. (2013). Leading to make a difference: A field experiment on the performance effects of transformational leadership, perceived social impact, and public service motivation. *Journal of Public Administration Research and Theory*, mut033.

Berger, N., & Fisher, P. (2013). A well-educated workforce is key to state prosperity. *Economic Policy Institute, 22*(1)

Bertram, R. M., Blase, K. A., & Fixsen, D. L. (2015). Improving programs and outcomes: Implementation frameworks and organization change. *Research on Social Work Practice, 25*(4), 477-487.

Bettinger, E. P., Boatman, A., & Long, B. T. (2013). Student supports: Developmental education and other academic programs. *The Future of Children*, *23*(1), 93-115.

Bhar, P. R., Fagioli, L. P., Hetts, J., Hayward, C., Willett, T., Newell, M., . . . Baker, R., (2017). *Improving placement accuracy in California community colleges using multiple measures of high school achievement.* Retrieved from RP Group website: http://rpgroup.org/Portals/0/Documents/Projects/MultipleMeasures/Publications/Bahr_et_al-2017-Improving_Placement_Accuracy_in_California.pdf.

Bill Clinton 1996: On the issues: Improving education. (n.d.) Retrieved June 17, 2017 from: http://www.4president.us/issues/clinton1996/clinton1996education.htm

Bjugstad, K., Thach, E. C., Thompson, K. J., & Morris, A. (2006). A fresh look at followership: A model for matching followership and leadership styles. *Journal of Behavioral and Applied Management, 7*(3), 304-311,313-319.

Bloom, B. S., Engelhart, M. D., Furst, E.J., Hill, W.H., & Krathwohl, D.R. (1956). Taxonomy of educational objectives: The classification of educational goals. In B.S. Bloom (Ed.), *Handbook 1: Cognitive Domain.* New York: David McKay

Boatman, A., & Long, B. T. (2016). Does financial aid impact college student engagement? *Research in Higher Education*, 57(6), 653-681.

Boggs, G. R. (2011). Community colleges in the spotlight and under the microscope. *New Directions for Community Colleges*, *2011*(156), 3-22.

Bolman, L. G., & Deal, T. E. (2013). *Reframing organizations: Artistry, choice, and leadership*. (5th ed.). John Wiley & Sons. Boston, MA: Allyn and Bacon. CA: SAGE Publications.

Boylan, H. R., Bliss, L. B., & Bonham, B. S. (1997). Program components and their relationship to student performance. *Journal of Developmental Education*, 20(3), 2-8.

Bragg, D. D. (2000). Preparing community college deans to lead change. *New Directions for Community Colleges*, *2000*(109), 75-85.

Bragg, D. D., & Durham, B. (2012). Perspectives on access and equity in the era of (community) college completion. *Community College Review*, *40*(2), 106-125.

Brownell, J. E., & Swaner, L. (2009). Outcomes of high-impact educational practices: A literature review. *Diversity and Democracy*, *12*(2), 4-6.

Bryant, A. N. (2001). ERIC review: Community college students: Recent findings and trends. *Community College Review*, 29(3), 77-93.

Burns, K. (2010). At issue: Community college student success variables: A review of the literature. *The Community College Enterprise, 16*(2), 33.

Burrows, J. (1999). Going beyond labels: A framework for profiling institutional stakeholders. *Contemporary Education*, 70(4), 5.

Byun, K. J., Henderson, R., & Toossi, M. (2015). Evaluation of BLS employment, labor force and macroeconomic projections to 2006, 2008, and 2010. *Monthly Lab. Rev., 138*, 1.

Calcagno, J. C., Bailey, T., Jenkins, D., Kienzl, G., & Leinbach, T. (2008). Community college student success: What institutional characteristics make a difference? *Economics of Education Review, 27*(6), 632-645.

Caldwell, R. (1993). Employee involvement and communication strategies for managing change. *Strategic Change, 2*(3), 135-138.

California Community College Chancellor's Office. (2018, May 22). *2018-19 Funding Formula Frequently Asked Questions.* Retrieved from https://extranet.cccco.edu/Portals/1/CFFP/Fiscal/Budget%20News/2018-19/Funding_Formula_FAQ_May222018.pdf

Carter, S. M., & Greer, C. R. (2013). Strategic leadership: Values, styles, and organizational performance. *Journal of Leadership & Organizational Studies*, 20(4), 375-393.

Casey, D., & Murphy, K. (2009). Issues in using methodological triangulation in research: Dympna Casey and Kathy Murphy explore the advantages and disadvantages of using triangulation. *Nurse Researcher, 16*(4), 40-55.

Castro, C. R. (2000). Community college faculty satisfaction and the faculty union. *New Directions for Institutional Research*, *2000*(105), 45-55.

Center for Community College Student Engagement. (2012). *A matter of degrees: Promising practices for community college student success: A first look*. Retrieved from CCCSE website: https://www.ccsse.org/docs/matter_of_degrees.pdf

Center for Community College Student Engagement. (2013). *A matter of degrees: Engaging practices, engaging students: High-impact practices for community college student engagement*. Retrieved from CCCSE website: https://www.ccsse.org/docs/Matter_of_Degrees_2.pdf

Center for Community College Student Engagement. (2014). *A matter of degrees: Practices to pathways: high-impact practices for community college student success*. Retrieved from CCCSE website: https://www.ccsse.org/docs/matter_of_degrees_3.pdf

Cho, S. W., & Karp, M. M. (2013). Student success courses in the community college: Early enrollment and educational outcomes. *Community College Review*, *41*(1), 86-103.

Clark, B. R. (1960). The" cooling-out" function in higher education. *American Journal of Sociology*, *65*(6), 569-576.

Clark, R. E., & Estes, F. (2008). *Turning research into results: A guide to selecting the right performance solutions*. Charlotte, NC: Information Age Publishing, Inc.

Cloud, R. C. (2010). Epilogue: Change leadership and leadership development. *New Directions for Community Colleges*, *2010*(149), 73-79.

Cogliser, C. C., Schriesheim, C. A., Scandura, T. A., & Gardner, W. L. (2009). Balance in leader and follower perceptions of leader–member exchange: Relationships with performance and work attitudes. *The Leadership Quarterly*, *20*(3), 452-465.

