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Leadership Adaptation to Changes in Public Funding of Community Colleges

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James H. Simpson

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Walden University

2017

Abstract

Leadership Adaptation to Changes in Public Funding of Community Colleges

by

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MTax, Arizona State University, 1992

BS, Arizona State University, 1987

BA, Arizona State University, 2010

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Walden University

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Abstract

Although growth in U.S. community colleges has been exponential, a major challenge accompanying that growth has been the source of funding, which has consisted of shifting proportions of tuition, local taxes, and state aid. The shift away from state aid toward fundraising, profit-oriented research, sophisticated financing, and higher tuition presents challenges and unintended consequences. This shift could threaten the community college access mission and contribute to a perception of higher education as a private good rather than a public good. With a framework of academic capitalism and resource dependency theories, the purpose of this basic qualitative interview study with 7 leaders from executive teams in community colleges was to explore strategies used in adapting to the changes in funding models. Participants were recruited using snowball sampling, and interview data were analyzed to identify recurring themes. Findings indicated a need for strategies to replace state funding; grants and fundraising were not considered sufficient. Strategies such as working cash bonds, prioritization studies, and differential tuition programs were reported to have long-term potential, but their efficacy remained to be confirmed. Restoring state funding would require that colleges align interests with legislators and donors, research and develop bold initiatives, craft successful communication and marketing strategies, and facilitate a culture shift within their institution that embraces the need for alternative revenue streams. This study raises awareness that rising tuition and education costs in general may threaten the community college mission, limiting access to higher education for students, especially for lower SES students who cannot afford the debt to fund the higher tuition.

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Dedication

This work is dedicated to my wife, Donna, who never once hinted, suggested, or even vaguely implied that the long hours in my home office were interfering with our family life. She is the one who gave me the will and inspiration to finish and would not let me quit. Thank you for all your love and support, Donna!

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Chapter 1: Introduction to the Study

The growth in community colleges was tremendous between 1960 and 2010, as evidenced by the opening of hundreds of institutions (D'Amico, Friedel, Katsinas, & Thornton, 2013). The National Center for Education Statistics (2016) reported that as of fall, 2014, there were 1,108 public community colleges serving 7.3 million students. A major challenge accompanying that growth has been the source of funding, specifically the reduction in taxpayer-supported state aid (Callender & Jackson, 2008; Cellini, 2012; Cohen, Brawer, & Kisker, 2013; Dowd, 2008; Dwyer, Hudson, & McCloud, 2013; Elliott & Nam, 2012; Katsinas, D'Amico, & Friedel, 2011; Leachman, 2015; Levin & Kater, 2012; Mitchell, 2015; Ross, 2013). Previous researchers had not adequately described how community college leaders adapt to the reduction of state aid; therefore, I explored how these leaders are responding to the changes in public funding of community colleges.

The responsibility for funding community colleges has shifted away from public funding toward individual funding as a result of the reduction in taxpayer-supported state aid (Bakhit, 2014; Bou-Habib, 2010; Cohen et al., 2013; Davidson, 2013; Drummer & Marshburn, 2014; Esters, McPhail, Singh, & Sygielski, 2008; Gilbert & Heller, 2013; Ness & Tandberg, 2011; Palmer, 2012; Phelan, 2014; Strickland, 2013; Tschechtelin, 2011). Cellini (2012), Cohen et al. (2013), and Dwyer et al. (2013) concluded the direct beneficiaries (students) of a college education are being asked to make larger contributions in the form of increased tuition to cover college costs. These authors also agreed the shifting of costs to the individual will be financed through student loans.

Elliot and Nam (2012) explored the adverse consequences of the public policy shift of pushing higher education costs onto the individual in the form of tuition and associated debt to finance those costs. This trend supports the possibility that public policy may be shifting toward the view of higher education as a private good, but the consequences of forcing the individual to bear more of the cost of education may not be fully understood. For example, increased tuition could be limiting access of poorer students, which contradicts the community college mission (Cohen et al., 2013; Davidson, 2013; Gilbert & Heller, 2013; Phelan, 2014; Strickland, 2013; Tschechtelin, 2011). What is clear is the need for deeper understanding of the strategies that community college leaders use for adapting to the change in funding models. The focus of this study was on identifying the specific strategies community college leaders use to offset a reduction in public funding and contribute to a culture that responds to the need for developing alternative revenue streams.

Background of the Study

The growth of community colleges was initially accompanied by shifting proportions of tuition, local taxes, and state aid, with states picking up an increasing share of the burden (Cohen et al., 2013). This trend was accelerated in the 1970s when several states passed legislation similar to California's Proposition 13 (California Proposition 13, People's Initiative to Limit Property Taxation, 1978). Prop 13, as it came to be called, capped local property tax appropriations, and although Prop 13 did not specifically dictate what part of the projected revenues were allocated to education, Cohen et al. (2013) suggested education budgets suffered, and colleges were forced to look to the state

to make up the shortfall in funding. The trend of increasing state aid ceased during the Great Recession of 2008-2011, when state funding was cut dramatically, and a more recent trend for an increasing reliance on tuition and associated student debt developed (Best, 2012; Cohen et al., 2013; Doyle, 2012; Elliott & Nam, 2012; Grant, 2011; McClanahan, 2011; Stokes & Wright, 2010). Although some of the shortfall was offset with federal economic stimulus, the balance was met through reducing staff, hiring part-time faculty, deferring maintenance, and freezing other employment (Cohen et al., 2013; Hoffman, 2012; Levin & Kater, 2012; Rhoades, 2012).

Although there are arguments for and against public funding of higher education, some authors suggested there appears to be little consensus among scholars and no easy solutions (Dowd, 2008; Levin & Kater, 2012). Some stakeholders, for example, would argue an educated populace benefits all of society: the “rising tide lifts all boats” argument (Dowd, 2008; Doyle, 2012; Levin & Kater, 2012; Ross, 2013). These stakeholders point to the benefits of an educated electorate in a democracy as well as an educated workforce in an increasingly complex economy. Others would argue that, because higher education will enable an individual to earn more during a lifetime, the cost should be borne by the individual (Cohen et al., 2013; Dowd, 2008; Dwyer et al., 2013; Katsinas et al., 2013). One could argue that in former times, job training was largely the responsibility of employers, who paid for it. Now community colleges are doing more of the training, and the cost is being shifted from the employer to the future employee, and to the taxpayer to the extent that taxes subsidize education.

Despite the shifting of funding from local tax appropriations to state tax appropriations that occurred during the 1970s, there has been an overall decrease in the level of tax-supported funding. The decrease in that funding over the past several decades is well documented (Back, 2011; Doyle & Delaney, 2009; Fernandez, 2011, Joch, 2011; McClendon, Hearn, & Mokher, 2009; Ness & Tandberg, 2011). Although the decrease has occurred over the last several decades, that decrease has not been steady nor consistent due to fluctuating business cycles.

According to Doyle and Delaney (2009), a pervasive short-term approach that corresponds to the business cycles confounds the process of state appropriations. When times are good, appropriations are high, and when the business cycle declines, so do the appropriations. State legislatures seem to use reductions in higher education funding to balance deficits and then restore the funding when the economy recovers; however, Doyle and Delaney (2009) noted that enrollment cycles tend to occur inversely to business cycles, such that when the business cycle turns downward, enrollment in higher education increases, which contributes to a mismatch between funding and expenses.

Several authors claimed the decline in taxpayer funding is caused by other factors besides business cycles; therefore, it is reasonable to assume the decrease will continue even after the economy recovers from the current downturn, and much of that decrease is being offset through increased tuition (Fernandez, 2011; Joch, 2011; Kallison & Cohen, 2010). If cuts in state funding are not tied to business cycles as Doyle and Delaney (2009) claimed, Fernandez's (2011) claim that community colleges will have to develop alternative revenue streams to combat the tuition hikes seems accurate. Development of

those alternative revenue streams will rely on entrepreneurial and nontraditional fundraising.

Esters et al. (2008) examined the entrepreneurial, nontraditional fundraising behaviors and activities of 23 community college presidents. Esters et al. found shrinking traditional sources of funding motivate community college presidents to seek nontraditional resources. Findings indicated a predictive relationship among the total amount of nontraditional funds that were raised, the ability to expand the periphery of fundraising efforts, and the development of a fundraising culture within the institution. In other words, developing a college culture that supports fundraising efforts expands the opportunities to find revenue from nontraditional sources. Esters et al. suggested that community college presidents need to realign fundraising objectives with the strategic plan and include all stakeholders within the organization in that endeavor. Esters et al.'s suggestions for further research included exploring other institutions' entrepreneurial efforts at generating revenue and studying institutions that were successful in transforming the culture of fundraising.

Pfeffer and Salancik (2003) suggested an opportunity exists to explore public policy and markets using a framework of resource dependency. Resource dependency theory was originally developed to provide an alternative perspective to the economic theories of mergers and board exchanges; however, Pfeffer and Salancik saw that theory could be expanded to explore public policy and markets. Katsinas and Palmer (2005) suggested further research was needed on the topic of community college resource dependency, and Bakhit (2014) concluded further research should specifically address

how resource development efforts align with colleges' strategic plans, and whether the planning and implementation of those efforts could predict resource development success. In the current study, I explored the strategies community colleges are using to replace taxpayer funding, and how those strategies may fit within a framework of resource dependency theory. That theory suggests that, as organizations diversify their dependency across a wider base of resources, better control is achieved by managing these relationships and dependencies, minimizing reliance on the relationship with others, and increasing others' reliance on the organization.

Resource dependency is not an issue only for institutions; students have also been affected by shifting patterns of funding. This shifting pattern is especially troubling to students relying on loans and financial aid to fund their education (Best, 2012; Cellini, 2012; Doyle, 2012; Dwyer et al., 2013; Grant, 2011; Ross, 2013; Stokes & Wright, 2010). The literature indicated that many students who attend community colleges are lower socioeconomic status (SES) students who cannot afford to pay the increased costs without incurring debt, yet these students are not likely to earn as much as higher SES students to pay off the debt (Bartik & Hershbein, 2016). Several authors offered proposals to restructure the debt repayment system, but these proposals appear to be treating the symptom of the problem caused by higher tuition, rather than treating the cause of the problem (Cull & Whitton, 2011; Doyle, 2012; Stokes & Wright, 2010).

There is a lack of proposals to restore public funding or find alternative sources of revenue to keep tuition costs low and preserve the open access mission of the community college. Many authors concluded that community colleges will not be able to sustain an

open access mission unless they are able to develop alternative revenue streams to reduce the reliance on state funding, and many suggestions have been offered; however, there do not appear to be specific strategies institutions have implemented to develop alternative revenue streams (Bou-Habib, 2010; Cohen et al., 2013; Davidson, 2013; Esters et al., 2008; Gilbert & Heller, 2013; Ness & Tandberg, 2011; Palmer, 2012; Phelan, 2014; Strickland, 2013; Tschechtelin, 2011). The shift in these patterns of funding toward increased reliance on tuition threatens the open access mission of the public community college system (Bou-Habib, 2010; Cohen et al., 2013; Davidson, 2013; Esters et al., 2008; Gilbert & Heller, 2013; Ness & Tandberg, 2011; Palmer, 2012; Phelan, 2014; Strickland, 2013; Tschechtelin, 2011), leaving the system to adapt to the transformation of funding by identifying other revenue resources to supplement tuition and taxes. If those sources of revenue are grants and fundraising, there may need to be a shift in attitudes and willingness of employees to support the development of these resources, as well as a need to develop stronger relationships in the community.

