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Community College Governing Boards Effects of Structure and Composition on Student and Institutional Outcomes

Jason Lee Camp

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Community college governing boards: Effects of structure and composition on student
and institutional outcomes

By

Jason Lee Camp

A Dissertation
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in Community College Leadership
in the Department of Educational Leadership

Mississippi State, Mississippi

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2019

Community college governing boards: Effects of structure and composition on student
and institutional outcomes

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This dissertation examined if community college governing board structure and trustee selection influence institutional and student outcomes. This study employed a causal-comparative design and one-way between subjects ANOVA to examine the effects of board structure and trustee selection on the average cost of attendance, graduation rate, and salary after attending. The participants were 894 public community colleges in the United States. The independent variables included board structure (local boards versus statewide boards) and board composition (elected boards versus appointed boards). The independent variable data were collected from a report, *Public Community College Governing Boards: Structure and Composition*, compiled by the Association of Community College Trustees. The 3 dependent variables (i.e., average cost of attendance, graduation rate, and salary after attending) was collected from pre-existing publicly available data from the United States Department of Education College Scorecard. The research indicated that a locally governed board does result in a lower cost of attendance. The results also signaled that community college boards with elected boards of trustees have a lower cost of attendance and a higher salary after attending.

DEDICATION

I would like to dedicate this to my wife Kristy and daughter Molly. They are my greatest supporters. Without the love and support of Kristy, this opportunity would have not been possible. I also would like to thank my parents and extended family for always cheering me on throughout this process.

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CHAPTER I
INTRODUCTION

Introduction

Across the country, community colleges play a vital role in the education system. In the academic year 2015-2016 there were 1,007 public community colleges eligible to have awarded federal aid (U.S. Department of Education, National Center for Education Statistics, n.d.). From the early 20th Century, community colleges were formed due to several changes in society at that time. One of those changes was the national expansion in industry and the demand for skilled workers. An additional change was the adolescence stage of youth extending longer than it had previously. There was a great demand for social equality, and access to higher education was believed to be the answer to provide equality. Since that time, community colleges have rapidly changed in form and accessibility. This is emphasized in today's environment.

Community colleges can be found in both rural and intercity locations. Classes are offered in traditional classroom style, online, and hybrid formats. Admission policies are considered open door and ensure that all members of society have a place in the community college system. Vocational and academic paths now overlap and are dependent on one another for completion of a program. Community colleges today are frequently changing and in search of new programs and potential students (Cohen & Brawer, 2008).

In the fall of 2016, community colleges served 12.1 million students; 7.1 million of those students were in credit producing courses with 63% classified as part-time. The average age of the community college student was 28; women made up 56% of the population (American Association of Community Colleges, 2018).

The control of community colleges has evolved over time.

In the past three decades, the multiunit college groupings have increased, while the independent, nonprofit junior colleges have declined and nearly all colleges that are affiliated with local public school districts have severed that connection. The public colleges are now arrayed in single independent districts; multiunit independent districts; state university systems and branch colleges; and state systems, some with innovative patterns, such as non-campus colleges. Individual comprehensive colleges may include specialized campuses or clusters organized around curricular themes. (Cohen & Brawer, 2008, p. 116)

These changes have created a range of governance models for community colleges to operate under. Some institutions are subject to highly centralized systems, such as statewide governing boards that oversee all higher education institutions in the state. Other community colleges are controlled by decentralized systems that operate under one local board.

In America, a majority of public community colleges are controlled by a single district. Local boards of trustees are responsible for the selection and monitoring of a chief executive officer and establishing the institution's policies. Trustees are appointed from a governmental agency, or they are locally elected (Cohen & Brawer, 2008).

A 2014 report released by the Association of Community College Trustees (ACCT) reported that,

Thirty-six States have a local community or technical college governing or advisory boards. In 11 states, the community and technical colleges are solely governed by a statewide governing or coordinating board. Of these, four are exclusively community college statewide boards and seven are statewide higher education boards whose scopes extend beyond community colleges. Twenty-five states have a state-level community college governing board. In 15 states, the board has governance oversight for the community and/or technical colleges, while in seven states the board has a coordinating responsibility, and in three states the board has an advisory role. Twenty-four states have a higher education state governing or coordinating board that is also responsible for public community and technical colleges. In six states, a university governing board governs some or all of the community or technical colleges. Thirty-two states have some combination of state and local governance for the community and technical colleges. (Association of Community College Trustees, 2014, p. 5)

Community college governing and coordinating boards lack a consistent system of governance structure across the country. Throughout the development and history of the community colleges, various structures and compositions were adopted. Internal and external forces contributed to the changed landscape of governance. “Governance at the community college level is generally a highly complex and bureaucratic process” (Piland & Butte, 1991, p. 1). As stated in a report by the Education Commission of the States, “State coordination of postsecondary education is one of the most complex, difficult

balancing acts in state government” (McGuinness, 2015, p. 2). Determining the roles of community college boards is difficult to interpret due to the vast differences among governance structures. A board member’s greatest responsibility is to be an informed decision maker. A key role of a community college board is the selection, evaluation, and compensation of the chief executive officer or president of the institution. Examples of other responsibilities of a board are budgeting, setting visions and goals of the community college, approving long-term plans, administrative personnel decisions, approving legal contracts, and setting policies and procedures (Moore, 1973). Boards integrate the mission and vision of the organization throughout all aspects of the institution or system while planning for and managing change within the industry (Gillett-Karam, 2013). These boards play a major role in the direction and achievement of the community college and its students. In today’s educational environment every aspect of the educational institution seems to be under evaluation or performance standards. However, one area that has not seen the same level of measurement is the community college governing boards.

Statement of the Problem

The problem in this study was the lack of understanding regarding community college governance’s role in institutional and student outcomes. Community colleges are under immense pressure to have positive institutional outcomes. A majority of states have performance-based funding formulas that tie funding for public colleges to institutional and student outcomes (Fain, 2017). With this monumental task, ensuring the appropriate governance structure is in place should be an area of research. A research study conducted in 2016 by Fletcher and Friedel sought to understand the landscape of state-

level community college governance. The study used a mixed-methods approach by examining historic documents and conducting a survey. The study found that one-third of the states had made a change in the structure of state-level governance from 1996 to 2014. It also discovered that eight states were making attempts at changing their structures (Fletcher, 2016). Lovell and Trough (2002) also noted, “Governance patterns continue to change as the definition of the community college evolves” (p. 94). Few empirical studies investigated the governing board’s structure and composition impact on institutional outcomes. “Studies of campus governance typically ignore student outcomes, whereas the more voluminous research on student outcomes rarely looks at governance dynamics and processes” (Schuetz, 2008 p. 96). Understanding the potential impacts that the structure and composition of community college governing boards have on performance is vital for policymakers when considering future changes, community college governance structure, and composition.