Cohen, A. M. (1969). *Dateline'79: Heretical concepts for the community college.* Beverly Hills, CA: Glencoe Press. Retrieved from: https://eric.ed.gov/?id=ED288591

Cook, B. J. (2012). *The American college president study: Key findings and takeaways.* Retrieved from the American Council on Education website: https://www.acenet.edu/the-presidency/columns-and-features/Pages/The-American-College-President-Study.aspx

Cope, D. G. (2014). Methods and meanings: credibility and trustworthiness of qualitative research. *Oncology Nursing Forum* (Vol. 41, No. 1).

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: SAGE.

Crisp, G., & Delgado, C. (2014). The impact of developmental education on community college persistence and vertical transfer. *Community College Review*, 42(2), 99-117.

Crisp, G., & Taggart, A. (2013). Community college student success programs: A synthesis, critique, and research agenda. *Community College Journal of Research and Practice*, *37*(2), 114-130.

Crosta, P. M. (2014). Intensity and attachment: How the chaotic enrollment patterns of community college students relate to educational outcomes. *Community College Review*, *42*(2), 118-142.

Cutler, D. M., Huang, W., & Lleras-Muney, A. (2015). When does education matter? The protective effect of education for cohorts graduating in bad times. *Social Science & Medicine* 127 (2015): 63-73.

D'Amico, M. M., Friedel, J. N., Katsinas, S. G., & Thornton, Z. M. (2014). Current developments in community college performance funding. *Community College Journal of Research and Practice*, *38*(2-3), 231-241.

Dassance, C. R. (2011). The next community college movement? *New Directions for Community Colleges*, *2011*(156), 31-39.

Dawson, P., van der Meer, J., Skalicky, J., & Cowley, K. (2014). On the effectiveness of supplemental instruction: A systematic review of supplemental instruction and peer-assisted study sessions literature between 2001 and 2010. *Review of Educational Research*, *84*(4), 609-639.

Dent, E. B., & Goldberg, S. G. (1999). Challenging "resistance to change". *The Journal of Applied Behavioral Science*, *35*(1), 25-41.

Derby, D. C., & Smith, T. (2004). An orientation course and community college retention. *Community College Journal of Research and Practice*, *28*(9), 763-773.

Donahue, J. (2003). A case study of select Illinois community college board chair perspectives on their leadership role. *Community College Review*, *31*(2), 21-46.

Dougherty, K. (1991). The community college at the crossroads: The need for structural reform. *Harvard Educational Review*, *61*(3), 311-337.

Dougherty, K. J., Jones, S. M., Lahr, H., Natow, R. S., Pheatt, L., & Reddy, V. (2014). Performance funding for higher education: Forms, origins, impacts, and futures. *The ANNALS of the American Academy of Political and Social Science*, *655*(1), 163-184.

Doyle, W., & Zumeta, W. (2014). State-level responses to the access and completion challenge in the new era of austerity. *The ANNALS of the American Academy of Political and Social Science*, 655(1), 79-98.

Drucker, J. (2016). Reconsidering the regional economic development impacts of higher education institutions in the United States. *Regional Studies, 50*(7), 1185-1202.

Dudley, D. M., Liu, L., Hao, L., & Stallard, C. (2015). Student engagement: A CCSSE follow-up study to improve student engagement in a community college. *Community College Journal of Research and Practice, 39*(12), 1153-1169.

Dumdum, U. R., Lowe, K. B., & Avolio, B. J. (2013). A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension. In *Transformational and Charismatic Leadership: The Road Ahead 10th Anniversary Edition* (pp. 39-70). Emerald Group Publishing Limited.

Eagan, M. K., & Jaeger, A. J. (2009). Effects of exposure to part-time faculty on community college transfer. *Research in Higher Education, 50*(2), 168.

Eccles, J. (2006). *Expectancy value motivational theory.* Retrieved from http://www.education.com/reference/article/expectancy-value-motivational-theory/

Eddy, P. L. (2005). Framing the role of leader: How community college presidents construct their leadership. *Community College Journal of Research and Practice*, 29(9-10), 705-727.

Engle, J., & Tinto, V. (2008). *Moving beyond access: College success for low-income, first-generation students.* Retrieved from Pell Institute for the Study of Opportunity in Higher Education website: http://www.pellinstitute.org/downloads/publications-Moving_Beyond_Access_2008.pdf

Ewell, P. T. (2011). Accountability and institutional effectiveness in the community college. *New Directions for Community Colleges, 2011*(153), 23-36.

Fike, D. S., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community College Review, 36*(2), 68-88.

Finley, A. (2011). Assessment of high-impact practices: Using findings to drive change in the compass project. *Peer Review, 13*(2), 29.

Fitzgerald, S., & Schutte, N. S. (2010). Increasing transformational leadership through enhancing self-efficacy. *Journal of Management Development, 29*(5), 495-505.

Flannigan, S., Jones, B. R., & Moore, W. (2004). An exploration of faculty hiring practices in community colleges. *Community College Journal of Research & Practice, 28*(10), 823-836.

Fong, C. J., Davis, C. W., Kim, Y., Kim, Y. W., Marriott, L., & Kim, S. (2017). Psychosocial factors and community college student success: A meta-analytic investigation. *Review of Educational Research, 87*(2), 388-424.

Fong, K. E., & Melguizo, T. (2017). Utilizing Additional Measures of High School Academic Preparation to Support Students in their Math Self-Assessment. *Community College Journal of Research and Practice, 41*(9), 566-592.

Ford, J. D., Ford, L. W., & D'Amelio, A. (2008). Resistance to change: The rest of the story. *Academy of Management Review, 33*(2), 362-377.

Gallimore, R., & Goldenberg, C. (2001). Analyzing cultural models and settings to connect minority achievement and school improvement research. *Educational Psychologist, 36*(1), 45–56.

Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The Leadership Quarterly,* 16(3), 343-372.

Garfield, T. K. (2008). Governance in a union environment. *New Directions for Community Colleges, 2008*(141), 25-33.

Gilbert, C. K., & Heller, D. E. (2013). Access, equity, and community colleges: The Truman Commission and federal higher education policy from 1947 to 2011. *The Journal of Higher Education*, *84*(3), 417-443.

Gilley, A., McMillan, H. S., & Gilley, J. W. (2009). Organizational change and characteristics of leadership effectiveness. *Journal of Leadership & Organizational Studies*, *16*(1), 38-47.