Problem Statement

Community colleges have historically been known for a mission to provide open access to higher education through open admissions and relatively low tuition (Cohen et al., 2013; Davidson, 2013; Gilbert & Heller, 2013; Phelan, 2014; Strickland, 2013; Tschechtelin, 2011). Phelan (2014) posited this mission is now at risk due to a crisis in the funding of community colleges based on unstable, unpredictable, and declining revenue streams, specifically the decline in tax-supported funding and corresponding increase in tuition. There is consensus among many authors that the community college

mission is at risk due to the shift in funding from taxes to the individual. Phelan (2014) suggested there is a cost to achieving access, quality, and completion. According to Phelan, ignoring the reality of increased costs in an era of declining funding is “both simplistic and ill-conceived” (p. 11), and the community college mission of open access and opportunity for all “now seems to be unsustainable” (p. 12). Several authors concluded the decline in funding will continue over the long term unless community college leaders find additional strategies to cope with a (perhaps permanent) reduction in taxpayer-supported funding (D’Amico et al., 2012; Fernandez, 2011; Joch, 2011; Kallison & Cohen, 2010; Palmer, 2012).

To replace the reduction in taxpayer-supported funding, several authors concluded that community colleges need to develop alternative revenue streams to offset the reduction in taxpayer support (Bakhit, 2014; Bou-Habib, 2010; Cohen et al., 2013; Davidson, 2013; Drummer & Marshburn, 2014; Esters et al., 2008; Gilbert & Heller, 2013; Ness & Tandberg, 2011; Palmer, 2012; Phelan, 2014; Strickland, 2013; Tschechtelin, 2011). The alternative revenue streams envisioned would probably be based on grant development and fundraising, but grants and fundraising are not the only forms of alternative revenue streams colleges can use to replace the loss of state funding. According to Bakhit (2014), community colleges were exploring alternative means of raising revenue, such as leasing space, creating profit-producing courses and other intellectual property that could be sold, offering more training to private corporations, and fundraising through gifts. Bakhit claimed that questions remain to be answered

regarding the specific measures institutions have used to cope with the reductions in taxpayer funding and how the culture of the organization is adapting to a new paradigm.

Although many authors have identified the need to replace reductions in taxpayer funding with alternative revenue streams, as Bakhit (2014) suggested, the literature does not provide many specific examples of how institutions are addressing the problem currently or developing a culture to address the problem in the future. Most researchers refer to the need to pursue grants and develop fundraising programs without providing specifics. One exception is Drummer and Marshburn (2014) who found some institutions are relying on public foundations, such as the Bill and Melinda Gates Foundation and the Lumina Foundation for Education, to replace taxpayer support. According to Bakhit (2014), Esters et al. (2008), and Skari and Ullman (2012), there is a need to identify more specifics such as Drummer and Marshburn (2014) found, along with specific strategies institutions are using to develop a culture that responds to the need to develop alternative revenue streams. There appears to be a gap in the current research literature regarding how institutions are managing this culture shift to develop other resources. This study helped identify the specific strategies community college leaders have used to adapt to this change in funding models.

Purpose

The purpose of this basic qualitative interview study of community college leaders was to understand the specific strategies used in response to reductions in state aid and corresponding rises in tuition. Those strategies may be reactive in nature, such as reducing budgets through changes in programs or services, or could be proactive, such as

building alternative revenue streams and a college culture that responds to the need for alternative revenue streams.

Conceptual Framework

The conceptual framework for this study begins with the broad question of whether higher education is a public or private good, and includes theories of academic capitalism and resource dependency. Rhoades and Slaughter (2004) defined academic capitalism as “the involvement of colleges and faculty in market-like behaviors,” (p. 37) which has become prevalent in institutions of higher education in recent years. Pfeffer and Salancik’s (2003) theory of resource dependency, like the theory of academic capitalism, views organizations as being connected with networks of social relationships and interdependencies. Academic capitalism addresses how institutions are attempting to model businesslike behaviors to acquire resources, but it does not address the public funding component the way that resource dependency theory does. Resource dependency theory also addresses other external resources such as philanthropic organizations that are absent in academic capitalism. Despite the distinction between the two theories, there is some overlap. For example, businesses will try to attract investment similar to colleges attempting to obtain grants, and colleges will explore mergers and partnerships similar to businesses; however, neither theory provides a complete framework to study how the reductions in state funding are having long-term impacts on the community college system, and whether those cuts are a societal response to the larger question of higher education as a public or private good. Components of each theory can be used to fill in

the broader public- or private-good conceptual framework by informing the research question and its ancillary questions.

Research Question

The research question for this study was the following: What are the specific strategies community college leaders use in adapting to the change in funding models as a result of the reduction of taxpayer-supported funding?

Nature of the Study

I used a basic qualitative interview approach to explore the specific strategies community college leaders use in adapting to the change in community college funding. Rubin and Rubin (2011) suggested “in-depth qualitative interviewing” (p. 3) enables the researcher to explore complex topics with individuals who have the most knowledge of, or experience with, the topic. Funding for community colleges comes from a variety of sources such as students, parents, taxpayers, governments, businesses, and philanthropic organizations, all of whom have competing interests and multiple uses for the dollars that eventually are used to fund the system. The myriad interests that need to be satisfied by this funding system fit within Rubin and Rubin’s description of a complex topic.

The key concept investigated in this study was how community colleges are adapting to a change in the funding model that provides resources to the system. Traditionally, that funding comes from taxpayer support, minimal tuition, and a small amount of grants or miscellaneous funds. There has been a shift away from taxpayer support with a concurrent rise in tuition. This trend threatens the open access mission of community colleges if students, especially low-income students, cannot afford the tuition.

I explored how community colleges are replacing the reduction in funds received from taxpayers.

I used a basic qualitative interviewing design to explore the specific strategies community college leaders use in adapting to the change in funding models. The participants were community college leaders at community colleges that have been subject to reductions of state aid over the last 10 years, and who have some control or influence over the college budget. Data were collected from seven participants through telephonic and personal interviews that were recorded, transcribed, and analyzed for common themes.

Definition of Terms

Community colleges: Public colleges offering certificates and associate's degrees.

Community college leaders: Those who have control over or influence on the overall budget in their colleges; generally, these leaders were the president or chief financial officer of the college.

Revenue: All financial funds that flow into a community college to support its mission, infrastructure, and operation. Some of that revenue may be designated for specific purposes (restricted funds) such as donor-restricted funds, capital improvement allocations, or scholarship funds; however, if the intent of the funding is to support the institution, it was considered revenue. Revenue may also be divided into subcategories such as tuition, state aid, local tax revenue, grants, auxiliary (typically food service, bookstores, etc.), and miscellaneous.

Assumptions

There were four assumptions for this study. First, I assumed that the participants had current, in-depth knowledge of their institution's budget and the impact of state funding on that budget. Second, I assumed that participants would respond openly, truthfully, and insightfully to questions posed in the interviews. I assured participants of their confidentiality and their institution's confidentiality. Participants were able to withdraw from the study at any time with no ramifications. Third, I assumed that participants recognized the change in funding and were proactively addressing the problem. Finally, because the sample was drawn from a diverse group of community college leaders, I assumed that they represented diversity in approaches because more than one state community college in the United States was represented.

Scope and Delimitations

This study's scope included only community college leaders who had responsibility for their institution's financial decision-making and budget. There may be other personnel in other organizations and positions of responsibility who had innovative approaches to community college funding. Those chosen for participation were those who had administrative control or influence over the budget. Generally, these stakeholders were part of the executive leadership at each institution, and they were the president or chief financial officer. That is not to say the other stakeholders would not have influence on the development of a culture that embraces a need for alternative revenue streams; however, the perspective of these stakeholders would likely be more narrowly focused (such as academic affairs or student affairs) and would lack a broad

perspective of the institution. Including other stakeholders in a future study would be appropriate; however, this study was bounded by participants with a high-level perspective of the financing needs of the institution.

The study was also delimited in that longitudinal analysis of the financial statements of the participants' institutions might reveal different shifts in revenue generation; however, the aim in this study was to capture the present specific strategies community college leaders are employing to adapt to current shifts in funding models. These strategies could be based on revenue generation, expenditure limitation, or a combination of both. Although this study was an attempt to document what is currently happening, it could be replicated to document how the change may be occurring over time. The study was not delimited by geographical region; however, the nature of the referral strategy resulted in participants being selected from only two regions of the United States.

Limitations

Although the design of this basic qualitative interview study may be useful to other researchers who would like to describe changes to state funding in other states, the nature and contributory percentage of state aid can differ widely from state to state; therefore, the usefulness of any practices identified in this study to another institution may be dependent on the specific characteristics of the state aid received by that institution. This study included institutions from two states that had experienced a reduction in state aid over the last 10 years. One state was located in the Southwest, and the other was located in the Midwest.

Similarly, the personal characteristics of community college leaders can vary from college to college; for example, some may be more risk averse than others, or have a broader financial background. This variability of personal characteristics may limit the usefulness to other researchers. The purpose of this study was to understand the specific strategies community colleges are using to adapt to the reduction of state aid. These strategies may not extend to other financial management functions such as investing, financial statement analysis, or accounting procedures.

A thorough exploration of how the institutional culture has changed with respect to attitudes on fundraising and revenue generation would require a broader range of interviews with faculty, staff, students, and business leaders. This study was limited to identifying the practices college leaders have implemented to influence a change in the culture. The interview process for this study was primarily via telephone due to geographic distances and busy schedules of participants; the absence of nonverbal indicators and clues limited the amount of information obtainable.

Significance of the Study

The shifting patterns of community college funding are having a profound impact on the ability of community college administrators to provide open access to students due to the reduction in taxpayer support. I explored strategies that seven community college leaders are using to mitigate the loss of that support and fulfill the community college mission while limiting tuition increases. Without specific strategies to offset the reduction in taxpayer support, the trend to view higher education as a private good that should be funded by the individual, away from the view that higher education is a public

good that should be funded by society, is likely to continue. If that trend continues, students will be forced to pay more for their education, generally by incurring more debt. Incurring debt is especially troubling for low-income students because studies have shown these students tend to earn less money over their working careers to repay the debt (Bartik & Hershbein, 2016). Identifying strategies that promote the development of alternative revenue streams to replace the reduction in taxpayer funding and avoid tuition increases contributed to positive social change by enabling the community college system to fund its mission of providing a higher education to all students regardless of their socioeconomic status.

Significance to Practice

The shift away from public funding of higher education due to the decrease in taxpayer support has been accompanied by a corresponding increase in student tuition. Although there has been an increase in tuition, the increase has not been enough to replace the reduction in state aid, so institutions have been forced to look for other means to reduce operational expenses such as consolidating programs, limiting enrollment, closing campuses, hiring more part-time faculty at lower salaries, and relying on technology for course delivery. The literature did not reveal the processes leaders use to make these decisions, other than to imply a reaction to short-term threats; however, the literature did reveal that state aid was not likely to be fully restored in the future, and institutions will have to develop alternative revenue streams to replace the funding or resort to further increases in tuition. If those sources of revenue are grants and fundraising, there will need to be a shift in attitudes and willingness of employees to

support the development of these resources, as well as a need to develop stronger relationships in the community. There was a gap in the current research that explores how institutions are managing this culture shift to develop other resources. In this study, I helped to identify specific strategies community college leaders have used to adapt to the change in funding models. I also explored the strategies community college leaders have developed to mitigate the reduction in state aid, and how those strategies have been implemented. The results could be valuable to other community college leaders who are experiencing reductions in state aid. If the strategies are limited to managing expenses to balance budgets with decreasing revenues or increasing tuition to balance those budgets, there is a risk that community colleges may not be able to fulfill the mission of open access. Limiting access to higher education would indicate that the shift in society's perception of higher education as a private good rather than a public good is likely to continue.