Purpose of the Study

The purpose of this survey study was to determine if governing board structure and trustee selection influenced institutional and student outcomes in public community colleges in the United States. The results of the study can be used by policymakers when considering changes to the structure and composition of community college governing boards.

Theoretical Framework

This study was framed by the contingency theory. Morgan (1997) explained this theory by stating,

“Organizations are open systems that need careful management to satisfy and balance internal needs and to adapt to environmental circumstances. There is no one best way of organizing. The appropriate form depends on the kind of task or environment with which one is dealing. Different types of species of organizations are needed in different types of environments” (Morgan, 1997, p. 44).

The theory supported this study by recognizing that organizations must adapt to the environment in which they are operating. As the environment in which community colleges operate evolves, changes are needed to adapt to their governance models. The pressure that performance measures have placed on community colleges is a recognizable change in the traditional environment community colleges were founded upon. The task of community colleges has changed over time from being an extension of secondary education to providers of postsecondary and workforce training. Morgan (1997) acknowledged that the appropriate form of an organization was dependent on the task they were trying to accomplish. This research used the contingency theory to examine if the organizational form of governance could better perform in the environment that community colleges operate in today.

Research Questions

The following research questions were designed to examine the effect of community college governing boards; structure and composition on student and institution outcomes.

1. Is there a significant difference in the average cost of attendance, graduation rate, or salary after attending of community colleges that are governed by a local board compared to a statewide board?
2. Is there a significant difference in the average cost of attendance, graduation rate, or salary after attending of community colleges that select trustees by election or appointment?

Hypotheses

There were two hypotheses that guided this study. The two hypotheses were:

1. There is no significant difference in the average cost of attendance, graduation rate, or salary after attending community colleges that are governed by a local board compared to a statewide board.
2. There is no significant difference in average cost of attendance, graduation rate, or salary after attending community colleges that select trustees by election or appointment.

Definition of Key Terms

The following definitions were used in this study:

1. Appointed Trustee - member of a board who serves on the board because of an appointment by a publicly elected official, state or local legislature,

governor, or school board (Association of Community College Trustees, 2014).

2. Community College - “Any institution regionally accredited to award the associate in arts or the associate in science as its highest degree.” (Cohen & Brawer, 2008, p. 5)
3. Elected Trustee - member of a board who serves on the board because he or she is selected by the will of voters in the area served (Association of Community College Trustees, 2014).
4. Local Community College Board - board whose scope of authority is for a single community college or multi-college district (Association of Community College Trustees, 2014).
5. State Level Community College Board - community college board whose scope of authority is to govern all community colleges within the state. In some states, this also includes primary and secondary education responsibilities (Association of Community College Trustees, 2014).

Delimitations of the Study

There were two delimitations for this study. These were that this study only evaluated public community colleges eligible to award federal aid in the United States; and the data used in the research were limited to the federal reporting year 2015-2016.

The Significance of the Study

Research in community college governance has demonstrated a pattern of governance changes across public community colleges in the United States (Fletcher,

2016; Lovell & Trough, 2002). This research attempted to highlight any patterns that were present in student and institutional outcomes as a result of the structure and composition of community college governing boards. There was a very limited body of research related to how community college governance impacts institutional and student outcomes. This research has added to the scholarly literature that policymakers should consider when making future changes to higher education governance structures.

This chapter described the current situation with community college board structure and composition, stated the research problem, defined key terms, and identified the research questions and overall purpose of the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

Chapter two provides a synopsis of research literature surrounding community colleges' structure, composition, governance, and effectiveness. There was a vast amount of research related to institutional effectiveness that covers many aspects of educational institutions. However, the literature was very limited in regards to the structure and composition of community college boards and their impact on the institution. The goal of this literature review is to explore the current measures of institutional effectiveness, examine the college scorecard and the outcomes it measures, and understand the current landscape of community college boards' structure and composition.

Through a rigorous research of literature using a variety of databases and search terms, it was evident there was a gap in the research related to community college board structure and composition. Terms used in this quest included "community college governance," "board effectiveness," "selection and composition," "state vs local control," "elected," "appointed," "outcomes," "trustee," "governance models," "statewide board" and "coordinating." A combination of many of these terms was used (e.g., "elected trustee" and "community college board"). These terms were searched in various databases including Discovery Service for Mississippi State University, ProQuest Dissertations and Theses – Global, and Ebsco Discovery Service. Despite each search resulting in publications, very few advanced this study. There was some knowledge to be

gained from a number of articles on the landscape of community college boards' structure and composition and institutional effectiveness.

Institutional Effectiveness

Community colleges are faced with powers inside and outside the organization that demand effectiveness within the organization.

“Effectiveness is a complex, multifaceted construct with a myriad of meanings and interpretations. It can be conceptualized and measured in the form of learner outcomes, institutional growth and change, value-added, organizational efficiency, stakeholder satisfaction, ratings and rankings, and just about anything else that describes what institutions do” (Alfred, 2011, p. 104).

Institutional effectiveness between community colleges and 4-year colleges differs due to the wider teaching mission (e.g., occupational retraining, developmental coursework, continuing education) that community colleges face (Mayes, 1995). The focus turned to institutional effectiveness in the early 1990s due to the growth in community colleges and the expansion of their missions. Over time community college leaders came together to form what would be called the *Core Indicators of Effectiveness for Community Colleges*. This report was released in 1994 and sought to help leaders answer the main questions being asked within the community, such as “What are the key indicators of effectiveness in community colleges?”(Alfred, 2011, p. 105). The report developed 13 indicators that mainly focused on student outcomes and the satisfaction index of stakeholders. It has since been revised twice; the latest edition was published in 2007 and included 16 indicators. The 16 core indicators were student goal attainment, persistence, graduation rates, student satisfaction, success in subsequent and related coursework, program

learning outcomes and mastery of discipline, demonstration of general education competencies, regional market penetration rates, responsiveness to community needs, placement rates, licensure and certification pass rates, employer satisfaction with graduates, client satisfaction with programs and services, value added to the community, and transfer rates, performance after transfer (Alfred, Shults, & Seybert, 2007). Research conducted by Skolits and Graybeal (2007) sought to understand the influence of institutional effectiveness on faculty and staff. Using a mixed-method case study, the researchers looked at a 2-year community college in Tennessee and included 275 employees. The survey indicated that although there was emphasis placed on institutional effectiveness, there was still much work to be done in assisting faculty and staff in their knowledge and understanding of effectiveness (Skolits & Graybeal, 2007). Various other attempts at demonstrating institutional effectiveness have been used around the country. The Community College Survey of Student Engagement (CCSSE), was developed from the previous National Survey of Student Engagement, and is now used to help give community colleges insight into practices and student behaviors that have been found to contribute to student retention and learning (Center for Community College Student Engagement, n.d.). Another attempt at measuring effectiveness is the National Community College Benchmarking Project (NCCBP). This project shared their data on 25 benchmarks that measured statistics such as job placement rates to minority participation rates and allowed institutions to compare their results to the national averages (Ewell, 2011). Community colleges continue to face calls for increased accountability and the need for results as long as funding and resources remain limited.