Gillie, A. C. (1967). *The role of the community college president.* Retrieved from: https://eric-ed-gov.libproxy2.usc.edu/?id=ED017245

Ginder, S.A., Kelly-Reid, J.E., and Mann, F.B. (2018). *2017–18 Integrated Postsecondary Education Data System (IPEDS) Methodology Report* (NCES 2018-195). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch.

Glass, J. C. Jr., & Jackson, K. L. (1998). A new role for community college presidents: Private fund raiser and development team leader. *Community College Journal of Research and Practice*, *22*(6), 575-590.

Goff, D. G. (2003). *What Do We Know about Good Community College Leaders: A Study in Leadership Trait Theory and Behavioral Leadership Theory*. Retrieved from http://files.eric.ed.gov.libproxy1.usc.edu/fulltext/ED476456.pdf

Goldrick-Rab, S. (2010). Challenges and opportunities for improving community college student success. *Review of Educational Research*, *80*(3), 437-469.

Greene, T. G., Marti, C. N., & McClenney, K. (2008). The effort—outcome gap: Differences for African American and Hispanic community college students in student engagement and academic achievement. *The Journal of Higher Education*, *79*(5), 513-539.

Gruman, J. A., & Saks, A. M. (2011). Performance management and employee engagement. *Human Resource Management Review*, 21(2), 123-136.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of Qualitative Research*, *2*(163-194), 105.

Hallinger, P., & Heck, R. (2002). What do you call people with vision? The role of vision, mission and goals in school leadership and improvement. In K. Leithwood & P. Hallinger (Eds.), *Second international handbook of research in educational leadership and administration* (pp. 9–40). The Netherlands: Kluwer.

Hagedorn, L. S., Maxwell, W., & Hampton, P. (2001). Correlates of retention for African-American males in community colleges. *Journal of College Student Retention: Research, Theory & Practice*, *3*(3), 243-263.

Hannah, S. T., Avolio, B. J., Walumbwa, F. O., & Chan, A. (2012). Leader self and means efficacy: A multi-component approach. *Organizational Behavior and Human Decision Processes*, *118*(2), 143-161.

Hatch, D. K. (2016). A brief history and a framework for understanding commonalities and differences of community college student success programs. *New Directions for Community Colleges*, *2016*(175), 19-31.

Hatch, D. K., & Bohlig, E. M. (2016). An empirical typology of the latent programmatic structure of promising practices at community colleges. *Research in Higher Education*, 57(1), 72–98.

Heller, J. R. (2012). Contingent faculty and the evaluation process. *College Composition and Communication*, 64(1), A8-A12.

Hern, K., & Snell, M. (2014). The California acceleration project: Reforming developmental education to increase student completion of college-level math and English. *New Directions for Community Colleges*, *2014*(167), 27-39.

Hines, S. R. (2017). Evaluating Centers for Teaching and Learning: A Field-Tested Model. *To Improve the Academy*, *36*(2), 89-100.

Hodara, M., & Jaggars, S. S. (2014). An examination of the impact of accelerating community college students' progression through developmental education. *The Journal of Higher Education*, *85*(2), 246-276.

Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. (2007). Readiness for organizational change: The systematic development of a scale. *The Journal of Applied Behavioral Science*, *43*(2), 232-255.

Hope, L. (2017). *Guided Pathways and the future for California's students* [PowerPoint slides]. Retrieved from https://www.google.com/url?q=http://cccgp.cccco.edu/Portals/0/2017%2520Guided%2520Pathways%2520Presentation%2520IVC%2520Flex%2520Days.pptx&sa=U&ved=0ahUKEwiQoLyNpfreAhXoi1QKHQNbBXQQFggMMAQ&client=internal-uds-cse&cx=008193847720522529409:gq5qnhnmmki&usg=AOvVaw3jUdyzz_w-P8FSOSd8ewq1

Hope, L., & Stanskas, J. (2018, July 10). *Assembly Bill (AB) 705 implementation.* Retrieved from https://asccc.org/sites/default/files/AA%2018-40%20AB%20705%20Implementation%20Memorandum_.pdf.

Horn, L., Nevill, S., & Griffith, J. (2006). *Profile of Undergraduates in US Postsecondary Education Institutions, 2003-04: With a Special Analysis of Community College Students.* [Statistical Analysis Report. NCES 2006-184]. National Center for Education Statistics.

Huang, T., Cui, J., Cortese, C., & Pepper, M. (2015). Internet based peer assisted learning: Current models, future applications, and potential. *Handbook of Mobile Teaching and Learning*, 811.

Ingram, T. N., & Gonzalez-Matthews, M. (2013). Moving towards engagement: Promoting persistence among Latino male undergraduates at an urban community college. *Community College Journal of Research and Practice*, 37(8), 636-648.

Jackson, D. L., Stebleton, M. J., & Laanan, F. S. (2013). The experience of community college faculty involved in a learning community program. *Community College Review, 41*(1), 3-19.

Jacoby, D. (2006). Effects of part-time faculty employment on community college graduation rates. *The Journal of Higher Education, 77*(6), 1081-1103.

Jaggars, S. S., Hodara, M., Cho, S. W., & Xu, D. (2015). Three accelerated developmental education programs: Features, student outcomes, and implications. *Community College Review, 43*(1), 3-26.

Jaggars, S. S., & Stacey, G. W. (2014). *What we know about developmental education outcomes: Research overview.* Community College Research Center, Teachers College, Columbia University.

Jenkins, D., & Cho, S. W. (2013). Get with the program… and finish it: Building guided pathways to accelerate student completion. *New Directions for Community Colleges, 2013* (164), 27-35.

Jenkins, D., & Kerrigan, M. R. (2008). *Evidence-Based Decision Making in Community Colleges: Findings from a Survey of Faculty and Administrator Data Use at Achieving the Dream Colleges.* Community College Research Center, Columbia University.

Jepsen, C., Troske, K., & Coomes, P. (2014). The labor-market returns to community college degrees, diplomas, and certificates. *Journal of Labor Economics, 32*(1), 95-121.

Johnson, R. B., & Christensen, L. B. (2015). *Educational research: Quantitative, qualitative, and mixed approaches* (5th ed.). Thousand Oaks: SAGE.

Jones, S. J., & Johnson, B. (2014). Are community college presidencies wise career moves? *Community College Journal of Research and Practice, 38*(4), 300-309.

Jordan, W. J., Cavalluzzo, L., & Corallo, C. (2006). Community college and high school reform: Lessons from five case studies. *Community College Journal of Research and Practice, 30*(9), 729-749.