Significance to Theory

The conceptual framework begins with the broad question of whether higher education is a public or private good, and includes theories of academic capitalism and resource dependency. During data analysis, themes emerged to align with either the theory of academic capitalism (such as entrepreneurial activities) or resource dependency theory (such as partnerships to develop new resources). Neither theory provided a complete framework to understand the decision-making processes and strategies of community college leaders as they respond to reductions in state funding and the long-term impact on the community college system. Therefore, neither theory could provide a

framework to evaluate if reductions in state funding are a societal response to the larger question of higher education as a public or private good. Components of each theory, however, were used to augment the conceptual framework and answer the research questions.

Significance to Social Change

Many students who attend community colleges are lower SES students who cannot afford to pay for increased tuition without incurring debt, yet these same students are not likely to earn as much as higher SES students throughout their careers to pay off the debt. Several authors offered proposals to restructure the debt repayment system, but these proposals appear to be treating the symptom of the problem caused by higher tuition, rather than treating the cause of the problem (Cull & Whitton, 2011; Doyle, 2012; Stokes & Wright, 2010). The shift in these patterns of funding toward increased reliance on tuition threatens the open access mission of the public community college system, so the system will have to adapt by identifying other revenue resources to supplement tuition and taxes. The strategies explored in this study that promote the development of alternative revenue streams to replace the reduction in taxpayer funding and avoid tuition increases will contribute to positive social change by enabling the community college system to fund its mission of providing higher education to all students regardless of their SES.

Summary

The growth in community colleges was tremendous between 1960 and 2010, as evidenced by the opening of hundreds of institutions, and a major challenge

accompanying that growth has been the source of funding to pay for higher education. That funding has been characterized by shifting proportions of tuition, local taxes, and state aid; however, the trend has been for an increasing reliance on tuition and less reliance on state funding. Current research suggests this shift has been toward a businesslike model relying on fundraising, profit-oriented research, sophisticated financing, and higher tuition (Dowd & Grant, 2007; Kapitulik, Kelly, & Clawson, 2007; Kennamer, Katsinas, Hardy, & Roessler, 2010; Newfield, 2010; Tollefson, 2009).

If the community college system is to survive and fulfill its mission of providing access to any student who desires a college education, the system will have to adapt to the transformation of community college funding by identifying other revenue resources to supplement tuition and taxes. The purpose of this study was to understand leadership decision-making processes and strategies that respond to reductions in state aid and corresponding increases in tuition, and how those strategies contribute to a college culture that responds to the need for alternative revenue streams. The literature review in Chapter 2 includes the conceptual framework for this study along with other relevant topics such as community college funding patterns, the shifting perception of higher education as a private good rather than a public good, the impact on community college funding, the social ramifications of the change in funding, and evidence of the gap in the literature that warranted this study.

Chapter 2: Literature Review

The exponential growth in community colleges over the last 50 years has resulted in the opening of over 1,000 institutions (Cohen et al., 2013). This growth has not come without challenges, especially with respect to identifying sources of funding to pay for the growth in higher education. There is a debate over the future of higher education funding, and that debate centers on whether higher education is a public or private good. Supporters of the public good argument say there should be taxpayer funding of higher education because society as a whole benefits from an educated populace. On the other hand, supporters of the private good side argue the individual directly benefits from the education and should bear the cost (Cohen et al., 2013; Dowd, 2008; Kallison & Cohen, 2010; Levin & Kater, 2012). Current research indicates there has been a shift away from taxpayer funding of higher education over the last three decades, toward a businesslike model relying on fundraising, profit-oriented research, sophisticated financing, and higher tuition costs (Dowd & Grant, 2007; Kapitulik, Kelly, & Clawson, 2007; Kennamer et al., 2010; Newfield, 2010; Tollefson, 2009). This shift is troubling for the student without the resources to pay tuition, and especially troubling for the student who begins a course of study through financed tuition but does not complete a degree and does not have increased earning power to repay the debt.

To help understand the implications of this transformation in public funding, I explored several studies related to sources of community college funding, how the funding patterns have changed, what strategies institutions have implemented to cope with the transformation of funding, the extent to which students have assumed the burden

of funding, what resources are available for students to pay for that burden, how student debt has played a role, and social ramifications of the transformation of public funding of community colleges.

Literature Search Strategy

The literature search strategy began with the use of Walden University's Library and the Thoreau Multi-Database Search tool to search 103 different databases. To ensure the relevant education articles were included, the strategy included the use of ERIC, and ProQuest provided dissertations on related material. I used Google Scholar to find the most recent scholarly materials. The following search terms provided a plethora of related books, articles, and dissertations: *higher education funding, higher education accountability, community college funding, assessment, higher education revenue streams, higher education financial support, societal benefits of higher education, community college budget, fundraising, social costs, social benefits, for-profit higher education, student debt, community college mission, community college accountability, return on investment of community colleges, community college efficiency, community college strategic planning, community college enrollment forecasting, resource dependency, and academic capitalism.*

The most productive strategy was to identify the most relevant materials from the initial search, then mine the bibliographies of those texts to broaden the search. The challenge was finding current material, which was overcome by employing Google Scholar alerts, which allowed monitoring of the academic Web for new content on a specific topic.

Conceptual Framework

The conceptual framework for this study begins with the broad question of whether higher education is a public or private good. That broad framework includes theories of academic capitalism and resource dependency. Kallison and Cohen (2010) suggested that there has been a “compact” (p. 38) among taxpayers, institutions, and government formed by widespread programs and policies encouraging and subsidizing colleges. Kallison and Cohen opined that this compact has been diminished by what Rhoades and Slaughter (2004) theorized as “academic capitalism” (p. 37). Kallison and Cohen, along with Rhoades and Slaughter, proposed concrete suggestions to restore the public perception of higher education as a public good by calling for a new compact that balanced a restoration of public funding with a much higher level of accountability to the public in exchange for that investment.

Pfeffer and Salancik’s (2003) theory of resource dependency, like the theory of academic capitalism, views organizations as being connected with networks of social relationships and interdependencies. Although the original resource dependency theory as envisioned by Pfeffer and Salancik applied to corporate mergers and acquisitions, Ruggiano and Taliaferro (2012) illustrated how resource dependency theory also applies to nonprofit organizations, such as community colleges, because those organizations depend on external resources and must interact with other external organizations to successfully provide goods and services.

Academic Capitalism

Rhoades and Slaughter (2004) defined academic capitalism as “the involvement of colleges and faculty in market-like behaviors,” (p. 37) which has become prevalent in institutions of higher education in recent years. The authors further elaborated on that definition to distinguish it from the long-accepted practice of selling consumer items, such as t-shirts and coffee mugs, to cope with the loss of state aid (for public institutions) by replacing that revenue with profits from the sale of educational research and curricula that can be patented and copyrighted. Hoffman (2012) described academic capitalism as a “chase for dollars” (p. 12) implemented through the use of technology transfer offices, on-campus start-up companies, glossy promotional material to highlight the institution’s niche, and students who are viewed (and view themselves) as consumers paying a high price for an entertaining and flexible education. These changes in revenue generation were the result of shifting policies and agreements among states, higher education institutions, and private-sector organizations, which blur the lines between the institutions that operate on a for-profit and not-for-profit basis. Both Rhoades and Slaughter and Hoffman claimed these changes are intended to prioritize potential revenue generation at the expense of knowledge expansion.

According to Rhoades and Slaughter (2004), this paradigm shift was the result of changes in the economy and policies from the network of actors and organizations that influence higher education. The shift in the economy from a manufacturing and primarily industrial-based economy to one that is based on service, knowledge, and information has required colleges and universities to reevaluate how they establish

relationships with businesses that specialize in a knowledge-based economy. An additional, perhaps unintended, consequence of this paradigm shift is a perceived need for higher education to focus more on short-term economic goals, such as skill sets for one particular job, and less on long-term societal goals, such as preparing students for life in a highly technological, global world and solving the social problems that accompany this new world.

According to Rhoades and Slaughter (2004), the characterization of academic capitalism addresses both the revenue and the expense side of the equation. Not only is revenue generation adopting businesslike characterizations, the control over expenses is becoming more and more businesslike. Rhoades and Slaughter argued that the principles of business management have begun to encroach on the traditional shared governance model of academia such that presidents are now referred to as CEOs. As such, more and more control is being exercised in a top-down, corporate management style over expenses and academic professionals. Expenses, for example, are being managed by relying on cost efficiency measures such as increasing class sizes and hiring more part-time faculty at less cost. Although this trend is increasing, academic work is being pushed toward applied science for the development of patents for use by industry, with less emphasis on basic science for publication. Hoffman (2012) corroborated Rhoades and Slaughter's expense analysis by pointing out that many institutions use a new employment structure that replaces tenure and tenure-track faculty with administrative staff to recruit new students, create accountability schemes, and manage the revenue flows. According to Hoffman, this new structure amounts to a "blurring of public-private

boundaries” (p. 13). The elements of revenue and cost in an academic enterprise can be related to another theory: resource dependency theory.

Resource Dependency Theory

Pfeffer and Salancik’s (2003) resource dependency theory (RDT), like the theory of academic capitalism, views organizations as being connected with networks of social relationships and interdependencies. Power is gained by managing these relationships and dependencies, minimizing reliance on the relationship with others, while concurrently increasing others’ reliance on the organization. Pfeffer and Salancik’s RDT assumes that this power, or control, could be asserted by the organization over its external environment by making strategic choices to diversify resources. The ability to acquire and maintain resources is critical to the organization. Strickland (2013) gave an interpretive definition of these characteristics as they apply to community colleges and resource development. The continual decline of state aid means, in Strickland’s view, that community colleges cannot depend on external resources; they must learn to understand the environment and become interdependent with those external resources by constructing lasting relationships.

Ruggiano and Taliaferro (2012) showed that RDT can be applied to community college financing. Although the original RDT as envisioned by Pfeffer and Salancik (2003) applied to corporate mergers and acquisitions, Ruggiano and Taliaferro (2012) illustrated how RDT applies to nonprofit organizations because those organizations depend on external resources and must interact with other external organizations to successfully provide goods and services. These authors claimed that nonprofits such as

community colleges, which provide services to disadvantaged populations, are especially vulnerable to this dependency. According to Bakhit (2014), there is a symbiotic relationship between community colleges and the communities they serve. On the other hand, according to Strickland (2013), philanthropists desire to broaden the impact of their contributions, so the community college's disadvantaged population could serve as an ideal context for developing interdependent relationships with external sources. In the context of Ruggiano and Talliafero's (2012) study, nonprofits need to rely on political lobbying to secure external resources.

Askin (2007) relied on organizational theory as a framework for studying the relationship between community college financing and how institutions operated. According to Askin, institutional isomorphism describes how institutions are influenced by other institutions or related entities in their field, and RDT is a variation of isomorphism, which posits that organizations are influenced by external entities that supply funding or other resources. Kenton, Huba, Schuh, and Shelley (2005) also used RDT as a framework to study community college financing through the 1990s to determine whether changes in government appropriations had created external constraints for leaders trying to manage their resources effectively. Findings in this report indicated that community college presidents had to respond to these changes in governmental appropriations by developing external resources.