Community colleges have continued to refine metrics and methods to capture data to demonstrate their value in education and workforce development.

The College Scorecard

When millions of families across the United States start to consider their higher education options, they will find a multitude of guides, rankings, and lists of institutions. While many institutions claimed they did not subscribe to these rankings, research showed that students have considered them when making choices about college (Ehrenberg, 2005). The *U.S. News & World Report* is one of the most widely known ranking systems (Altbach, 2012). One of the major shortcomings in many of those rankings was that they failed to account for individual student characteristics that should have been considered (Ehrenberg, 2005). As noted in *Inside Higher Education*, a federal rating system carried more authority than those done by media publications (Lederman, Stratford, & Jaschik, 2014). The College Scorecard was launched February 12, 2013, by the U.S. Department of Education. The Obama administration set the goal of more accountability for value, quality, and cost to the public (U.S. Department of Education, 2013). In Obama's 2013 State of the Union, he announced the availability of the College Scorecard,

Through tax credits, grants, and better loans, we've made college more affordable for millions of students and families over the last few years. But taxpayers cannot keep on subsidizing higher and higher and higher costs for higher education.

Colleges must do their part to keep costs down, and it's our job to make sure that they do... My Administration will release a new College Scorecard that parents and students can use to compare schools based on simple criteria: where you can

get the most bang for your educational buck. (U.S. Department of Education, 2013, p. 1)

The College Scorecard was updated to include additional data and correct some controversial methodologies used in calculations. The data available on the site were assembled from various data reported to the federal government such as Integrated Postsecondary Education Data System (IPEDS), Internal Revenue Service, and Bureau of Labor Statistics. Some data represented on the site were limited to only students who received federal grants and loans, known as Title IV recipients (U.S. Department of Education, 2018a). The College Scorecard provides users with the ability to compare up to ten institutions side by side while highlighting three equal data points. With some data points limited to Title IV recipients, the scorecard received some negative feedback for not capturing all students at an institution. This tool avoided rating or ranking colleges due to resistance from higher education leaders and organizations (Lederman et al., 2014). Although there were many non-peer reviewed articles regarding the College Scorecard to date, there was very little scholarly work that explored the College Scorecard. However, it did provide uniform data to compare institutions that were vital to this research.

Cost of Attendance

Cost of attendance is one of the three metrics the College Scorecard displays for each institution. When families are evaluating institutions, this metric can provide perspective student's important financial data to consider. The metric displayed for the institutions captured tuition and fees, books and supplies, and living expenses for all full-time, first-time, degree/certificate-seeking undergraduates who received Title IV aid. The

cost element was calculated from IPEDS Institutional Characteristics and Student Financial Aid (FSA) modules (U.S. Department of Education, 2018a). Community college boards' are responsible for the fiscal health and stability of their institution. Much of this fiscal health is dependent on tuition that is set by a board (Smith, 2000). Studies found that when considering college options, the cost of attendance was overestimated and difficult for parents to understand (Grotsky & Jones, 2007; Horn, Chen, & Chapman, 2003). Tools like the College Scorecard aid in understanding the cost of attendance. When compared to 4-year institutions, community colleges were less expensive to attend. In 2015-2016 the average cost to attend 4-year institutions was \$39,529 compared to a 2-year institution at \$24,367 (U.S. Department of Education, 2016). From 2014-2015 to 2016-2017 the national average tuition increased by 5% for full-time, first-time degree/certificate-seeking undergraduates at 4-year institutions (U.S. Department of Education, 2018b). Over time, community college tuition rose at a slower pace than that of 4-year institutions (Denning, 2017). There was a negative relationship found between tuition increases and enrollment in many studies reviewed by Heller. Heller (1997) reviewed 10 tuition enrollment studies that took place from 1975 to 1996 and found reliable results that supported the fact that as tuition increased, enrollment decreased. These studies used many different types of data sets and methods. The review was developed from the findings of the Leslie and Brinkman (1987) that had taken place previously. Heller (1997) showed that enrollment fell from 0.5% to 1.0% with each \$100 dollar increase in tuition.

Graduation Rate

The expectations by government agencies, foundations, and accrediting associations have increased for community colleges to ensure students cross the finish line in degree programs. Alfred (2011) argued that community colleges' hydraulics must be designed to foster acceptable completion rates. The term hydraulics was used to capture the organization's mission, policies, culture, organizational architecture, systems and process, and operation. This hydraulics, as Alfred (2011) coined, was typically a direct result of the governing board's role in the organizations. Community college leaders have argued over time that the traditional concepts of graduation rate used in the Graduation Rate Survey (GRS) required by IPEDS did not accurately capture the true picture of student completion and retention (Ewell, 2010). There were four main concerns described that are persistent among community college leaders who looked at the GRS:

For the typical comprehensive community college, there are at least four things wrong with this approach. First, entering students may have had some (and sometimes substantial) postsecondary enrollment experience somewhere else. Second, many beginning students enroll for less than a full-time load in their first term and maintain this lighter load throughout their academic career. Third, as a result of continuous part-time attendance, the 200% time window allowed for completing a degree may be too short. Fourth, the degree that a student eventually earns after entering a particular community college may be actually earned at another institution. In combination, these four limitations mean that the proportion of students who can be included in the GRS graduation rate calculation at many community colleges is less than 15% of total enrollment. (Ewell, 2011 p. 28-29)

New concepts of completion emerged that more accurately captured students who moved through the education landscape (Alfred, 2011). The Voluntary Framework of Accountability (VFA) was one system that was developed by the American Association of Community Colleges (AACC), Association of Community College Trustees, and the College Board. The VFA was designed to be more reflective of the community college system and the variation in attendance trends with 2-year institutions. There were other methods explored to more accurately capture graduation rates. Long-term tracking of students that used data contained in the National Student Clearinghouse was found to boost ultimate graduation rates by almost 10%. This was due to being able to track students as they moved among institutions. In previous graduation rate tracking efforts, students were only followed within the institution. However, with long-term tracking, student completion was captured as they moved from one institution to another (Ewell, 2011).

Salary after Attending

College attendance is commonly associated with a student's desire to broaden his or her employment eligibility. The demand for increased accountability in regards to employment and earnings outcome increased with the Workforce Investment Act of 1998 and the Carl D. Perkins Vocational and Applied Technology Education Act (Stevens, 1998). The attention to these metrics became more focused in the last few years. An effective board is one that is proactive in understanding employment trends of the community. This requires the board to be visionary and future-oriented in policy decisions (Smith, 2000).