Juszkiewicz, J. (2016). *Trends in Community College Enrollment and Completion Data, 2016.* Retrieved from American Association of Community Colleges website: https://www.aacc.nche.edu/wp-content/uploads/2017/11/TrendsCCEnrollment_Final2016.pdf

Juszkiewicz, J. (2017). *Trends in Community College Enrollment and Completion Data, 2017.* Retrieved from American Association of Community Colleges website: https://www.aacc.nche.edu/wp-content/uploads/2018/04/CCEnrollment2017.pdf

Kaplan, A., & Maehr, M. L. (2007). The contributions and prospects of goal orientation theory. *Educational Psychology Review, 19*(2), 141-184.

Kaplan, R. M., Fang, Z., & Kirby, J. (2017). Educational attainment and health outcomes: Data from the medical expenditures panel survey. *Health Psychology, 36*(6), 598-608.

Kater, S. T. (2017). Community college faculty conceptualizations of shared governance: Shared understandings of a sociopolitical reality. *Community College Review, 45*(3), 234-257.

Kater, S., & Levin, J. S. (2004). Shared governance in the community college. *Community College Journal of Research and Practice*, *29*(1), 1-23.

Kay, A. C., Gaucher, D., Peach, J. M., Laurin, K., Friesen, J., Zanna, M. P., & Spencer, S. J. (2009). Inequality, discrimination, and the power of the status quo: Direct evidence for a motivation to see the way things are as the way they should be. *Journal of Personality and Social Psychology*, *97*(3), 421.

Kezar, A. (2004). What is more important to effective governance: Relationships, trust, and leadership, or structures and formal processes?. *New Directions for Higher Education, 2004*(127), 35-46.

Kirschner, P. A., & van Merriënboer, J. J. (2013). Do learners really know best? Urban legends in education. *Educational Psychologist, 48*(3), 169-183.

Kitchen, P. J., & Daly, F. (2002). Internal communication during change management. *Corporate Communications: An International Journal*, *7*(1), 46-53.

Kok, S. K., & McDonald, C. (2017). Underpinning excellence in higher education–an investigation into the leadership, governance and management behaviours of high-performing academic departments. *Studies in Higher Education*, 42(2), 210-231.

Kotter, J. P. (2009). Leading change: why transformation efforts fail. *Harvard Business Review, 73*(2).

Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice, 41*(4), 212-218.

Krantz, J. (2018). Dilemmas of organizational change: A systems psychodynamic perspective. In *The systems psychodynamics of organizations* (pp. 133-156). Routledge.

Krueger, R. A., & Casey, M. A. (2009). *Focus groups: A practical guide for applied research* (4th ed.) Thousand Oaks, CA: SAGE Publications.

Kubala, T., & Bailey G. M. (2001). A new perspective on community college presidents: Results of a national study. *Community College Journal of Research &Practice*, *25*(10), 793-804.

Kuh, G., O'Donnell, K., & Schneider, C. G. (2017). HIPs at ten. *Change: The Magazine of Higher Learning*, *49*(5), 8-16.

Kuh, G.D, Kinzie, J., Buckley, J, Bridges, B.K., & Hayek, J.C., (2006). *What matters to student success: A review of the literature.* Final report for the National Postsecondary Cooperative and National Center for Educational Statistics. Retrieved from: https://nces.ed.gov/npec/pdf/Kuh_Team_Report.pdf

Kuvaas, B. (2006). Performance appraisal satisfaction and employee outcomes: mediating and moderating roles of work motivation. *The International Journal of Human Resource Management*, *17*(3), 504-522.

Lahr, H., Pheatt, L., Dougherty, K. J., Jones, S., Natow, R. S., & Reddy, V. (2014). *Unintended impacts of performance funding on community colleges and universities in three states.* Community College Research Center, Colombia University. Retrieved from https://ccrc.tc.columbia.edu/media/k2/attachments/unintended-impacts-performance-funding.pdf

Langley, A., Smallman, C., Tsoukas, H., & Van de Ven, A. H. (2013). Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy of Management Journal*, 56(1), 1-13.

Lester, J. (2014). The completion agenda: The unintended consequences for equity in community colleges. In *Higher education: Handbook of theory and research* (pp. 423-466). Netherlands: Springer.

Levin, J. S. (1998). Organizational change and the community college. *New Directions for Community Colleges*, *1998*(102), 1-4.

Levin, J. S. (2000). The revised institution: The community college mission at the end of the twentieth century. *Community College Review*, *28*(2), 1-25.

Levin, J. S., Jackson-Boothby, A., Haberler, Z., & Walker, L. (2015). Dangerous work: Improving conditions for faculty of color in the community college. *Community College Journal of Research and Practice*, *39*(9), 852-864.

Lewis, L. K. (2011). *Organizational change: Creating change through strategic communication* (Vol. 4). New York, NY: John Wiley & Sons.

Lewis, M. D. (1989). *The role of the community college president: A review of the literature from 1969-89.* Retrieved from: https://files-eric-ed-gov.libproxy2.usc.edu/fulltext/ED307947.pdf.

Lincoln, Y. S., & Guba, E. G. (1989). Ethics: The failure of positivist science. *The Review of Higher Education*, *12*(3), 221-240.

Locke, M. G., & Guglielmino, L. (2006). The influence of subcultures on planned change in a community college. *Community College Review*, *34*(2), 108-127.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, *57*(9), 705.

Locke, E. A., & Latham, G. P. 2006. New directions in goal-setting theory. *Current Directions in Psychological Science*, 15(5): 265–268.

Lok, P., & Crawford, J. (1999). The relationship between commitment and organizational culture, subculture, leadership style and job satisfaction in organizational change and development. *Leadership & Organization Development Journal*, *20*(7), 365-374.

Lucey, C. A. (2002). Civic engagement, shared governance, and community colleges. *Academe*, 88(4), 27

Malm, J. R. (2008). Six community college presidents: Organizational pressures, change processes and approaches to leadership. *Community College Journal of Research and Practice*, *32*(8), 614-628.

Martin, K., Galentino, R., & Townsend, L. (2014). Community college student success: The role of motivation and self-empowerment. *Community College Review*, *42*(3), 221-241.

Matos Marques Simoes, P., & Esposito, M. (2014). Improving change management: How communication nature influences resistance to change. *Journal of Management Development*, *33*(4), 324-341.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: SAGE.