Strickland (2013) opined that community colleges' mission of providing access closely aligns with the missions of most nonprofits, and Strickland used RDT to evaluate the role of the community college president in external resource development. However,

not all scholars were able to definitively align presidential efforts of external resource development to RDT. Bakhit (2014) used RDT to examine ways in which college presidents' reactions to funding challenges aligned with RDT. Through interviews with nine California community college presidents, Bakhit tried to determine what frames of thought guided California community college presidents' responses to the decline in state funding. Bakhit suggested it was not clear to what extent community college presidents' responses to funding challenges aligned with RDT because many expressed that their efforts were hindered by laws or regulations that prohibited them from responding to revenue declines by raising tuition or imposing taxes. Although the presidents understood the external environment that influences community colleges, they lacked the power to diversify the resources. This finding aligns with Ruggiano and Talliafero's (2012) finding that nonprofits need to rely on political lobbying to secure external resources. Bakhit concluded that community college presidents should recognize more of their time needs to be allocated to resource development, and that similar research needs to be conducted in other states than California.

One way in which community colleges' funding challenges relate to resource dependency is how Hillman, Withers, and Collins (2009) described Pfeffer and Salancik's (1978) most commonly overlooked chapter. "The Created Environment: Controlling Interdependence Through Law and Social Sanction" (p. 1411) described how firms attempt to reduce the uncertainty of relying on larger social systems (such as the government) through other strategies such as using political mechanisms to create or alter an external economic environment to provide a more favorable climate for the

organization. Hillman et al. suggested that, by influencing governors, legislatures, and local governing boards through political action, community colleges attempt to create their own environment. This influence can be particularly effective by encouraging lawmakers to become board members or encouraging board members to run for public office. These cross-connections can break down barriers of communication, improve relationships, and manage the interdependencies. Applying Strickland's (2013) interpretation of RDT and building interdependencies, community colleges need to tell the story of how lawmakers depend on community colleges to serve lawmaker constituents by building better workforces, providing pathways to baccalaureate institutions that would not otherwise exist for disadvantaged students, and serving the community. Hillman et al. claimed that the research as of 2009, though sparse, had supported the positive correlations between political activity and external dependencies that affect the organization. The authors suggested this was an area ripe for further research.

Diversification of resources is another tenet of Pfeffer and Salancik's (2003) RDT. Community colleges have traditionally relied on a 'three-legged stool' funding model that consists of one leg representing state support, another leg for tuition and fees, and the third leg from local support (Cohen et al., 2013; Strickland, 2013). The continual decline of state funding means that third leg will need to be replaced through alternative revenue streams as envisioned by RDT. Pfeffer and Salancik outlined two possible roles for organizational leaders who must respond to environmental changes—responsive and discretionary. The responsive role seeks to adapt the organization to the environmental

changes in a passive context by responding to challenges as they are presented, and the discretionary role seeks to modify the environment in a more active context by anticipating external threats and opportunities. Both roles require an understanding of the external environment, and the culture of the internal environment may influence the leaders' actions. In this study, I identified any revenue streams adopted by a college to replace lost funding, if the leaders adopted a responsive or discretionary role in adapting to the changes, and how the culture of the internal environment may have influenced the leaders' actions.

D'Amico et al. (2014) identified another tie to resource dependency in the integration of performance and budgeting, and how measuring success and tying funding to success will influence behavior. The researchers attributed this relationship to RDT, which suggests institutions anticipating scarce resources will change behaviors and form alliances to acquire resources. In the current context, this means community colleges will find efficiencies, improve programs and student performance, and build better relationships with business and industry when incentivized with performance-based funding – one of the newer ideas to fund community colleges.

Rationale for the Conceptual Framework

Neither the theory of academic capitalism nor resource dependency provides a complete framework to understand the strategies community college leaders use to respond to reductions in state funding and their long-term impact on the community college system, and whether those cuts are a societal response to the larger question of higher education as a public or private good. Components of each theory, however, were

used to augment the public or private conceptual framework and answer the research question for this study. As data were analyzed, themes emerged that align with either the theory of academic capitalism (such as entrepreneurial activities) or resource dependency theory (such as partnerships to develop new resources). The final analysis will determine if these themes address Kallison and Cohen's (2010) call for a new compact that balances a restoration of public funding with a much higher level of accountability to the public.

Literature Review Related to Key Concepts

Funding the community college mission, education as public or private good, and the social ramifications of changes in funding are key concepts addressed in this literature review. The discussion leads to a conclusion of a gap in the research literature related to community college leaders' decision-making processes and specific strategies in responding to the change in funding sources.

Funding the Community College Mission

Community colleges have historically been known for a mission to provide open access to higher education through open admissions and relatively low tuition (Cohen et al., 2013; Davidson, 2013; Gilbert & Heller, 2013; Phelan, 2014; Strickland, 2013; Tschechtelin, 2011). Phelan (2014) posited this mission is now at risk due to a crisis in the funding of community colleges based on unstable, unpredictable, and declining revenue streams, coupled with increased calls for accountability, performance, improved quality, and higher graduation rates. Phelan suggested there is a cost to achieving access, quality, and completion, and ignoring the reality of increased costs in an era of declining funding is "both simplistic and ill-conceived" (p. 11). The community college mission of

open access and opportunity for all “now seems to be unsustainable” (p. 12). This funding crisis, according to Phelan, is forcing community colleges to move away from comprehensive community colleges to specialized colleges that offer fewer programs and limit enrollments. As evidence, Phelan described the situation in California where community colleges have capped enrollments due to lack of resources, and the nation’s rural community colleges where programs have been eliminated, essential services discontinued, and access to developmental education has been curtailed. The funding crisis that has led to these recent developments and put the open access mission at risk can be better understood through the historical lens of community college funding.

Cohen et al. (2013) found that when community colleges were small, they were organized as extensions of the secondary schools and derived their budgets from them. Although there was a wide variance among states, tuition revenue was a relatively small proportion of community college funding. Cohen et al. noted that tuition for public two-year colleges comprised only 6% of budgets in 1918, but that situation changed as independent community college districts were organized. Funding increasingly came from local sources (predominately local taxes), with a minimal amount of aid coming from the state in the form of oil, gas, and mineral revenues from public lands. Much of this state aid was used to equalize funding among the wealthier and poorer districts. Even by the 1920s, the proportion of state aid was less than 5 percent of all public college revenues. As community colleges grew, so did the proportion of revenue that came from state aid and local taxes up until the 1970s, when several states passed legislation to limit property taxation (Cohen et al., 2013). The reduction in property tax revenue meant the

state had to pick up a larger share of the burden, and tuition rates increased. According to Cohen et al., recessions in the 1980s and 1990s put increasing pressure on the states to limit their contribution, and the Great Recession of 2008-2011 caused dramatic cuts in state funding.

The decrease in state funding over the past decades is well documented by several authors (Back, 2011; Doyle & Delaney, 2009; Fernandez, 2011, Joch, 2011; Kenton et al., 2005; McClendon et al., 2009; Ness & Tandberg, 2011; Palmer, 2012). Kenton et al. (2005) documented this shift by studying the National Center for Education Statistics (NCES) annual Integrated Postsecondary Education Data System (IPEDS) Finance Survey for 212 colleges during the years 1990-2000. The Center established that there had been a significant decrease in state and local appropriations, with a concurrent rise in tuition and fees during that decade. Further evidence of this decline in appropriations comes from a more recent report. The State Higher Education Executive Officer's Organization (2015) report on state higher education finance revealed that the proportion of tax revenue allocated to higher education has dropped to 5.5 percent, which is the lowest since the organization began compiling these statistics in 1990. The evidence suggests this decline in state appropriations is being partially offset by raises in tuition.

D'Amico et al. (2012), using data from the 2011 annual National Access and Funding Survey project that received responses from the National Council of State Directors of Community Colleges in all 50 states, described a current state of funding for community colleges. Approximately 60% (31 of 51) of the respondents said their states were moving toward a model of funding that more resembled privatization, where tuition

will provide more and more of the funding. Even as state revenues increased, tuition was not likely to decrease, and the reason for this counter-intuitive statement is that, according to the respondents of the D'Amico et al. survey, many states have structural deficits in their budgets due to Medicaid, unfunded pension liabilities, tax reductions, and other priorities that leave community colleges far down the list when allocating state revenues. Although there is an overall long-term decline in state funding, short-term views can disguise the long-term problem.

According to Doyle and Delaney (2009), a pervasive short-term view confounds the analysis of state funding of higher education because state appropriations seem to correspond to business cycles. Their key message was that when times are good, appropriations are high, and when the business cycle declines, so do the appropriations. State legislatures seem to use higher education funding to offset deficits and the funding is subsequently restored when the economy recovers. Palmer (2012) agreed with Doyle and Delaney with respect to the diminished state funding of community college and its relationship to business cycles. Palmer expanded Doyle and Delaney's assertions by noting several indicators point to an unstable, cyclical nature of state appropriations that fluctuate with economic recessions: (a) the discretionary nature of higher education funding in state budgets, (b) the ability for institutions to supplement state funding through tuition increases, and (c) the tendency for state legislators to balance budgets by cutting funding for higher education. Palmer also tracked state appropriations per \$1,000 in personal income for state community colleges from the years 1979 through 2009. The downward trend of 26% (inflation adjusted) during this time indicated the public was less

willing to fund higher education through tax appropriations. During the same period, according to Palmer, average in-state tuition and fees rose by 106% (inflation adjusted), illustrating the shift from public financing to private financing.

Katsinas et al. (2011) used ten years of survey data to illustrate the shifting of costs from the public to the individual. “As we have noted in every report since 2003, tuition increases remain the predominant method by which public access institutions make up for shortfalls or cuts in state tax appropriations for operating budgets” (p. 1). Katsinas et al. also used this data to predict that tuition was likely to rise by twice the inflation rate, and state funding will stay flat or be reduced in the majority of states. The Century Foundation Task Force on Preventing Community Colleges from Becoming Separate and Unequal (2014) looked even further back to show that tuition revenue at community colleges comprised 18% of the total revenue in 1989, rising to 22% in 1999, and 27% in 2009. At the same time, state and local appropriations comprised 72% of the total revenue in 1989, dropping to 65% in 1999, and 58% in 2009. As noted earlier, some years could show an increase in appropriations, but the long-term trend is a downward slope.

If the timing of the funding cuts was based on temporary state budget shortfalls, and those cuts were subsequently restored, higher education budgets could be adjusted; however, longitudinal studies reveal the funding is never fully restored, and those studies did not forecast a reversal in the trend (Doyle & Delaney, 2009; Fernandez, 2011). Fernandez (2011) documented the shift in funding at Valencia Community College from a primarily state-funded college in 2001, to a tuition-funded college in 2010. State

funding eroded from 60% in 2001, with student tuition at 35%, to 40% state funding in 2010, and a subsequent increase in tuition to 55%. Note that, in this example, other revenue sources (primarily grants) stayed static at 5%. As tuition rises, the market starts attracting private providers of education, and the end result is a shift away from public education toward private education (Bou-Habib, 2010; Ness & Tandberg, 2011). Ness and Tandberg (2011) noted that, if public higher education is to survive, alternative revenue streams will be needed to offset the decrease in state support.