The Scorecard displayed an average salary after attending the institution. This data point was calculated by linking cohort data of federally aided students with data from de-identified tax records (U.S. Department of Education, 2018a). There was much criticism of this metric. One example was an article from the Chronicle of Higher Education,

Here's what the website wouldn't tell him: how students who don't receive federal aid fare, or how graduates' earnings compare with those of dropouts. Nor would it show how majoring in English, rather than engineering, might affect his earning potential. That limitation matters. A wealth of research has shown that "what you study is more determinative than where you study it," said Mark S. Schneider, vice president of the American Institutes for Research. (Field, 2015 p. 1)

Community college can be a cost-effective source of obtaining a degree and entering the workforce. Bryan and Walker (2018) examined the cost-effectiveness of a community college education and found that students who attended community college prior to 4-year institutions earned slightly higher incomes after graduation. The study used two sources of data: the Baccalaureate and Beyond Longitudinal Survey from 2000-2001 and IPEDS to create models and estimates. This study also found that these students completed their bachelor's degree with less student debt (Byrne & Walker, 2018).

Community College Governance

Community colleges are large and complex organizations that require thoughtful and strong leadership. The role and structure of community colleges have changed over time to meet the increasing demands. What started as an extension of public schools

morphed into institutions with very distinct missions and identities. The adaptation to change continues to meet the demands of their local communities, state, nation, and global environment (Smith, 2000). At the heart of any community college is a governance system. Governance was defined by *Merriam-Webster* as, “the way that a city, company, etc., is controlled by the people who run it” (Merriam-Webster Online, 2018). Lovell and Trough (2002) further defined governance in a community college setting as “the decision-making authority for an organization, which is typically controlled by boards” (p. 91).

Carver’s (1997) book *Boards That Make a Difference* argued that community college boards’ creation through public schools led to boards that operated with the same mindset as public school boards. Trustees used the same governance philosophy and methods that were in place for a K-12th-grade school system. This method oversaw, decided and enforced the lowest-level decisions. However, Carver (1997) proposed that a community college board operated best when they followed several essential principles. First, a board should be involved in deciding the goals and outcomes for the institution. Meaning the outcomes that the community college pursued were determined by the board rather than the operations that arrived at the outcome. Next, Carver proposed that a boards’ focus should have been on the future of the institution and not on reviewing past actions or making decisions about present situations. Another principle was that the board should have monitored outcomes but allowed the college to measure them. The board should work with administrators to ensure the goals were being met and to provide the resources that were needed to meet the goals. Boards should act through well-developed policies that allow administrators to do their jobs with clear guidance and minimal board

involvement. Carver (1997) argued that a board operates successfully only when the board acts as a whole. Individual trustees should refrain from attempting to direct employees or circumvent the will of the majority of the board. In this same area, he argued that a board must delegate all authority to the president of the community college to maintain the chain of command in the organization. Finally, Carver's model for boards was that student learning and success should be the highest priority (Potter & Phelan, 2008).

While community college history has been recorded robustly over time, there was limited research that examined statewide governance patterns and the factors that influenced these structures (Lovell & Trough, 2002). Governance structures among community colleges differed greatly from state to state as documented by the ACCT in a report completed in 2014. ACCT (2014) found that 36 states had local governing or advisory boards. There were 11 states that had community colleges that were governed only by a statewide board. It was also noted that while ACCT was conducting the report, some states considered changes to their governance structure which highlighted the evolution taking place within community college governance (ACCT, 2014). This change was also noted as the governance structure of community colleges was affected by internal and external forces on the institutions. External pressure such as reduced federal and state funding, demand for articulation agreements amongst state systems, and calls for increased workforce development efforts shaped how governance structures have evolved. These pressures also changed the leaders within the structure and overall decision making over time (Amey, Jessup-Anger, & Jessup-Anger, 2008). From 1989 to 1994 Marcus (1997) examined the number of attempted restructuring efforts in state

higher education governance and rationales for why the proposals were brought forth. The study surveyed and interviewed 39 higher education executive officers. The study found that during that time period, there were 49 proposals for restructuring with 27 eventually being enacted. Of the 49 proposals, the rationales for why the proposals advanced were also measured, and the result was more than half of the responses was to reduce cost. The second most desired reason was increased accountability. The study also found that there was a correlation between power struggles and the proposals to give the legislature and governor more power. The study concluded with the author suggesting,

If they (higher education leaders) believe that the interests of higher education are best served when the intended barrier between higher education and politics is only infrequently breached, then focusing on the cooperative implementation of a shared vision of higher education excellence is more fruitful than jockeying for power and control. (Marcus, 1997, p. 411)

This was supported by McClendon, Deaton, and Hearn's (2007) analysis of legislative enacted reforms from 1985–2000 in state governance of higher education. The analysis included a 49 state sample. They found that "higher education governance reforms are driven more by political conditions than by economic circumstances, conditions within higher education, or policy pressures exerted among states." (McLendon, et al., 2007, p. 666)

Fletcher and Fredel (2016) conducted a research study to better understand the landscape of state-level community college governance. Prior to this research the most recent literature about state-level community college governance structures was conducted in 2001. The study used a mixed-methods approach by examining historic

documents and conducting a survey of the National Council of State Directors of Community Colleges. The study found that one-third of the states had made a change in the structure of state-level governance from 1996 to 2014. It also discovered that eight states (Alabama, Connecticut, Florida, Illinois, Indiana, Maine, Michigan, New Jersey, New Mexico, South Dakota, and Washington) were making attempts at changing their structures.

Local Versus State Control

Within higher education, states started to develop statewide governing boards to emphasize more power over public institutions from the 19th and early 20th Centuries. The complete removal of constitutional autonomy of institutions happened in some states (Ehrenberg, 2004). “The relationship between state and local institutions is generally the result of a unique situation and conditions and reflects the traditions, values, and practices of not only the education community but also the political process and the people of the state” (Charles, 1978, p. 70). Fletcher and Fredel (2017) using document analysis and a mixed methods survey, found that there were various governance models in community colleges across the country that researchers struggled to categorize. The survey was distributed to state directors of community colleges and had 45 (90%) responses. The document analysis of the study concluded that most studies focused on the state-level community college governance structures (Fletcher & Friedel, 2017). While 36 states had local governing boards, there were 11 states in which a statewide governing board acted as the institution's board (ACCT, 2014). As community colleges were established in the early years, many were formed from secondary and university systems. Local leaders made up the governance structure similar to the secondary school systems. In 1947,

President Harry Truman's Commission on Higher Education recommended greater independence and growth of community colleges. The independence of the community colleges led to various governance models developing over time. Community college governance models seek to balance local control with the basic responsibility of higher education (Smith, 2000). At the origin of many discussions on control was the financial support provided by states. The intense need for state funding opened the door for increased scrutiny and the desire for greater accountability. The idea of control being tied to funding was supported by Garret (1993) who showed that when over 50% of the funding came from state sources, there tended to be a more centralized governance structure. The pressure for control did not stop with just funding; state leaders also looked to community colleges to solve the area's workforce needs. Control became the answer to pressures for greater institutional outcomes (Charles, 1978).