Maxwell, N. L., & Person, A. E. (2016). Comprehensive reform for student success. *New Directions for Community Colleges*, *2016*(176), 7-10.

Mayer, R. E. (2011). *How learning works. Applying the science of learning.* Boston, MA: Pearson Education.

McAfee, O., & Finch, A. (2013). How career development can enhance college faculty. *Journal of Knowledge & Human Resource Management*, *5*(10).

McArthur, R. C. (2002). Democratic leadership and faculty empowerment at the community college: A theoretical model for the department chair. *Community College Review, 30*(3), 1-10.

McCabe, R. H. (1981). Now is the time to reform the American community college. *Community and Junior College Journal*, *51*(8), 6-10.

McClenney, B. N. (2013). Leadership matters: Addressing the student success and completion agenda. *New Directions for Community Colleges*, *2013*(164), 7-16.

McCormick, M. J. (2001). Self-efficacy and leadership effectiveness: Applying social cognitive theory to leadership. *Journal of Leadership & Organizational Studies*, *8*(1), 22-33.

McDonald, R. (2007). An investigation of innovation in non-profit organizations: The role of organizational mission. *Nonprofit and Voluntary Sector Quarterly*, 36(2), 256–281.

McEwan, E. K., & McEwan, P. J. (2003). *Making sense of research*. Thousand Oaks, CA: SAGE.

McNabb, D. E., & Sepic, F. T. (1995). Culture, climate, and total quality management: Measuring readiness for change. *Public Productivity & Management Review*, 369-385.

McNair, D. E. (2015). Deliberate disequilibrium: Preparing for a community college presidency. *Community College Review, 43*(1), 72-88.

McNair, D. E., Duree, C. A., & Ebbers, L. (2011). If I knew then what I know now: Using the leadership competencies developed by the American Association of Community Colleges to prepare community college presidents. *Community College Review*, *39*(1), 3-25.

McPhail, C. J. (2011, November). *The Completion Agenda: A Call to Action. (*Summary Report from the November 10-11, 2010, meeting of the American Association of Community

Colleges commissions and board of directors. American Association of Community Colleges.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. (4th ed.). San Francisco: Jossey-Bass.

Mitchell, M., Palacios, V., & Leachman, M. (2014). States are still funding higher education below pre-recession levels. *Center on Budget and Policy Priorities*, *5*(1), 14.

Moeller, A. J., Theiler, J. M., & Wu, C. (2012). Goal setting and student achievement: A longitudinal study. *The Modern Language Journal*, 96(2), 153-169.

Morphew, C. C. (1999). Challenges facing shared governance within the college. *New directions for Higher Education,* 1999(105), 71-79.

Morrill, C. (1991). Conflict management, honor, and organizational change. *American Journal of Sociology*, 97(3), 585-621.

Moschetti, R. V., & Hudley, C. (2015). Social capital and academic motivation among first-generation community college students. *Community College Journal of Research and Practice,* 39(3), 235-251.

Mullin, C. M. (2010). *Rebalancing the Mission: The community college completion challenge.* (AACC Policy Brief 2010-02PBL). American Association of Community College.

Murray, J. P. (2002). The current state of faculty development in two-year colleges. *New Directions for Community Colleges, 2002*(118), 89-98.

National Center for Education Statistics. (2003). *1995-96 Beginning Postsecondary Students Longitudinal Study, second follow-up (BPS: 96/01).* Washington, DC: U.S. Department of Education.

National Center for Education Statistics. (2014). Digest of education statistics. [Data table]. Retrieved from https://nces.ed.gov/programs/digest/d09/tables/dt09_331.asp

National Center for Education Statistics. (2017). Digest of education statistics. [Data table]. Retrieved from https://nces.ed.gov/programs/digest/d17/tables/dt17_326.20.asp?current=yes

National Student Clearinghouse Research Center. (2012). *Completing college: A national view of student attainment rates – fall 2006 cohort.* Retrieved from https://nscresearchcenter.org/signaturereport4/.

National Student Clearinghouse Research Center. (2013). *Completing college: A national view of student attainment rates – fall 2007 cohort.* Retrieved from https://nscresearchcenter.org/signaturereport6/.

National Student Clearinghouse Research Center. (2014). *Completing college: A national view of student attainment rates – fall 2008 cohort*. Retrieved from https://nscresearchcenter.org/signaturereport8/.

National Student Clearinghouse Research Center. (2015). *Completing college: A national view of student attainment rates – fall 2009 cohort.* Retrieved from https://nscresearchcenter.org/signaturereport10/.

National Student Clearinghouse Research Center. (2016). *Completing college: A national view of student attainment rates – fall 2010 cohort*. Retrieved from https://nscresearchcenter.org/signaturereport12/.

National Student Clearinghouse Research Center. (2017). *Completing college: A national view of student attainment rates – fall 2011 cohort.* Retrieved from https://nscresearchcenter.org/signaturereport14/.

National Student Clearinghouse Research Center. (2018). *Yearly success & progress rates – 2018.* Retrieved from https://nscresearchcenter.org/snapshot-report-yearly-success-and-progress-rates/

Nevarez, C., & Wood, J. L. (2012). A case study framework for community college leaders. *Community College Journal of Research and Practice*, 36(4), 310-316.

Northouse, P. (2015). *Leadership: Theory and practice*. Thousand Oaks, CA: SAGE Publications.

Noruzy, A., Dalfard, V. M., Azhdari, B., Nazari-Shirkouhi, S., & Rezazadeh, A. (2013). Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: an empirical investigation of manufacturing firms. *The International Journal of Advanced Manufacturing Technology*, 64(5-8), 1073-1085.

Obama, B. (2009). *Remarks at Macomb community college in Warren, Michigan.* Retrieved from: https://www.gpo.gov/fdsys/pkg/DCPD-200900565/pdf/DCPD-200900565.pdf

O'Banion, T. (1994). An academic advising model. *NaCADA Journal*, *14*(2), 10-16.

O'Leary-Kelly, A. M., Martocchio, J. J., & Frink, D. D. (1994). A review of the influence of group goals on group performance. *Academy of Management Journal*, 37: 1285-1301.

Oreg, S. (2006). Personality, context, and resistance to organizational change. *European Journal of Work and Organizational Psychology*, *15*(1), 73-101.