In an attempt to explain the longstanding trends of diminished state appropriations and increased tuition and fees, Palmer (2012) suggested they were the result of “deeply rooted features of contemporary U.S. society” (p. 174), and proffered three possible explanations: ideological, structural, and sociopolitical. The ideological explanation focuses on who benefits from education, the individual or society. The structural explanation suggests the economy, because of economic cycles, does not have the stable tax base to support ongoing increases in higher education spending. The sociopolitical explanation relies on the diminished willingness of taxpayers to continually support tax increases to fund the growth of government.

Of the three explanations, Palmer (2012) discounted the ideological theory due to the fact that most states have increased funding in upward economic cycles and, therefore, are not driven by ideological assumptions. To address the structural explanation, education leaders will have to acknowledge the up and down economic cycles, and build in balancing mechanisms such as “rainy day funds” (p. 178) to cope with funding shortfalls. According to Palmer, the more challenging issue is the

sociopolitical explanation, which will require the rebuilding of trust and confidence in the community college system through the introduction of more accountability, focused prioritization of revenues and expenses, and perhaps performance-funding mechanisms. Another aspect that Palmer did not mention, but could possibly address the sociopolitical explanation, is the development of alternative revenue sources.

While Kenton et al.'s (2005) study documented a decrease in state aid and concurrent rise in tuition, the study also found very little reliance on alternative revenue sources (such as grants, gifts, and endowments); however, Kenton et al. concluded that, based on RDT, colleges relying on only two revenue streams put themselves at risk of survival unless they adapt. According to Kenton et al., community colleges were in ideal positions to leverage influence and raise funds through relationships with workforce development programs, federal welfare-reform programs, and community service. These authors concluded, similar to Hillman et al. (2009), that building relationships with state and local legislators by establishing active lobbying efforts was key to protecting the appropriations from state and local funding.

Crookston and Hooks (2012) suggested community colleges must rely on public funding, and there are limited alternatives to replace that funding when it declines. Although four-year universities have relied on alumni donations, out-of-state tuition, research grants, and endowments to supplement state aid, community colleges have not traditionally had access to those sources of funds. To offset state funding losses, community colleges will have to generate alternative revenue streams to avoid further increases in student tuition (Dowd & Grant, 2007; Drummer & Marshburn, 2014;

Fernandez, 2011; Mullin & Honeyman, 2008). The alternative revenue streams would probably be based on grant development and fundraising. Drummer and Marshburn (2014) found that public foundations, such as the Bill and Melinda Gates Foundation and the Lumina Foundation for Education, have contributed millions of dollars in the last several years to fund initiatives such as Achieving the Dream and Completion by Design, and many colleges have established separate 501(c)(3) foundations to solicit private funding.

According to Esters et al. (2008), although fundraising has typically been the domain of four-year institutions, community college presidents were adapting to the reality that more and more of their job description will include reaching out to the business community, alumni, and estate planning experts to establish fundraising campaigns that rival those at four-year institutions. According to Renninger et al. (2007), community colleges were not traditionally able to access federal grants and contracts like universities; however, that changed with the emergence of many opportunities through programs such as the National Science Foundation's Advanced Technological Education program. Esters et al. suggested that access to grants will require an expansion of how institutions think about fundraising. Renninger et al. agreed and suggested community college faculty may have to rethink their role in the institution, which has been a role of teachers rather than researchers.

Research and grants are not the only alternative revenue streams colleges can use to replace state funding. According to Renninger et al. (2007), community colleges have been exploring alternative means of raising revenue such as leasing space, creating

courses and other intellectual property that can be sold, offering more training to private corporations, and fundraising through gifts. Skari and Ullman (2012) added to that list by suggesting alumni programs have long been the domain of four-year institutions because students who transfer from community colleges also transfer allegiance from the community college to the university. Skari and Ullman suggested colleges could improve socialization efforts by planting a ‘seed’ in the minds of students to give back after they become successful. This socialization could occur through more direct contact with the donors; for example, inviting the benefactors to attend classes in the buildings named after them, or inviting potential donors of lab equipment to attend lab sessions and meet the students. Students will connect the resources they are using to the gift from a real person, which subliminally plants the idea for future generosity. This strategy could also have the more immediate benefit of showing donors how their contributions are affecting students and perhaps encourage further giving. Skari and Ullman’s ideas align closely with the interdependency concept of RDT and represent the strategic, proactive response envisioned by RDT’s definition of the discretionary role of community college leadership. The discretionary role could also prove useful as external forces attempt to reshape traditional funding models.

Another aspect of community college funding is the state funding formula. Most state funding formulae are based on enrollment, usually some measure of full-time student equivalency (FTSE). In line with this trend, Cohen et al. (2013) noted that many legislators (and others) have called for a shift in the allocation of funding away from enrollment-based measures toward outcomes-based measures. Since the 1980s, several

states have experimented with performance-based funding to accomplish this shift. Cohen et al. found 26 states had enacted performance funding for colleges and universities between 1979 and 2007. When state revenues started shrinking in the early 2000s, many states abandoned these experiments, and by 2004 only a few states had such formulas in place. Even as state revenues were shrinking, Crookston and Hooks (2012) claimed the call for accountability continued to grow, presumably to curb further reductions.

Cohen et al. (2013) wrote that performance funding proposals are resurging now that state coffers are recovering and calls for performance and greater accountability are increasing. The writers noted a variety of models have been proposed, but not without controversy. Rhoades (2012) argued that rewarding outcomes could restrict access as colleges discourage marginal students from enrolling, standards could be relaxed to encourage completion, and research has not shown that incentive-based funding is a better use of public funding than the current models. Rhoades suggested the recent Arizona Board of Regents proposals for performance-based funding, based only on efficiency models (as opposed to increased resources), would lead to perverse incentives.

Rhoades noted:

Consider the incentives these policies provide. If the goal is simply greater output with fewer production employees (faculty), the quickest paths are to drop standards, to replace full-time faculty with yet more part-time faculty, and to serve more and wealthier out-of-state students who are able to pay more and are more likely to succeed. Ironically, a completion agenda that promotes

performance-based funding but that pays little attention to an important aspect of that performance (i.e., quality) encourages institutions to reduce quality or to reduce service to in-state, low-income students. (p. 18)

Cohen et al. acknowledged there is more than one point of view and described proponents' contentions that formula multipliers for underserved student success will protect open access; performance-funding models will increase the availability of funding; multiple measures will protect against the erosion of standards; and the input of college faculty and leaders in designing the new metrics will lead to more student success.

D'Amico et al. (2014) provided some insight into how performance funding proposals are evolving. D'Amico et al. surveyed the National Council of State Directors of Community Colleges, receiving 50 responses from 49 states to determine the current status of performance funding. The original model for performance funding involved setting aside funds to be allocated based on a specific set of performance metrics, what D'Amico et al. termed "PF 1.0" (p. 233). This funding model was essentially a bonus system that rewarded colleges based on outcomes after the fact. States were calling for models that build the performance metrics directly into the funding formula with a focus on intermediate measures of success. D'Amico et al. called these new models "PF 2.0" (p.233), and several states were evolving toward PF 2.0; however, other states were mixing elements of both, serving as a reminder there is not a 'one-size-fits-all' model.

The theory behind the integration of performance and budgeting was that measuring success and tying funding to success will influence behavior. D'Amico et al.

(2014) attributed this theory to Pfeffer and Salancik's (2003) RDT, which suggested institutions with scarce resources will change behaviors and form alliances to acquire resources. In the current context, this means community colleges will find efficiencies, improve programs and student performance, and build better relationships with business and industry when incentivized with performance-based funding. However, several studies that D'Amico et al. identified did not find improved student outcomes in the states that had instituted performance-based funding. One speculation was that this may be because the percentage of funding based on performance constituted only a small percentage (less than five percent in these studies) of the total funding, which may not have been high enough to incentivize a change in behavior. Another speculation could be that the incentives are poorly designed and actually incentivize behavior that does not produce better student outcomes. Tennessee had plans to raise that percentage to 80%, and D'Amico et al. reported that three states indicated the percentage had grown to 10–25%, and three others said the percentage was greater than 50%. Now that states are raising the percentage, D'Amico et al. suggested there will need to be additional study to determine the impact of increasing the rates.

As of 2012, D'Amico et al. (2014) found there were 19 states using a performance-based funding model, but only one of the states had been using the model for more than 10 years. The other element they tried to determine was if there had been a shift away from inputs and processes (e.g., enrollment, financial aid awards, class size, and workforce development) toward outputs and outcomes (e.g. retention, developmental course completion, graduation, and transfer). Indeed, the survey revealed there had been

a shift toward outputs, which, coupled with the increased percentage of funding based on performance, suggests there is a movement toward PF 2.0. On the other hand, while 30 states have tried performance-based funding, only 19 are still using it, and, of those 19, only one has been using it for more than 10 years. This profile suggested there was still much to be learned on the efficacy of this funding model.

According to Cohen et al. (2013), the debate over models for funding was no more contentious than the debate over how much of the cost of education should be borne by students in the form of tuition and fees. In previous decades, when local revenues supplied most of the funding for junior colleges, some (including the 1947 President's Commission on Higher Education) argued the first two years should be an extension of the free public schools and, therefore, no tuition should be charged. As noted earlier, the argument for free tuition holds that an educated populace carries social and economic benefits to the society as a whole, hence society should bear the cost. Another argument, however, claims the person receiving the education, and subsequent economic benefit, should bear at least a portion of that cost (Callender & Jackson, 2008; Cellini, 2012; Cohen et al., 2013; Dowd, 2008; Dwyer et al., 2013; Elliott & Nam, 2012; Katsinas et al., 2011; Levin & Kater, 2012; Ross, 2013). The no-tuition argument eventually lost ground to a debate that centered not on whether a student should pay any tuition, but how much that student should pay. Supporters claimed students would benefit more from an education when they had an economic investment in their education, but even those who agreed with that principle claimed there was another issue, that of equity. In other words,

why should a low-income student be forced to pay the same tuition as the sons and daughters of wealthy parents?

The pendulum has now swung back to the no tuition argument with the proposal from former U.S. President Barack Obama to make the first two years of higher education at a community college free (Cubberly, 2015). Following Obama's proposal, Tennessee enacted the "Tennessee Promise" (Carruthers, 2016, p. 1) to provide free tuition and mentoring for the first two years of community college, and the 2016 presidential election campaign spawned more proposals for free tuition (National Association of Student Financial Aid Administrators, 2016). Cubberly (2015) noted that any federal proposal would need congressional approval and, even if Congress approves, tuition is just one of the costs of going to college. The other expenses, such as transportation, books, child care, food, and lodging, are often funded with financial aid that is subsidized by the federal government.

No discussion of community college funding would be complete without addressing the importance of financial aid to both the student and the community college system. Financial aid has been the bedrock of community college funding and, despite the reliance on tuition, a large part of that tuition is funded through the federal government (Cohen et al., 2013). According to the National Center for Education Statistics (2015), from 2007-08 through 2012-2013, the percentage of first-time, full-time, degree/certificate-seeking students receiving financial aid increased from 68 percent to 78 percent. Of all full-timers, 56 percent received federal grants, and 27 percent received loans, which averaged \$4,872. That loan figure represents a sizable increase

over the 1992-1993 period when only 12 percent of full-timers borrowed an average of \$2,530 (Cohen et al., 2013). Despite the receipt of financial aid, a large portion of which is used to pay tuition at the institution, these institutions had to develop strategies to offset the loss of state aid.