“The extent to which an institution complies with the state's attempts to control the institution varies based on the institution's dependence on these external resources; an institution will only adjust to the degree that conditions of scarcity and uncertainty involve an element of critical organizational independence” (Li & Kennedy, 2018 p. 7-8).

Elected Versus Appointed Trustees

The debate over the elected or appointed board of trustee members in education is a longstanding point of consideration (Hebel, 2004). The selection methods of boards contribute to how a board operates. Trustee board members, depending on their selection process, elected or appointed, may see their roles and issues the board faces in a different light. Hendrickson (2013) pointed to stronger vetting processes as a reason for appointing

trustees. However, that argument was also met with criticism due to the number of political appointments that were made as favors rather than to qualified individuals (Hendrickson, 2013). While research was limited in the area of trustee selection, Lowry (2001) found that public universities' tuition within governmental structures that were selected by nonacademic stakeholders were significantly more discounted than those institutions whose leadership were chosen by stakeholders in the academic realm. The study used data from 407 public university campuses and then modeled tuition spending (Lowry, 2001). It was also argued that the democratic political process of electing trustee members often detracted from effectiveness in governance. Individuals elected sometimes lacked the desire for the overall well-being of the institution and were focused on a specific issue. They often lacked the individual expertise for the position (Kezar & Eckel, 2004). While these arguments were strong, there were valid oppositions. Gehring (1998) suggested that higher education was at risk of losing the valuable component of institutional uniqueness because of the federal system of education. He argued the federal government's overreach into the education system was harming higher education, recommending more lay board involvement and rights (Gehring, 1998). Young (1982) found that elected trustees are more concerned with administrative function and limited faculty and student interaction within the policy-making process. He also found that appointed trustees were more in favor of increased state funding. There was still a gap in research that examined how trustee selection impacted institutional outcomes. This study examined this topic and provided evidence for future governance decisions.

Even though there was limited available research on the specific topic of how the structure and composition of the community college board affected student outcomes, the

literature review was able to explore several areas. There were studies, Fletcher and Friedel (2016) that surveyed the structure and composition of community college boards and described the current landscape. Research (Ewell, 2011) was also available in regards to measuring student outcomes. This study advanced these two areas by discovering patterns in community college structure and composition that enhanced student outcomes.

CHAPTER III

METHODOLOGY

This chapter will provide an overview of the procedures and methods that were used to conduct this study. This chapter will discuss the research design, research questions, population and sampling, data collection, and data analysis procedures. The purpose of this survey study was to determine if governing board structures and trustee selection influence institutional and student outcomes in public community colleges in the United States. The subjects of this study were American, public community colleges. Publicly available data was analyzed to understand how the structure and composition of a community college board affects student outcomes.

Research Approach

This study narrowed general reasoning to the more specific theories using a deductive research approach. The study examined many institutions and then narrowed down to design the hypotheses that allowed the evaluation of the relationship between the variables. The data were further examined by gathering the observations in order to test the hypotheses to obtain the negative or positive results against the subject theory. The objective of the study, research questions, and hypotheses were then developed. Next, research data collection and analysis was designed to test the hypothesis and understand the results (Creswell, 2014).

This study used the deductive research approach because it was based on existing theories and studies. The deductive research approach included the building of the research strategy to test the hypothesis. A deductive design was used to assess the relationship between the independent and dependent variables. This approach allowed for the research to reflect on the themes and decide if the data supported the themes or if additional research was needed (Creswell, 2014).

Research Philosophy: Positivist

The statistical analysis of the quantitative variables or observations used the positivist research philosophy. This approach was based on subjectivity and empiricist view. The study supported the five principals of the positivist research philosophy; the research should have the goal to predict and explain, values should only be judged through logic, any bias within the research should not be allowed, across sciences there are no a difference in the logic of inquiry, and in the human senses research should be empirically observed (Glesne, 2016).

This positivist research philosophy was based on the assumption that X causes Y under certain circumstances. It included the relationship of variables; the application of research method and fact;, use of methods that apply methodology such as population selection, measurement, analysis, and reaching a conclusion in regard to the hypothesis (Creswell, 2014).

Research Design and General Method

This study employed a causal-comparative design. This form of quantitative research design looked at two or more groups in terms of a cause (independent variable)

that has previously happened (Creswell, 2014). In this study, community colleges' governing board structure and composition were examined to determine the impact on the average cost of attendance, graduation rate, and salary after attending. The use of a quantitative, causal-comparative research design was appropriate because it focused on the differences of pre-established groups that cannot be manipulated. This design allowed for the identification of the contributing relationship between the independent and dependent variables, making it appropriate for this study. There was no control over the independent variable in this study. This study attempted to identify the effect of one variable on the other variable by comparing the groups. The analysis, a causal-comparative, explored the effects and causes of the variables. This type of study is used typically when variables are unable to be manipulated in a practical way (Schenker & Rumrill, 2004). It would not have been practical to manipulate a community college board structure and composition for the sake of research.

This study examined two independent variables 1) board structure (local boards versus statewide boards) and 2) board composition (elected boards versus appointed boards). The study had three dependent variables 1) average cost of attendance, 2) graduation rate, and 3) salary after attending. A logical and suitable analysis for this study was a factorial analysis of variance (ANOVA). A factorial design looks at two or more groups with independent variables compared to the dependent variable. This allows the researcher to explore the interactions between the independent variables and how they impact the dependent variables. These interactions are able to be discovered because they are examined in combination (Lavrakas, 2008). In a factorial design, the factor is a major independent variable. Due to having multiple variables, the factorial design was used. A

2X2 ANOVA was used to determine if there was an effect on the average cost of attendance, graduation rate, or salary after attending considering each independent variable. A factorial ANOVA was used to analyze the differences in a dependent variable between the two or more independent variables.

Research Questions

1. Is there a significant difference in the average cost of attendance, graduation rate, or salary after attending of community colleges that are governed by a local board compared to a statewide board?
2. Is there a significant difference in average cost of attendance, graduation rate, or salary after attending of community colleges that select trustees by election or appointment?

Hypotheses

There were two hypotheses that guided this study. The two hypotheses were:

3. There is no significant difference in the average cost of attendance, graduation rate, or salary after attending community colleges that are governed by a local board compared to a statewide board.
4. There is no significant difference in average cost of attendance, graduation rate, or salary after attending community colleges that select trustees by election or appointment.