Paglis, L. L., & Green, S. G. (2002). Leadership self-efficacy and managers' motivation for leading change. *Journal of Organizational Behavior*, *23*(2), 215-235.

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, *66*(4), 543-578.

Pajares, F. (2006). Self-efficacy theory. Retrieved from http://www.education.com/reference/article/self-efficacy-theory/.

Pardo del Val, M., & Martínez Fuentes, C. (2003). Resistance to change: a literature review and empirical study. *Management Decision*, *41*(2), 148-155.

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2008). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, *9*(3), 105-119.

Piland, W. E., & Bublitz, R. F. (1998). Faculty perceptions of shared governance in California community colleges. *Community College Journal of Research and Practice*, *22*(2), 99-110.

Pintrich, P. R. (2000). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology*, *92*(3), 544.

Plinske, K., & Packard, W. J. (2010). Trustees' perceptions of the desired qualifications for the next generation of community college presidents. *Community College Review*, *37*(4), 291-312.

Porter, M. E. (2000). Location, competition, and economic development: Local clusters in a global economy. *Economic Development Quarterly*, *14*(1), 15-34.

Price, D. V., & Tovar, E. (2014). Student engagement and institutional graduation rates: Identifying high-impact educational practices for community colleges. *Community College Journal of Research and Practice*, *38*(9), 766-782.

Ramchunder, Y., & Martins, N. (2014). The role of self-efficacy, emotional intelligence and leadership style as attributes of leadership effectiveness. *SA Journal of Industrial Psychology*, *40*(1), 01-11.

Richards, E., & Terkanian, D. (2013). Occupational employment projections to 2022. *Monthly Lab. Rev.*, *136*, 1.

Rousseau, D. M., & Tijoriwala, S. (1999). What's a good reason to change? Motivated reasoning and social accounts in promoting organizational change. *Journal of Applied Psychology*, 84: 514-528.

Rueda, R. (2011). *The 3 dimensions of improving student performance*. New York: Teachers College Press.

Salkind, N. J. (2017). *Statistics for people who (think they) hate statistics*. Sage Publications.

Sandoval-Lucero, E., Antony, K., & Hepworth, W. (2017). Co-Curricular Learning and Assessment in New Student Orientation at a Community College. *Creative Education*, *8*(10), 1638.

Sain, B., & Williams, M. R. (2009). An examination of the use of portfolios for faculty evaluation at community colleges. *Journal of Applied Research in the Community College*, *17*(1), 56-59.

Sandoval-Lucero, E., Maes, J., & Klingsmith, L. (2014). African American and Latina (o) community college students' social capital and student success. *College Student Journal*, 48(3), 522-533.

Saxon, D. P., & Morante, E. A. (2014). Effective student assessment and placement: Challenges and recommendations. *Journal of Developmental Education*, *37*(3), 24.

Schein, E. H. (1996). Culture: The missing concept in organization studies. *Administrative Science Quarterly*, 229-240.

Schein, E. H. (2004). *Organizational culture and leadership* (3rd ed.). San Francisco, CA: Jossey Bass.

Schneider, B., & Rentsch, J. (1988). Managing climates and cultures: A futures perspective. In J. Hage (Ed.), *Issues in organization and management series. Futures of organizations: Innovating to adapt strategy and human resources to rapid technological change* (pp. 181-203). Lexington, MA.

Schuetz, P. (1999). Shared Governance in Community Colleges. *ERIC Digest*. Retrieved from https://www.ericdigests.org/2000-2/shared.htm.

Scott, J. H. (1990). Role of community college department chairs in faculty development. *Community College Review*, 18(3), 12-16.

Scott-Clayton, J. (2012, April 20). *Are college entrants overdiagnosed as underprepared?* Retrieved from: https://economix.blogs.nytimes.com/2012/04/20/are-college-entrants-overdiagnosed-as-underprepared/

Scott-Clayton, J. (2015). The role of financial aid in promoting college access and success: Research evidence and proposals for reform. *Journal of Student Financial Aid*, 45(3), 3.

Scrivener, S., Weiss, M., Ratledge, A., Rudd, T., Sommo, C., & Fresques, H. (2015). *Doubling graduation rates: Three-year effects of CUNY's Accelerated Study in Associate Programs (ASAP) for developmental education students.* Retrieved from MDRC website: https://www.mdrc.org/sites/default/files/doubling_graduation_rates_fr.pdf

Scrivener, S., Bloom, D., LeBlanc, A., Paxson, C., Rouse, C. E., & Sommo, C. (2008). *A good start: Two-year effects of a freshmen learning community program at Kingsborough Community College*. Retrieved from MDRC website: https://www.mdrc.org/sites/default/files/A%20Good%20Start.pdf

Shea, C. M., Jacobs, S. R., Esserman, D. A., Bruce, K., & Weiner, B. J. (2014). Organizational readiness for implementing change: A psychometric assessment of a new measure. *Implementation Science, 9*(1), 7.

Shults, C. (2001). *The critical impact of impending retirements on community college leadership.* (*Research Brief, Leadership Series No. 1).* American Association of Community Colleges. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.458.6137&rep=rep1&type=pdf

Shumaker, R., & Wood, J. L. (2016). Understanding first-generation community college students: An analysis of covariance examining use of, access to, and efficacy regarding institutionally offered services. *The Community College Enterprise, 22*(2), 9-17.

Siegel, P. A., Post, C., Brockner, J., Fishman, A. Y., & Garden, C. (2005). The moderating influence of procedural fairness on the relationship between work-life conflict and organizational commitment. *Journal of Applied Psychology*, 90(1), 13.

Smith, A. B., Street, M. A., & Olivarez, A. (2002). Early, regular, and late registration and community college student success: A case study. *Community College Journal of Research & Practice, 26*(3), 261-273.

Smith, M., & Bititci, U. S. (2017). Interplay between performance measurement and management, employee engagement and performance. *International Journal of Operations & Production Management*, 37(9), 1207-1228.

Smith, K. G., Locke, E. A., & Barry, D. (1990). Goal setting, planning, and organizational performance: An experimental simulation. *Organizational Behavior and Human Decision Processes, 46*(1), 118-134.

Sousa, D. (2014). Validation in qualitative research: General aspects and specificities of the descriptive phenomenological method. *Qualitative Research in Psychology*, *11*(2), 211-227.

Sparkman, L., Maulding, W., & Roberts, J. (2012). Non-cognitive predictors of student success in college. *College Student Journal*, *46*(3), 642-652.