Dunn (2015), in a study of state and local appropriations for public education, confirmed D'Amico et al.'s (2012) assertions of tuition providing more and more funding due to lower state appropriations. This outcome reflects what D'Amico et al. had stated in corroborating the statements of Doyle and Delaney (2009) who said that state legislatures seem to use higher education funding as a 'plug' to balance deficits during recessionary times. The difference between the business cycles studied by Doyle and Delaney, and the recovery from the Great Recession, was that the last downturn has caused more long-term structural problems that will soak up any additional revenues that may be coming to the states in future years (Dunn, 2015). Based upon the writings of D'Amico et al., Doyle and Delaney, and Dunn (2015), it appears that community college leaders have to find additional strategies to cope with a (perhaps permanent) loss of taxpayer-supported funding.

Joch (2011) described how several institutions were responding to the reduction of taxpayer funding; for example, Dallas County Community College District (DCCCD), which had relied on 32 percent of its operating budget from the state, suffered a 7.5 percent reduction. To compensate, DCCCD offered an early retirement package to 700 employees, left unfilled positions vacant, and retiring teachers were replaced with younger, cheaper, less experienced faculty. The chancellor even suggested DCCCD

might need to consider enrollment caps. Joch also described how the Coast Community College District developed contingency plans to deal with the cuts: best-, middle-, and worst-case scenarios. The middle-case scenario envisioned a 10% reduction, which meant they would serve 10% fewer students and reduce faculty and staff positions. The middle-case scenario involved a 38% tuition increase and, if the worst-case scenario developed, tuition would nearly double. Yavapai College (YC) in Arizona, which started the year with 10% of funding from the state, saw a reduction to 1%. YC had to leave positions vacant and raise tuition. The College of DuPage (COD) had to furlough full-time faculty and replace them with part-time instructors, increase tuition, increase faculty workloads, and eliminate faculty release time. Joch asserted these scenarios were not simply a ‘post-recession hangover’, and would result in a “seismic shift in community college funding for years to come” (p. 34). One might wonder how these strategies will affect student learning, while others may wonder if students should financially contribute to their own education.

According to the State Higher Education Executive Officer’s Organization (2015) report, budget challenges remain for higher education institutions despite an economic recovery from the recession. These challenges could be due to a lag in funding levels or, more critically, due to changes in tax policy or structural deficits. In an earlier report, the State Higher Education Executive Officer’s Organization (SHEEO) warned that institutions should be wary of making bad judgments when making decisions on how to raise revenue, prioritize programs, or rely on technology as a solution. Competing with each other to attract out-of-state or international students can be counter-productive;

prioritizing programs carries a risk of overestimating the number of students that can be served with existing resources; and, an over-reliance on technological solutions to offset budget cuts or tuition increases could impact the quality of the workforce. The report continues with the warning “Or the better-off public may be lulled into thinking that the American economy can get by with limited opportunity and 20th century standards for educational attainment, so long as their own families are well-educated” (State Higher Education Executive Officers Organization, 2013, p. 42). This statement implies a risk of limiting the open access mission of a community college that could lead to a class divide between the lower and higher socioeconomic classes.

Fernandez (2011), Joch (2011), and Kallison and Cohen (2010) have identified the rate of decline in state funding as not just tied to business cycles; therefore, it is not unreasonable to assume the decrease will continue, even after the economy recovers from the current downturn. If cuts in state funding are not simply tied to business cycles as Doyle and Delaney (2009) and Palmer (2012) claimed, Fernandez’s claim that community colleges will have to develop alternative revenue streams to combat tuition hikes will likely come true.

The current literature on funding the community college mission reveals there has been a long-term decline in taxpayer support for community colleges, with an associated increase in student tuition. Although there has been an increase in tuition, the increase has not been enough to compensate for the loss of state aid, so institutions have been forced to look for other means to reduce operational expenses such as consolidating programs, limiting enrollment, closing campuses, hiring more part-time faculty at lower

salaries, and relying on technology for course delivery. The literature does not reveal the processes leaders use to make these decisions, other than to imply a reactionary nature to short-term threats. Many authors concluded that community colleges will not be able to sustain an open access mission unless they are able to develop alternative revenue streams to reduce the reliance on state funding, and many suggestions have been offered; however, there do not appear to be reports of specific strategies institutions have implemented to develop alternative revenue streams.

Kallison and Cohen (2010) provided another aspect of the shift in the funding of higher education. Rather than attribute that shift solely to recessionary cycles and the reallocation and prioritization of resources, they look to a deeper cause: the shift in societal perceptions on whether higher education is a public or private good. In the next section I discuss the literature related to this shift.

Higher Education: Public or Private Good

The 1947 President's Commission on Higher Education suggested the first two years of college should simply be a continuation of the first 12 years of public schooling and be provided free of charge (Gilbert & Heller, 2013). That view was during a time when junior colleges were primarily funded through local taxes and tuition, and the burden would have fallen on the localities rather than the federal government. According to Gilbert and Heller, the argument for this socially subsidized, free tuition was that an educated citizen earns more money, pays more taxes, and generally participates in the civic functions of society, contributing to the betterment of that society; therefore, society should bear the cost of the education. Not everyone agreed with that argument.

Kenton et al. (2005) studied funding patterns at 212 community colleges during the 1990s and found a wide range of reliance on tuition and fees, which they claimed “reflects various state policies and philosophies about where the responsibility lies for funding higher education and who benefits more, the individual or society” (p. 118). Cohen et al. (2013) claimed that argument still existed at the time of their writing, and they described an ‘individual benefit’ position in the context of individual rights and freedoms; that is, the individual will be the one that receives the economic benefit, and that individual can choose whether or not the cost justifies the future economic benefit. At a minimum, according to supporters of the ‘individual benefit’ position, these students should bear a portion of the cost of their education because, without an economic investment in their own education, the education does not hold as much value to the recipient.

Although Cohen et al. (2013) suggested this debate was still on-going, they said it had morphed into one of determining how much of the cost the student should bear, not a debate of whether tuition should be free. Furthermore, the debate had grown to encompass another element of equity and access, suggesting that students from lower socioeconomic status who cannot afford to pay the individual tuition are being denied access to a higher education. This was the conclusion of a report from the Century Foundation in 2014 (Century Foundation Task Force on Preventing Community Colleges from Becoming Separate and Unequal, 2014).

In a task force report by the Century Foundation titled *Bridging the Higher Education Divide* (Century Foundation Task Force on Preventing Community Colleges

from *Becoming Separate and Unequal*, 2014), the members of the task force found that elite four-year institutions have recognized the need for racial integration, but these institutions have not made any efforts toward socioeconomic status (SES) integration. According to the report, high-SES students outnumber low-SES students by 14 to 1 in competitive four-year institutions, and it was determined that many students of lower SES enroll in the less expensive community colleges where low SES students outnumber high SES students by 2 to 1. The report states that, unlike the federal efforts to attract middle and upper-middle class students to ‘magnet’ schools in the K-12 environment, no efforts exist to provide extra state and federal resources similar to the federal Title I funding for K-12. The task force argued that community colleges must serve the students of greatest economic need, but typically have the least amount of funds to do so. Evidence of this lack of funding was cited in the report, which stated that per-pupil total expenditures for private research universities increased by \$14,000 in the period between 1999 and 2009, while the per-pupil expenditures for community college students increased by \$1 during that same period. This situation, according to the report, was encouraging separate and unequal institutions similar to what racial segregation did in the past.

The underfunding of community colleges has other ramifications as well. Although community college tuition is relatively low, Cohen et al. (2013) claimed that supporters of the argument that the student (rather than the taxpayer) should bear more of the cost burden for their education point to the inefficiencies of community colleges’ open access policies and the high cost to taxpayers of students who do not complete a

degree or certificate. This line of reasoning does not seem to account for the benefit that accrues to both the individual and society of an educated populace – even from those who do not complete a degree or certificate, and the completion of a degree or certificate is not necessarily the best metric to measure that benefit. Nevertheless, supporters of the individual benefit would argue that completion rates, and perhaps more importantly attrition rates, are an important measure to calculate the cost to the taxpayer.

Schneider and Yin (2011) studied attrition rates at the nation's community colleges and the cost to taxpayers of dropouts. Controlling for students who transfer to a four-year institution and other non-degree seeking students, Schneider and Yin looked at first-year students who intended to complete a degree or certificate but did not return for the second year during the five-year period between 2004-2005 and 2008-2009. The authors acknowledged there were many factors contributing to high attrition rates, specifically mentioning the remedial education needed for entering students and the lack of support services community colleges can afford to offer; however, this study was designed to quantify the hidden costs of attrition rates to the taxpayer. The study revealed that almost \$4 billion in federal, state, and local taxpayer monies went to students who subsequently dropped out. These dollars are absorbed in the cost of a completed degree, which contributes to Desrochers and Wellman's (2011) reporting of data from The Delta Project that spending per degree at public community colleges in 2009 was \$73,940, compared with \$65,632 at public research institutions. Although the research outcomes lent weight to the argument against public funding of community colleges based on the high cost of a completed degree, perhaps there are other factors that

were not accounted for in the research, such as students attending more than one college, students dropping out and then returning, or students who switched majors and lost federal funding due to excess credit hours taken. The Century Foundation Task Force on Preventing Community Colleges from Becoming Separate and Unequal (2014) suggested, on the contrary, that attrition and the resulting high cost per degree was due to underfunding community colleges, and the task force proposed several examples of how adequate funding could raise overall levels of efficiency. The absence of taxpayer support that could improve efficiencies for public community colleges might indicate that the public perceives higher education as a private good that should be paid for by the student.

Cellini (2012), Cohen et al. (2013), and Dwyer et al. (2013) generally concluded the primary beneficiaries (the students) of a college education are being asked to make larger contributions to cover college costs. The authors also agreed the shifting of costs to the individual will be financed through student loans. Elliot and Nam (2012) further explored the adverse consequences of the public policy shift of allocating higher education costs to the individual in the form of tuition, and associated debt to finance those costs. Callender and Jackson (2008) cited a specific example of that public policy shift in the passing of a 2004 law in England. The law caused a radical shift in higher education funding, particularly in student finances, by allowing institutions to charge higher tuition while allowing students to incur debt to finance that tuition. This trend supports the possibility that public policy may be shifting toward the view of higher

education as a private good, but the consequences of forcing the individual to bear more of the cost of education may not be fully understood.

Expecting students to borrow to pay for higher education appears to be inequitable, especially for those students from lower SES classes who are at greater risk of default and high repayment burden (Dowd, 2008). Bartik and Hershbein (2016) found that college graduates who come from families with incomes more than 185% of the Federal Poverty Line (FPL) earn 162 percent more over the course of their careers than those without a college education; however, college graduates who come from families below the FPL only earn 92 percent more over their lifetimes. The SES class of a student seems to be related to the amount of earnings a student can expect in the future to pay off the debt incurred to pay the higher tuition. On the other hand, Cellini (2012) and Doyle (2012) argued there may be an appropriate level of debt that can be leveraged by the student to provide future economic benefits. To address the inequity identified by Dowd (2008), Doyle suggested a revision to the U.S. system of student debt that relies on income-contingent loan repayment plans such as those adopted in Britain, Australia, New Zealand, South Africa, and elsewhere.