Participants

There were 1,007 public community colleges eligible to award federal aid in the academic year 2015-2016 (U.S. Department of Education, National Center for Education

Statistics, n.d.). Using data obtained from the United States Department of Education Scorecard, the inclusion criteria was the main campus of public institutions where the associate degree is the highest degree offered and that are not on heightened cash monitoring (i.e., federal financial aid compliance issues). The criteria limited the available data to 894 institutions. Taking a census rather than sampling eliminated the chance of a sampling error. This population represented all types of governance structures and ideally resulted in more detailed information about sub-groups.

Data Collection

Data collection consisted of pre-existing, publicly-available data from the United States Department of Education Scorecard. The institutions included were limited to 894 community colleges by selecting the main campus of public institutions where the associate degree is the highest degree offered and that are not on heightened cash monitoring. Average cost of attendance, graduation rate, and salary after attending for each institution was obtained from the United States Department of Education College Scorecard Data site. The data on the site were compiled from two sources. The first source is the IPEDS. All institutions that participate in the federal student financial aid program are required to submit data in the form of interrelated surveys by the U.S. Department of Education's National Center for Education Statistics (NCES) annually. The requirement is the result of the Higher Education Act of 1965. The second source of data within the Scorecard is from the United States Department of Treasury. The Treasury data consist of data computed from IRS tax records, U.S. Census Bureau, and the National Student Loan Data System (NSLDS; U.S. Department of Education, 2018a). Three main data elements that were used in the study from the Scorecard data were the

average cost of attendance, graduation rate, and salary after attending. The average cost of attendance was calculated as the average net price for Title IV institutions, which includes tuition and fees, books and supplies, and living expenses for undergraduates who received Title IV aid (U.S. Department of Education, 2018a). Graduation rate was calculated as the “Completion rate for first-time, full-time students at less-than-four-year institutions (150% of the expected time to completion), pooled in two-year rolling averages and suppressed for small in size” (U.S. Department of Education, 2018a, p. 18-19). Salary after attending was calculated as the median earnings of students working and not enrolled 10 years after entry but was limited to Title-IV receiving students. This data also excluded students who were enrolled in graduate school at the time of data collection (U.S. Department of Education, 2018a).

The classification of each institution's existence of a local governing board or state governing board and trustee selection method was obtained from a report, *Public Community College Governing Boards: Structure and Composition*, compiled by the ACCT (ACCT, 2014). This classification was then further verified by reviewing any discrepancies from the report with document analysis.

Data Analysis

The data were evaluated using an ANOVA test. The ANOVA test was used to test the difference between the variables (independent or dependent). The ANOVA test determined the mean values of the variables to see if they were significantly different. The F-test was used to demonstrate the statistical significance of the questions and variables (Gravetter & Wallnau, 2014). A factorial ANOVA allowed the researcher to determine if there was a difference or interaction between the dependent variable with the

varying independent variables. Descriptive statistics such as percentages, means and frequencies were used to describe the subjects. The data were entered into the Statistical Package for Social Sciences (SPSS). The SPSS software was used as it provides accurate and bias-free results.

Quantitative data analysis was used in this study because the data analysis provides quantifiable, objective and easy interpretations of the results. The data were summarized to allow for the generalization of the population. The use of quantitative data analysis also prevented personal bias from impacting the data (Creswell, 2014).

SPSS was used to analyze the data. Codes were assigned to the variables when entered into SPSS. Each variable had a different scale of measurement and resulted in different scales being assigned to the variable (Glesne, 2016). Each of the variables had descriptive statistics applied to provide a summary of the data. The basis of the vitality of quantitative data analysis is formed from the descriptive statistics. The hypotheses were tested by using the inferential analysis. The inferential analysis also aided in generalizing the results to the population. Using inferential statistics, the ANOVA test was applied to determine the relationship between the independent and the dependent variable. Quantitative data analysis explained the use of appropriate statistical analysis in relation to the number of variables that were examined. Graphs were used to interpret the data (Glesne, 2016).

Summary

This research was a quantitative, causal-comparative analysis study involving public community colleges in the United States. This design was used in order to better understand how the structure and composition of community college boards impact

student and institutional outcomes. Participants were all public community colleges in America, the main campus of public institutions where the associate degree is the highest degree offered, and that are not on heightened cash monitoring. Institutional and student outcome data from each selected community college were analyzed using a 2X2 factorial ANOVA to determine if there was a main effect on the average cost of attendance, graduation rate, or salary after attending considering each independent variable. The results can be used to guide policy decisions regarding community college boards' structure and composition.

CHAPTER IV

ANALYSIS OF DATA

Introduction

Understanding the impact of governance on student and institutional outcomes in community colleges is important as states contemplate changing governance models in higher education. While research has been conducted to create classifications and typologies of community college governance structures, there has not been a study to determine how these governance models impact student or institutional outcomes. The purpose of this causal-comparative quantitative research design was to determine if governing board structures and trustee selection influence institutional and student outcomes in public community colleges in the United States.

The purpose of this chapter is to show the results of the study. This chapter looks at the data collection process and the population. The results of the ANOVA and the statistical analysis are presented. Next, the ANOVA results are discussed followed by a chapter summary.

Data Collection

This quantitative study was conducted using publicly-available data from the United States Department of Education College Scorecard for the academic year 2015-2016. The institutions included were limited to 894 community colleges by the main campus of public institutions that the associate degree is the highest degree offered and

that are not on heightened cash monitoring. Average cost of attendance, graduation rate, and salary after attending for each institution was obtained from the United States Department of Education College Scorecard data site.

Descriptive Statistics: Study Participants

The descriptive statistics of the population are provided in Table 1. The sample of participants was $N = 894$. This included public community colleges eligible to award federal aid in the academic year 2015-2016. The requirement to be included in the study was the main campus of public institutions where the associate degree is the highest degree offered and that are not on heightened cash monitoring (i.e., federal financial aid compliance issues). The two independent variables, board structure (local boards versus statewide boards) and board composition (elected boards versus appointed boards) of all institutions, were obtained from a report, *Public Community College Governing Boards: Structure and Composition (2014)*, compiled by the ACCT. The three dependent variables (average cost of attendance, graduation rate, and salary after attending) were collected from the pre-existing publicly-available data from the United States Department of Education College Scorecard.

The data were entered into SPSS. An ANOVA was performed to determine if the average cost of attendance, graduation rate, or salary after attending was significantly different at community colleges with local boards compared to statewide boards and trustees selected by appointment and election.