Spreitzer, G. M., & Quinn, R. E. (1996). Empowering middle managers to be transformational leaders. *The Journal of Applied Behavioral Science*, *32*(3), 237-261.

Stouten, J., Rousseau, D. M., & De Cremer, D. (2018). Successful organizational change: Integrating the management practice and scholarly literatures. *Academy of Management Annals, 12(2), 752-788.*

Sullivan, L. G. (2001). Four generations of community college leadership. *Community College Journal of Research & Practice*, *25*(8), 559-571.

Tagg, J. (2012). Why does the faculty resist change?. *Change: The Magazine of Higher Learning*, *44*(1), 6-15.

Tandberg, D. A., Hillman, N., & Barakat, M. (2014). State higher education performance funding for community colleges: Diverse effects and policy implications. *Teachers College Record*, *116*(12), n12.

Terenzini, P. T., Rendon, L. I., Upcraft, M. L., Millar, S. B., Allison, K. W., Gregg, P. L., & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education*, *35*(1), 57-73.

Thomas, A. B. (1988). Does leadership make a difference to organizational performance? *Administrative Science Quarterly*, 388-400

Tierney, W. G., & Minor, J. T. (2004). A cultural perspective on communication and governance. *New Directions for Higher Education*, *2004*(127), 85-94.

Tinto, V. (1999). Taking retention seriously: Rethinking the first year of college. *NACADA Journal*, *19*(2), 5-9.

Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *The Journal of Higher Education*, 68(6), 599-623.

Townsend, B. K., & Wilson, K. (2006). " A hand hold for a little bit": Factors facilitating the success of community college transfer students to a large research university. *Journal of College Student Development*, *47*(4), 439-456.

Trowler, V. (2010). Student engagement literature review. *The Higher Education Academy*, *11*, 1-15.

Turner, C. S. V., González, J. C., & Wood, J. L. (2008). Faculty of color in academe: What 20 years of literature tells us. *Journal of Diversity in Higher Education*, *1*(3), 139.

Twombly, S., & Townsend, B. K. (2008). Community college faculty what we know and need to know. *Community College Review*, *36*(1), 5-24.

Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education*, 46(2), 153-184.

United State Department of Labor. (2015). *Earnings and unemployment rates by educational attainment.* Retrieved from http://www.bls.gov/emp/ep_table_001.htmwork

Van Dam, K., Oreg, S., & Schyns, B. (2008). Daily work contexts and resistance to organisational change: The role of leader–member exchange, development climate, and change process characteristics. *Applied Psychology*, *57*(2), 313-334.

Van den Heuvel, S., Schalk, R., & van Assen, M. A. (2015). Does a well-informed employee have a more positive attitude toward change? The mediating role of psychological contract fulfillment, trust, and perceived need for change. *The Journal of Applied Behavioral Science*, *51*(3), 401-422.

Van der Voet, J., Kuipers, B. S., & Groeneveld, S. (2016). Implementing change in public organizations: The relationship between leadership and affective commitment to change in a public sector context. *Public Management Review*, *18*(6), 842-865.

Van Iddekinge, C. H., Aguinis, H., Mackey, J. D., & DeOrtentiis, P. S. (2017). A Meta-Analysis of the interactive, additive, and relative effects of cognitive ability and motivation on performance. *Journal of Management*, 0149206317702220.

Van Knippenberg, D., Dahlander, L., Haas, M. R., & George, G. (2015). From the Editors: Information, Attention, and Decision Making. *Academy of Management Journal*, 58 (3), 649-657.

Visher, M. G., Weiss, M. J., Weissman, E., Rudd, T., & Wathington, H. D. (2012). The Effects of learning communities for students in developmental education: A synthesis of findings from six community colleges. *National Center for Postsecondary Research*.

Wada, K., Arakida, M., Watanabe, R., Negishi, M., Sato, J., & Tsutsumi, A. (2013). The economic impact of loss of performance due to absenteeism and presenteeism caused by depressive symptoms and comorbid health conditions among Japanese workers. *Industrial Health*, *51*(5), 482-489.

Waller, L., Glasscock, H. M., Glasscock, R. L., & Fulton-Calkins, P. J. (2006). Community college funding. *Community College Journal of Research and Practice*, *30*(5-6), 443-461.

Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation Science, 4*(1), 67.

Whitt, K. K., Scheurich, J. J., & Skrla, L. I. N. D. A. (2015). Understanding superintendents' self-efficacy influences on instructional leadership and student achievement. *Journal of School Leadership*, *25*(1), 102-132.

Wickens, C. M. (2008). The organizational impact of university labor unions. *Higher Education, 56*(5), 545-564.

Wigfield, A., & Eccles, J. S. (2000). Expectancy–value theory of achievement motivation. *Contemporary Educational Psychology*, *25*(1), 68-81.

Wigfield, A., Eccles, J. S., Fredricks, J. A., Simpkins, S., Roeser, R. W., & Schiefele, U. (2015). Development of achievement motivation and engagement. *Handbook of Child Psychology and Developmental Science*.

Wild, L. L., Ebbers, L. H., Shelley, M. C., & Gmelch, W. H. (2003). Stress factors and community college deans: The stresses of their role identified. *Community College Review*, 31(3), 1-23.

Windham, M. H., Rehfuss, M. C., Williams, C. R., Pugh, J. V., & Tincher-Ladner, L. (2014). Retention of first-year community college students. *Community College Journal of Research and Practice*, 38(5), 466-477.

Woessmann, L. (2016). The economic case for education. *Education Economics, 24*(1), 3-32.

Woosley, S. A., & Miller, A. L. (2009). Integration and institutional commitment as predictors of college student transition: Are third week indicators significant?. *College Student Journal*, *43*(4).

Wyatt, L. G. (2011). Nontraditional student engagement: Increasing adult student success and retention. *The Journal of Continuing Higher Education*, *59*(1), 10-20.

Xu, D. (2016). Assistance or obstacle? The impact of different levels of English developmental education on underprepared students in community colleges. *Educational Researcher*, *45*(9), 496-507.

Yamamura, E. K., Martinez, M. A., & Saenz, V. B. (2010). Moving beyond high school expectations: Examining stakeholders' responsibility for increasing Latina/o students' college readiness. *The High School Journal*, *93*(3), 126-148.