The financial inequity is not the only ramification of this shift of costs to the individual. Dwyer et al. (2013) suggested it is unfortunate that many students will have to take on debt to finance their education, and this shifting of risk to the individual can have “perverse consequences” (p. 31) by aggravating many of the other challenges young adults experience, such as job loss, family formation, divorce, home purchase, and illness. These inequities are likely to persist due to continued transference of costs to

individuals and rising tuition rates. The loss of state funding and rising tuition rates contribute to the rising levels of student debt, which is becoming unsustainable for many students. According to Stokes and Wright (2010), the increasing amount of debt a student must carry to graduate, the failure of grants and subsidized loans to keep pace with the cost of education, the increased demand for student loans in the future, and a loan structure in the U.S. that is encouraging lenders to stop lending, have all been contributing to a pending student loan system failure unless new models are adopted. Stokes and Wright suggested one of two models as a replacement for the existing U.S. model: the income contingent model that is already in place in Australia, or a “Tertiary Education Levy” (p. 20) that was developed by the authors. The Tertiary Education Levy embraced the concept of education as an investment – both for society and the individual.

The Tertiary Education Levy (TEL; Stokes & Wright, 2010) is a model that establishes a student loan based upon the program costs, anticipated career earnings, and the societal benefit of the career. Students who anticipate greater earnings are expected to contribute more to the program costs, but occupations that benefit society overall should receive a greater government subsidy. A complex formula determines the payment based upon the three factors above. The payment is called a levy, because it is a tax on the amount of earnings that exceeds an average of all earnings. To ease the burden of high payments, the payments are amortized over 25 years, but the payments are mandatorily collected through the tax system. While the payments continue for 25 years, even if the loan does not get fully repaid, Stokes and Wright (2010) suggested a \$100,000 annual limit on the earnings subject to the levy assessment to avoid the concerns of some

who might say the levy was excess taxation. One effect of the Australian system is to eliminate risk for the student. Australian students only make payments to pay back their loans in years when their earnings exceed a certain threshold, and those who never reap financial benefits in terms of higher earnings never have to pay back the loans.

The current literature summarizes the decades-long debate over the perception of higher education as a public or private good. That debate has morphed into one of determining how much of the cost the student should bear, not a debate of whether tuition should be free. That perception has caused a decrease in taxpayer supported funding for community colleges with a corresponding rise in tuition. The problem revealed in the literature is many students who attend community colleges are lower SES students and cannot afford to pay the increased costs without incurring debt, yet these same students are not likely to earn as much as higher SES students in order to pay off the debt. Several authors offer proposals to restructure the debt repayment system, but these proposals appear to be treating the symptom of the problem caused by higher tuition, rather than treating the cause of the problem. There is a lack of proposals in the literature to restore public funding or find alternative sources of revenue to keep tuition costs low and preserve the open access mission of the community college. The proposals to ease the burden of student debt are likely to be welcomed by many, since an increasing number of college students are carrying a debt burden; however, the rising cost of tuition that has spurred the debt also carries other social ramifications. I discuss these ramifications in the final section of the literature review.

Social and Economic Ramifications of the Change in Community College Funding

Up until the middle of the 20th century, higher education was the province of the middle and upper classes, with only one in seven people attending college (Beach, 2011). By the middle of the 20th century, that perception was changing; colleges were no longer operated solely for the wealthy and educated, and earning a college degree was viewed by many as an investment in the future (Levin & Kater, 2012). Dwyer et al. (2013) likened the investment in education to the investment in home ownership, one that is worthy of leveraging debt to achieve a higher return on the investment.

Doyle (2012) claimed college is a good investment because the overall payoff of a college education averages 10% a year while the cost of borrowing is 3.4%. Doyle found the earnings level was not the only benefit: unemployment rates are approximately 5% lower for college graduates; life expectancy is higher; college graduates are healthier; and civic participation is more robust among graduates. Cellini's (2012) cost-benefit analysis supports Doyle's findings, specifically for the limited use of debt to leverage the future payoff of higher education. Doyle suggested that, although many are wondering if they can afford school, perhaps they should be wondering how they could afford to not attend college.

Doyle's return on investment calculations that support his position are averages across the entire student population over lengthy periods of time that do not account for what occurs at an individual level. At the individual level, the investment can be much riskier depending on the choice of schools, majors and professions, and possibly disastrous if the student drops out and has nothing to show for the investment. Bartik and

Hershbein (2016) found that higher SES students earn more over their lifetimes than lower SES students, so Doyle's (2012) and Cellini's (2012) findings may not be applicable to poorer students.

Doyle (2012) offered some suggestions to improve the situation such as strategies to reduce costs (attending community college), pay as you go (working while attending school), expanding income-based repayment plans, and maximum repayment terms. Former President Obama introduced similar approaches by issuing a Presidential Memorandum that caps payments at 10% of earned income and forgives the balance after 20 years of repayment (Presidential Memorandum—Federal Student Loan Repayments, 2014). A particularly noteworthy suggestion was to incorporate the repayment structure into the tax system, similar to what Australia has done (Cull & Whitton, 2011).

Although the leveraging of student debt to obtain higher returns in the future is a compelling argument for incurring student debt, as Doyle (2012) acknowledged, it is not necessarily right for every individual student. Identifying factors and tools to help a student make that decision, and handle the debt responsibly, would be part of a valuable cost-benefit analysis. Cellini (2012) conducted an analysis of the economic and social costs and benefits of the two-year, for-profit sector of higher education. This analysis covered the rapid growth of the sector and the factors that contributed to that growth, competition between the for-profit and public sectors, student characteristics of both sectors, the impact of financial aid policies, and the quality of for-profit education as measured by student outcomes. In this case, however, Cellini used a specific measure of one student outcome to measure quality; “economic theory suggests that the best measure

of education quality is the labor market return, or the growth in earnings, that can be attributed to a student's education" (p. 159). Based on the one student outcome of growth in earnings, Cellini found that public community college students would only have to generate a 5.3 percent growth in earnings to obtain a positive net benefit from their education. Levin and Kater (2012) did not agree with Cellini that growth in earnings was the best measure of the quality of education. These authors described the potential effects of using limited measures when they noted that "Student satisfaction levels and placement rates [used as sole outcome measures] as opposed to quality of education [to] measure academic success" (pp. 62-63) could seriously diminish the quality of education.

Regardless of the outcome measure used in Cellini's (2012) study, Cellini noted there have been very few academic studies to conduct cost-benefit analyses in the two-year education sector. Cellini provided a valuation of the costs of the for-profit sector relative to the public sector, and the valuation estimates the costs to taxpayers of educating a student in a for-profit institution in the form of grants, aid, and contracts were roughly \$7,600 per year per student, as opposed to \$11,600 for the public sector. In addition to the costs to taxpayers, students incurred annual costs of \$51,600 in foregone earnings, tuition, and loan interest in two-year for-profit institutions, as opposed to only \$32,200 in the public sector. Although taxpayer costs were \$4,000 higher in the public sector, the combined costs for students and taxpayers suggested that community colleges were roughly \$15,600 per student per year lower than their for-profit counterparts. To cover their personal costs, for-profit students need to generate earnings gains of at least

8.5 percent per year of education, while community college students only require earnings gains of 5.3 percent to obtain net benefits from their education.

Although Cellini's (2012) research had a narrow interpretation of student outcomes, the valuation obtained was nonetheless useful as one factor in a cost-benefit analysis for the student trying to decide the appropriate level of debt to incur, and how that debt could be leveraged to provide future economic benefits. A comparison of Cellini's required earnings gains for both sectors, with Doyle's (2012) calculation of a college education's 10% return on investment, aligned with the notion of college as a profitable investment. Cellini's research also informs the debate on the value of public funding of higher education; however, with the current state of diminishing public support, students will want to be knowledgeable on all aspects of financing the costs of higher education, especially those students of lower SES status.

A major social ramification of the change in community college funding is the lack of equity and access for students of lower SES status who cannot afford to pay the increasing tuition that is replacing public funding (Gilbert & Heller, 2013). According to the National Center for Education Statistics (2011), of students who started their post-secondary education in 2003-2004, only 26% of low-income students, compared with 59% of high-income students, earned a bachelor's degree within six years. Crookston and Hooks (2012) painted an even bleaker picture attributable to the rise in the cost of post-secondary education. Between 1980 and 2008, the cost of attendance spiked 40% in constant dollars (427% in current dollars). For the bottom income quintile, this cost represents 58% of annual income. These less affluent families now incur greater debt

and have more difficulty paying back the loans. This disparity between low and high-income students suggests low-income students are being denied access to a higher education.

Crookston and Hooks (2012) suggested the transformation of community college funding may be having a negative impact on employment growth. Using sophisticated quantitative analyses and data from multiple sources, Crookston and Hooks studied the impacts of community colleges on employment trends in 44 states, specifically in rural counties between four different time periods during the years of 1976 to 2004. The evidence presented showed that community colleges had a positive impact on employment growth in the earlier periods of this timeframe; however, employment growth turned negative during the last period during 1998-2004. By controlling for other variables, Crookston and Hooks were able to isolate the effects of decreasing state aid, and corresponding reliance on tuition increases and grants, to demonstrate a negative impact on employment growth. Crookston and Hooks were able to quantitatively demonstrate that cuts in public assistance to community colleges can have a negative societal impact.

Crookston and Hooks (2012) also asserted the decrease in state funding affects the ability of low-income families to access higher education. A small rise in tuition that may be easily absorbed by wealthier families has a much larger effect on less affluent families. The need to incur debt to finance an education deters families from encouraging children to pursue a college degree; furthermore, the need to pursue grants and corporate training to replace the reduction in state aid is resulting in a shift of focus

away from the needs of the student, to the needs of business and industry, at the expense of a liberal education. These institutions were exhibiting the very definition of academic capitalism, and this transformation of community college funding is negatively impacting the core mission of community colleges--access.

The current literature on the social ramifications of the transformation of community college funding describes the evolution of community colleges as an institution that provided higher education access to the lower SES classes to facilitate their upward mobility to enter the middle and upper classes of society. The benefits derived from higher education include increased earnings, lower unemployment, higher life expectancy, lower medical costs, and more robust civic participation. These benefits can justify the cost of receiving a higher education such that it can be viewed as an investment in one's future. Some authors have done limited cost-benefit analyses that conclude the investment in a higher education can yield a substantial rate of return, especially when attending community colleges that have traditionally had low tuition rates. Now that tuition rates are rising, the rate of return on the investment will certainly be lower, especially for lower SES students who do not earn as much as their higher SES counterparts. The rise in tuition, and education costs in general, may be limiting access to higher education for poorer students. Employment growth has been negatively affected by the cuts in state aid and corresponding rises in tuition. Some observers contend the quality of education is suffering due to a shift in focus away from the students toward efforts to replace the reductions in state aid (Rhoades, 2012). The consensus appears to be that the reduction of state aid and corresponding rise in tuition

will have long-term social and economic ramifications; however, the only solutions offered are suggestions to reduce the costs higher education by attending community colleges, restructuring debt repayments, and working while attending school. There is a gap in the literature on proposals to restore public funding, or find alternative sources of revenue to keep tuition costs low and preserve the open access mission of the community college.

Summary

The literature review is a documented narrative that supports the conceptual framework for this study and describes the funding of the community college mission. The review documents the current perception of higher education as a public or private good, the impact that perception is having on community college funding, and the social ramifications of the change in community college funding.

Support for the conceptual framework begins with the broad question of whether or not higher education is a public or private good, and includes theories of academic capitalism and resource dependency. The literature provides a historical background on the sources of community college funding, and how there has been a shift away from public toward private education due to the decrease in state funding of higher education, accompanied by a corresponding increase in student tuition.