Table 1

Descriptive Statistics of Population

Variable	Frequency	Percentage
Board Composition		
Local	673	75%
Statewide	221	25%
Board Structure		
Appointed	526	59%
Elected	368	41%

N=894

Data Analysis Results

A factorial ANOVA was conducted to compare the main effects of board structure and the interaction effect between local boards and statewide boards on the average cost of attendance, graduation rate, and salary after attending. Table 2 illustrates participants' means, standard deviations, and percentages for board structure. Table 3 illustrates the results of the ANOVA for board structure.

Table 2

Board Structure Descriptive Statistics

		N	Mean	Std. Deviation	%
Average Cost of Attendance	Local	673	7200.88	2836.58	75
	State	221	7925.09	2848.67	25
	Total	894	7379.91	2855.13	100
Graduation Rate	Local	673	.28	.15	75
	State	221	.30	.18	25
	Total	894	.28	.16	100
Salary after Attending	Local	673	30557.21	4660.90	75
	State	221	30234.84	4947.09	25
	Total	894	30477.52	4732.49	100

Table 3

Board Structure ANOVA Results

		Sum of Squares	df	Mean Square	F	Sig.
Average Cost of Attendance	Between Groups	87256203.74	1	87256203.74	10.82	.001
	Within Groups	7192303005.91	892	8063119.96		
	Total	7279559209.66	893			
Graduation Rate	Between Groups	.07	1	.07	2.69	.101
	Within Groups	24.36	892	.02		
	Total	24.44	893			
Salary after Attending	Between Groups	17288819.50	1	17288819.50	.77	.380
	Within Groups	19982789267.74	892	22402230.12		
	Total	20000078087.24	893			

A post hoc analysis was not available due to a lack of factors in the statistical analysis.

Average Cost of Attendance $F(1, 892) = 10.82, p = .001$ was statistically significant at the .05 level. Average cost of attendance was higher in colleges under state controlled boards. Graduation Rate $F(1, 892) = 2.691, p = .101$ and Salary After Attending $F(1, 892) = .772, p = .380$ did not reach the .05 level.

A factorial ANOVA was also conducted to compare the main effects of board composition and the interaction effects between appointed trustees and elected trustees on the average cost of attendance, graduation rate, and salary after attending. Table 4 illustrates participants' means, standard, deviations, and percentages for board

composition. Table 5 illustrates the results of the ANOVA for board composition.

Table 4

Board Composition Descriptive Statistics

		N	Mean	Std. Deviation	%
Average Cost of Attendance	Appointed	526	7783.15	3029.75	59
	Elected	368	6803.54	2477.47	41
	Total	894	7379.91	2855.13	100
Graduation Rate	Appointed	526	.29	.17	59
	Elected	368	.27	.15	41
	Total	894	.28	.16	100
Salary after Attending	Appointed	526	29975.10	5223.33	59
	Elected	368	31195.65	3819.43	41
	Total	894	30477.52	4732.49	100

Table 5

Board Composition ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Average Cost of Attendance	Between Groups	207776380.62	1	207776380.629	26.20	.000
	Within Groups	7071782829.03	892	7928007.656		
	Total	7279559209.66	893			
Graduation Rate	Between Groups	.04	1	.04	1.70	.193
	Within Groups	24.39	892	.02		
	Total	24.44	893			
Salary after Attending	Between Groups	322561298.52	1	322561298.52	14.62	.000
	Within Groups	19677516788.72	892	22059996.40		
	Total	20000078087.24	893			

A post hoc analysis was not available due to lack of factors in the statistical analysis.

Average Cost of Attendance $F(1, 892) = 26.21, p = .000$ was statistically significant at the .05 level. Average cost of attendance was higher under appointed boards. Salary After Attending $F(1, 892) = 14.62, p = .000$ was statistically significant at the .05 level. Salary after attending was higher under an elected board. Graduation Rate $F(1, 892) = 1.72, p = .193$ did not reach the .05 level.

Research Questions

Research Question 1. Is there a significant difference in the average cost of attendance, graduation rate, or salary after attending of community colleges that are governed by a local board compared to a statewide board? The ANOVA conducted to test the difference in the average cost of attendance, graduation rate, or salary after

attending of community colleges that are governed by a local board compared to a statewide board revealed that only Average Cost of Attendance $F(1, 892) = 26.21, p = .000$ was statistically significant between the community colleges that are governed by a local board and those that are governed by a statewide board. The average cost of attendance for community colleges governed by a local board was $M = \$7,200, SD = \$2,836$, while state board governance resulted in $M = \$7,925, SD = \$2,848$. Graduation Rate $F(1,892) = 2.691, p = .101$ and Salary After Attending $F(1, 892) = .772, p = .380$ did not reach the significant level, and the null hypothesis could not be rejected. These results suggest that cost of attendance is lower at community colleges governed by a local board.

Research Question 2. Is there a significant difference in the average cost of attendance, graduation rate, or salary after attending of community colleges that select trustees by election or appointment? The ANOVA conducted to test the difference in the average cost of attendance, graduation rate, and salary after attending of community colleges that are governed by appointed trustees compared to elected trustees revealed that Average Cost of Attendance $F(1, 892) = 26.21, p = .000$ and Salary After Attending $F(1, 892) = 14.62, p = .000$ was significant between the community colleges that are governed by an appointed board compared to an elected board.

The average cost of attendance for community colleges governed by an appointed board was $M = \$7,783, SD = \$3,029$, while elected boards resulted in $M = \$6,803, SD = \$2,477$. Salary after attending for community colleges governed by an appointed board was $M = \$29,975, SD = \$5,223$, while elected boards resulted in $M = \$30,477, SD = \$4,732$. Graduation Rate $F(1,892) = 1.72, p = .193$ did not reach the significant level,

and the null hypothesis could not be rejected. These results suggest that cost of attendance is lower at community colleges governed by an elected board. They also suggest that the salary after attending a community college with an elected board is slightly higher than that of an appointed board.

These results are summarized in Table 6.

Table 6

Research Question Summary

	<i>M</i>	<i>SD</i>	<i>p</i>
Board Structure			
Average Cost of Attendance			.001*
Local	7200.88	2836.58	
State	7925.09	2848.67	
Graduation Rate			.101
Local	.28	.15	
State	.30	.18	
Salary After Attending			.380
Local	30557.21	4600.90	
State	30234.84	4947.09	
Board Composition			
Average Cost of Attendance			.000*
Appointed	7783.15	3029.75	
Elected	6803.54	2477.47	
Graduation Rate			.193
Appointed	.29	.17	
Elected	.27	.15	
Salary After Attending			.000*
Appointed	29975.10	5223.33	
Elected	31195.65	3819.43	

p<.05

CHAPTER V

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

This chapter summarizes the study of the impact of community college governing board structure and composition on student and institutional outcomes. The purpose of this study was to understand the effect of community college governing board structure and trustee selection on institutional and student outcomes in public community colleges. The independent variables in this study were board structure (local boards versus statewide boards) and board composition (elected boards versus appointed boards).