Zeidenberg, M., Jenkins, D., & Calcagno, J. C. (2007). Do student success courses actually help community college students succeed? CCRC Brief. Number 36. *Community College Research Center, Columbia University*.

Appendix A

Interview Protocol

Thank you for your willingness to talk to me. I know it can be hard to find time to do some the "extra" things in such a busy job. I am hopeful that I can gather information that might prove useful to you as you continue your leadership of the college. As you know, I'm interested in examining the role that senior leadership plays in affecting the completion rates at community colleges. The complexity of community colleges and their deep and wide missions can make providing leadership a challenge. Examining those challenges and how leaders such as yourself address those issues in relation to completion rates is the basis of this research. More specifically, I'm examining what it takes for community college leaders to affect completion rates.

Questions

1. How do you define student completions?
2. Please describe your professional experiences that you feel most prepared you for this position. (Knowledge – Conceptual)
3. What programs or services do you think could most impact student success at your institution? (Knowledge – Conceptual)
4. Can you give an example of a "significant organizational change" that you've either engaged in or would like to engage in?
    a. How do you begin the process of making a significant organizational change?
    b. What do you consider a less meaningful change?
5. Within the context of your organization, who do you engage when making significant changes? (Knowledge – Conceptual)
    a. What types of challenges, if any, have you experienced in the form of resistance to change and do you have preferred methods of addressing those challenges? (Organizational influences)
6. How would you characterize the value of a community college degree? (Utility value)
    a. How would you characterize the value of the certificate programs offered by the college versus an AA/AAS?
7. Considering your college's current completion rate, your student population, and available resources, what do you think the target completion rate for the college should be? (Utility value, Cultural setting 2)
    a. Is this an aspirational target? Do think having an aspirational target is useful?

8. Do you feel that your position as the president is established in such a way as to provide you with the influence you need to increase student completion rates? (Leader means self-efficacy, organizational influences)
    a. What, if anything, would you change about your job description?
9. In what ways do you influence key players within the organization particularly when working on programs that you believe will impact both student completion rates as well as the day-to-day work of faculty and staff? (Leader action self-efficacy)
10. Do you think changes at the institution can be made that dramatically change completion rates quickly – that is, within five years? (Cultural model 1)
11. What does an organization that is "ready for change" look like? (Cultural model 2, Knowledge – Conceptual)
    a. Does your organization meet that criteria?
    b. Considering where the organization is now, do you think you'll be able to have the effect on the college that you want? (Self-efficacy)
12. Do your personal goals for student completions differ from those that the institution has set? (Cultural setting 2)
    a. How did this come about? OR Can you describe the role that you played in establishing the institutional completion goal?
13. How does the financial picture of the institution affect the way in which you provide leadership? (Cultural setting 1)
    a. Can you give an example of financial resources affected something that you did in terms of your leadership?

Appendix B

Institutional Document Analysis Protocol

Stated Institutional Metrics and Goals Analysis Protocol

Public-facing institutional documents pertaining to institutional goals will be examined via web-search. Potential documents to be examined include but are not limited to:

- Institutional strategic plan(s)
- Educational master plan
- Institutional research reports
- Student success reports

The purpose of this analysis is to explore the extent to which the institution is focused on student completions, what metrics are used to measure student completions, and if the institution has a formal goal of increasing student completion rates. Follow-up questions during the interview process will probe the reasons for metrics used.

Data Collect Tool

Institution Name:					
Document Name	Student Success Metric	Stated Result	Report year(s)	Completion rate metric (Y/N)	Formal Goal to increase completion rate (Y/N)

Document Name:

Stated formal goal(s) for increasing student completion rates:

Appendix C

Professional Experience Curriculum Viète Analysis Rubric

Participant Name: _____

Community College Best Practices Analysis

Years of Experience: How many years of experience does the participant have working within a community college program that has been empirically shown in the academic literature to be a best practice in improve student completion rates? Example of programs include:

- Counseling/Advising/Academic planning
- Academic support (such as supplemental instruction)
- Curriculum reform in developmental education
- Learning communities
- Faculty professional development

Experience is distinguished between direct experience and indirect experience.

Direct Experience: Includes direct service to students within the program, direct oversight of the program, and evidence of initiation of the program.

Indirect Experience: Experience with indirect oversight such as supervision of program manager not coupled with direct experience or tangential contact with best practices programs such as experience using tutoring as a faculty member.

Knowledge Domain: Community College Best Practices	Years of Experience by type		Total Years
	Direct	Indirect	
Counseling/Advising/Academic planning			
Academic support (i.e. S.I.)			
Curriculum reform in developmental education			
Learning communities			
Faculty professional development			

Knowledge of Organizational Change Practices Analysis

Years of Experience: How many years of experience does the participant have engaged in the design and implementation of an institution-wide program or process that involved multiple stakeholders? Experience in this area is distinguished by leadership and participant.

Leadership: Evidence that the participant initiated the change, led the design and implementation, or both.

Participant: Participant was a member of the team or department that instituted an institutional change. Evidence that indicates consistent participation in the design and implementation process.

Knowledge Domain: Organizational Change Practices	Years of Experience by type		Total Years
Description of change	Participant	Leader	

Administrative Functioning of Community Colleges

Years of Experience: How many years of experience does the participant have with the administrative functions of a community college? Experience in this area is distinguished by years of experience in non-administrative leadership positions and administrative leadership positions.

Non-administrative leadership: Service as department chair or committee chair without budget oversight.

Administrative Leadership: Service within an exempt position within a community college that includes supervision of faculty and/or staff and budget oversight.

Knowledge Domain: Administrative Functioning	Years of Experience by type		Total Years
Description of position	Non-Admin	Admin	

Appendix D

Leader Efficacy Questionnaire Sample

Sample Items from Leader Efficacy Questionnaire — Self Assessment Form

Directions: Think about yourself as a leader in your organization and for each item below, indicate your level of confidence. A score of 100 represents 100% confidence, whereas a score of 0 means no confidence at all.

As a Leader I can...

1. Develop agreements with followers to enhance their participation
2. Coach followers to assume greater responsibilities for leadership
3. Inspire followers to go beyond their self-interests for the greater good
4. Rely on the organization to provide the resources needed to be effective
5. Go to my superiors for advice to develop my leadership
6. Effectively lead working within the boundaries of the organization's policies
7. Motivate myself to take charge of groups
8. Think up innovative solutions to challenging leadership problems