Summary of Results

An ANOVA was run to compare community college board structure and composition in relation to average cost of attendance, graduation rate, and salary after attending. The results indicated that the cost of attendance is lower at community colleges governed by a local board. The results also indicated that cost of attendance is lower at community colleges governed by an elected board. Further, the results suggest that the salary after attending a community college with an elected board was slightly higher than that of an appointed board. Board structure was not shown to impact graduation rate and salary after attending. Board composition was not shown to impact graduation rate in the study.

Discussion of Findings

Research Question 1. Is there a significant difference in the average cost of attendance, graduation rate, or salary after attending of community colleges that are governed by a local board compared to a statewide board? Through the literature review in this study it was evident that there was a complex and varying landscape of community college governance structures (Piland & Butte, 1991). Fletcher (2016) noted that states are actively considering changes to governance structures. However, McClendon, et al. (2007) noted that reforms in community college governance structures are being driven by political conditions (McLendon et al., 2007). The results of this study indicated that the cost of attendance is lower at a community college governed by a local board of trustees. As tuition in higher education continues to rise and states are facing scarce financial resources, this finding should be a point of consideration for states seeking to change governance structures. Local boards are more aware of the impact of a tuition increase in the communities they serve. Sobel (2013) contributes the escalating cost of college to nonessential aspects of the college experience (Sobel, 2013). Balancing nonessential cost with market demands is a challenge for any board. The results of this study indicated that graduation rate and salary after attending are not significantly different among board structures.

Research Question 2. Is there a significant difference in the average cost of attendance, graduation rate, or salary after attending of community colleges that select trustees by election or appointment? This research question revealed two significant findings. The cost of attendance was lower and the salary after attendance was higher at community colleges governed by elected boards of trustees. Lower cost of attendance in

the terms of an elected board of trustees aligned with Lowry's (2001) finding that public universities' tuition within governmental structures that are selected by nonacademic stakeholders was significantly more discounted than those institutions whose leadership was chosen by stakeholders in the academic realm (Lowry, 2001). Elected trustees also are more closely accountable to constituents, and that could be a contributing factor to lower tuition among elected boards. A higher salary after attendance from a community college governed by an elected board of trustees was also a significant finding in this study. There is an intense focus for community colleges to prepare traditional students and retool nontraditional students to earn a living wage (Cohen & Brawer, 2008). This finding and the charge for students to earn a living wage should be further explored. The results of this study indicated that graduation rate was not significantly different based on board composition.

Results in Relation to the Theoretical Framework

The contingency theory explained by Morgan (1997) called for organizations to be managed carefully so as to meet the internal needs and to adapt to environmental circumstances (Morgan, 1997). Community colleges today are frequently changing and in search of new programs and potential students (Cohen & Brawer, 2008). The task of community colleges has changed over time from being an extension of secondary education to providers of postsecondary and workforce training. All of these changes have created a multitude of community college governance structures. While some institutions are highly centralized governance systems, such as statewide governing boards that oversee all higher education institutions in the state, other community colleges are controlled by decentralized systems that operate under one local board

(Cohen & Brawer, 2008). This result matches the contingency theory that organizations must adapt to the changing environmental circumstances. A local board may be more aware of changes taking place in a community and have the ability to adapt to these changes more rapidly. As community colleges face continued demands to meet performance measures, such as average cost of attendance, graduation rate, salary after attending, and more, the need to adapt governance models that support these measures should be considered.

Recommendations

Community colleges will continue to be vital to the success of America's future by providing a skilled workforce for the economy. Policymakers will continue to explore how to capitalize and get the highest return for the investment in education. This will lead to continued calls for governance reforms in higher education to meet the demands for greater performance under political and financial pressure. This study indicated that local and elected boards provided a lower cost of attendance. States that are considering centralizing their higher education governance structure should pause and consider this finding. The preservation of locally-elected governance models would provide an organization that is accountable to the population it serves. Controlling the cost of attendance through local representation in community college governance could be key to the success of the future of community colleges.

Limitations

Limitations in this research included that this study only evaluated public community colleges eligible to award federal aid in the United States in the federal

reporting year 2015-2016. The data used represented only those students receiving federal aid. Finding uniform performance measures that are reported by all community colleges that captured all students will be a hurdle for future research to overcome. This study relied on the report released by the ACCT (2014) to classify the governance structure of participants. Future research could be improved by governance classification information being collected in IPEDS data through the United States Department of Education.

Future Research

Future research of interest to the researcher would include:

- A comparison study of Scorecard metrics before and after a state changes governance structures to determine if Scorecard metrics have been impacted.
- A study of elected versus appointed trustees' perceptions in their role of determining the cost of attendance.

Conclusion

This study has provided new insight for policymakers and practitioners to study when considering changes to community college governance structures. The debate regarding board structure and composition has always been a lingering issue within community college governance discussions. There was limited research on trustee perceptions and understanding of various issues. There was a gap in research that seeks to understand how board structure and composition affects student and institutional outcomes. This indicates that changes in governance structure and composition that have

been made in recent years may be political in nature due to the lack of research that supports the various governance models.

The specific findings were:

- The community college board with a locally elected board had a lower cost of attendance than that of a statewide board. A significant difference in average cost of attendance was found between community colleges that are governed by a local board and those that are governed by a statewide board.
- Students had a higher salary after attending at a community college with locally elected trustees than that of a statewide board. A significant difference in salary after attending was found between community colleges that are governed by a local board and those that are governed by a statewide board.
- Students had a lower cost of attendance at community colleges with elected trustees than those with appointed trustees. A significant difference in average cost of attendance was found between community colleges that are governed by elected trustees and those that are governed by an appointed trustee.

Previous literature had not studied community college governing boards' effects of structure and composition on student and institutional outcomes. These findings have made a significant contribution to the body of research on the relationship of a governing board's structure and composition to student and institutional outcomes. Higher

education will continue to operate in a highly charged political climate. Administrators, policymakers, and the public should turn to research to drive decision making. This study should be useful to public officials when considering changes to higher education governance.

Community colleges were created to serve the local community by providing higher education and workforce training options (Cohen & Brawer, 2008). A locally-elected board is the best way to keep decision making close to the people who are served by the community college board. Trustees who interact with students, parents, and alumni on a daily basis in the place they live and work are more aware of the needs of the community. If the mission of community colleges is truly community based, so should be those who govern the institutions.

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APPENDIX A
IRB Approval Letter

Protocol ID: IRB-18-527

Principal Investigator: Mark Fincher

Protocol Title: Community College Governing Boards: Structure and Composition impact
on College Scorecard metrics

Review Type: EXEMPT

Approval Date: January 08, 2019

Expiration Date: January 07, 2024