Although there has been an increase in tuition, the increase has not been enough to replace the reduction in state aid, forcing institutions to look for other means to reduce operational expenses such as consolidating programs, limiting enrollment, closing campuses, hiring more part-time faculty at lower salaries, and relying on technology for

course delivery. The literature does not reveal the strategies leaders use to make these decisions, other than to imply a reactionary nature to short-term threats. The literature revealed that state aid is not likely to be fully restored in the future, and institutions will have to develop alternative revenue streams to replace the funding or resort to increases in tuition.

Another problem revealed in the literature was that many students who attend community colleges are lower SES students and cannot afford to pay the increased costs without incurring debt, yet these same students are not likely to earn as much as higher SES students in order to pay off the debt. Several authors offered proposals to restructure the debt repayment system, but these proposals appear to be treating the symptom of the problem caused by higher tuition, rather than treating the cause of the problem. There is little discussion in the literature regarding proposals to restore public funding or find alternative sources of revenue to keep tuition costs low and preserve the open access mission of the community college. Many authors concluded that unless community colleges are able to develop alternative revenue streams to reduce the reliance on state funding, they will not be able to sustain an open access mission. Many suggestions on funding have been offered; however, there does not appear to be reports of specific strategies institutions have implemented to develop alternative revenue streams.

The shift in these patterns of funding toward increased reliance on tuition threatens the open access mission of the public community college system, so the system will have to adapt to the transformation of funding by identifying other revenue resources to supplement tuition and taxes. If those sources of revenue are grants and fundraising,

there will need to be a shift in attitudes and willingness of employees to support the development of these resources, as well as a need to develop stronger relationships in the community. There is a gap in the current research that explores how institutions are managing this culture shift to develop other resources. In this study, I helped identify specific strategies community college leaders have used to adapt to the change in funding models.

The next chapter will describe the basic qualitative interview design of the study, how participants were selected, how the participants' anonymity was protected, the data gathering instrument, how that data was analyzed, and various methods to ensure the trustworthiness of the study.

Chapter 3: Research Method

The purpose of this basic qualitative interview study of community college leaders was to understand leadership decision-making processes and specific strategies used to respond to reductions in state aid and corresponding rises in tuition, and how those strategies contribute to a college culture that responds to the need for alternative revenue streams. In this chapter, I describe the research design and rationale, the role of the researcher including biases and relationships, the methodology of the study and how participants were selected, and issues of trustworthiness including the ethical procedures that were followed while conducting the study.

Research Design and Rationale

The research question for this basic qualitative interviewing study was the following:

What are the specific strategies community college leaders use in adapting to the change in funding models?

Qualitative studies are appropriate to explore a topic rather than explain it (Merriam, 2009). To answer the research question, I used a qualitative approach to explore how institutions have learned to cope with the reductions in state aid, and how the culture of the organization is adapting to a new paradigm. Maxwell (2013) described a quantitative study as one best suited to answer questions based on variables, the statistical relationship between variables, and elements of causation. My research question did not lend itself to a quantitative study. Qualitative studies, according to Maxwell, are designed to answer questions related to people, events, and processes that

connect them, and they are appropriate to explore a topic rather than examine relationships among variables. Merriam suggested that qualitative researchers are able to examine how individuals interact with their environment. The interviewees chosen to participate in this study all interact with, and are affected by, the environment created by a reduction in state funding.

Creswell (2013) identified five main designs of qualitative research, one of which is the case study. Yin (2013) described various reasons for choosing the case study research design over other designs. The case study design is appropriate when trying to explain the how or why of a phenomenon, especially if the phenomenon requires an extensive and in-depth explanation. Although the research question of this study required an extensive and in-depth explanation, Creswell (2013) characterized a case study as a “bounded system” (p. 101) and suggested a research problem that has boundaries that are too broad may not be appropriate for a case study. In this study, the boundaries would be all public community colleges in the U.S., which would be too broad for the scope for this study and a reason to reject the case study approach. Merriam (2009) identified “a baffling number of approaches and choices” (p. 21) to qualitative research and wrote “interviewing can be used to collect data from a large number of people representing a broad range of ideas” (p. 88). Therefore, a basic qualitative interview design was appropriate for this study.

Rubin and Rubin (2011) suggested “in-depth qualitative interviewing” (p. 3) enables the researcher to explore complex topics with those who have the most knowledge of, or experience on, the topic. Rubin and Rubin differentiated between

positivist and naturalist philosophies of research, describing the positivist paradigm as one embracing deductive methods that try to find objective, quantifiable answers to questions, and the naturalist paradigm as one that embraces multiple perspectives of a problem. Rubin and Rubin suggested the naturalistic philosophy is best to explore complex issues where multiple perspectives may exist. The topic of this study embodies multiple perspectives. For example, a taxpayer who may or may not have children in college is concerned about how tax dollars are spent. Legislators who are responsible for allocating state tax revenues are trying to be responsive to the majority of their constituents. A community college administrator is trying to find resources to ensure the institution remains true to its mission. All of these perspectives inform the funding of community colleges, and community college leaders have to be cognizant of these perspectives. Qualitative interviews were the most appropriate method to explore complex issues with multiple perspectives.

Role of the Researcher

My role as researcher was to conduct interviews based on a research design protocol (Appendix) with seven community college leaders and verify their statements through member checks, an approach suggested by Miles, Huberman, and Saldaña (2014). Another part of that role was listening to the participants as they answered the questions, and looking for comments that provided opportunities for further exploration or comments that may have needed additional clarification. There was a risk of personal bias; however, I was aware of that risk and made every effort not to let bias influence the study. That potential bias stemmed from my perspective that higher education serves the

public good and should be financed through taxpayer-supported funding. My awareness of my bias enabled me to set it aside for research purposes. I also disclosed to participants that I am a professor at a community college that has been subject to reductions in state aid. For purposes of the interview, I conducted the interviews such that my only role was an objective researcher exploring the paradigm shift in community college funding. I established a shared interest of ensuring the community college system survives the loss of state aid and transformation of funding.

As a peer reviewer for the Higher Learning Commission, I have conducted many accreditation reviews throughout a 19-state region. If individuals from those colleges would have volunteered as participants for the study, I was prepared to reject them; however, this situation did not occur. If I am asked to conduct a review of a college that employs one of the participants of the study, I will disclose the relationship to both the Commission and the institution, and offer to withdraw from participation.

Methodology

This section includes the logic used to select participants; the instruments used to collect data; the procedures for recruitment, participation, and data collection; and the plan for analyzing the data.

Participant Selection Logic

The population of this study consisted of community college leaders from colleges that have experienced reductions in state aid, and who have a role in managing the budget or in generating income for the college. A former chief financial officer in a large community college district, who is an expert in the field of community college

finance, agreed to forward my invitation to participate in the study to several colleagues who fit the description of the population. The initial participants came from that invitation. Subsequent participants came from the initial participants inviting others through a snowball sampling method until enough participants were selected until data saturation was reached.

According to Miles et al. (2014), samples in qualitative studies tend to be purposive rather than random, and the initial selection can change as the study evolves. The choice of participants should be driven by the nature of the research question, as opposed to the participants' representation of a group. Patton (2002) suggested a larger sample size will allow more breadth of examination, but a smaller sample size will allow a more in-depth exploration of an issue. Patton also suggested an interview that contains open-ended questions is likely to take more time and indicated the sample size should be smaller than a structured interview. Based on these suggestions and the nature of the study, I determined seven participants to be an appropriate sample size.

The criteria for community college leader participation were that the community college must have been subject to reductions of state aid since 2005, and the participant must have some control over the college budget. Participants were community college leaders who were part of the executive leadership at each institution, including chief executive officers or chief financial officers. This criterion did not exclude other community college leaders who have a role in managing the budget or in generating income for the college in various capacities. The specific sample selection tended to be iterative, evolving as the study progressed and new elements of the issue were

discovered, so new participants were asked to join the study until a saturation point was reached where new participants were repeating what others had said and no new information was being provided. The referrals were exhausted after the seventh interview. Expanding the study further was not necessary because the sixth and seventh interviews reaffirmed what had been said in previous interviews; therefore, saturation had been reached.

The initial referrals were participants in two different states, and subsequent referrals were located in the same states as the original two referrals. To expand the study to other states would have required exerting more pressure on the existing participants for more referrals, or requesting an amendment to the IRB approval. Expanding the study further was not necessary because these two states have experienced major reductions in state funding, they represented two distinct geographical regions of the country, and participants represented 18 separately accredited colleges due to the fact that two of the participants were CFOs at multicollge districts.

Instrumentation

The primary instrument used for this study was a researcher-designed interview protocol (Appendix). The protocol consisted of open-ended questions that allowed for open-ended responses and follow-up questions. All participants were asked an identical set of initial questions to allow some measure of coding the set of data, along with follow-up questions where appropriate. Turner (2010) suggested this method can lead to “rich and thick” (p. 756) qualitative data. The interviews revealed the initial historical events, attitudes, policies, and practices that indicated how the institution had addressed

the state funding shortfall. The responses I looked for included the specific elements college leaders had used to balance their budgets, and the changes in attitudes and culture that had occurred in response to the steady decrease in state aid over the last several decades. The specific elements used to balance the budgets were relatively easy to identify; however, the accompanying attitudes and culture shifts that related to specific elements were more difficult to identify and nearly impossible to measure with respect to impact on revenue generation. Using the interview protocol, I probed for these as well.

To illustrate the probing nature of the interview, if a participant mentioned that philanthropic efforts successfully replaced a portion of the lost state aid, I would query the participant on the involvement of the faculty and staff in those efforts. I would then ask if the efforts were intentional and part of a strategic plan, or nonsolicited such as an angel donor who writes a large check. If the response was that a donor wrote a large check, I would query if there were there any conditions attached to the donation that could possibly compromise the academic integrity of the institution. If a participant described a reduction in programs due to prioritization strategies, I would ask how the faculty and staff responded. When leaders said they acknowledged the need for entrepreneurial ideas, I would ask how employees and stakeholders had been engaged to generate creative ideas. These examples of probing questions depended on the specific responses of the interviewees and illustrate the use of an exploratory study using the naturalistic inquiry model described by Patton (2002) and Rubin and Rubin (2012).

Procedures for Recruitment, Participation, and Data Collection

Interview participants were initially recruited from replies received from the emailed invitation to participate, which was forwarded by the former CFO of a community college district to colleagues who may have been interested in participating. Those who were interested replied directly to me, and upon receipt of interest to participate, I provided the potential participant with an informed consent form, which explained the nature of study and the participant's role in it. Participants were asked to sign the form acknowledging their willingness to participate in the study. Following this step, arrangements were made to conduct and record the interviews. Additional prospective participants suggested by confirmed participants were sent the email invitation directly from me. Those who replied were sent the informed consent form and were scheduled for an interview.

The procedure for collecting data was through qualitative interviews. Following the naturalistic inquiry model described by Patton (2002) and Rubin and Rubin (2012), the interviews contained open-ended questions and were conducted via telephone and recorded on two recording devices: a Philips DVT 8000 Voice Tracer digital recorder that has three microphones for accurate voice reproduction and an Android smartphone. Both devices were able to produce digital files that could be exported to software to assist transcription. Video conferencing through Skype or Google Hangouts was considered but rejected due to the variability in Internet connections, computer hardware requirements, and individual knowledge of the technology.

After the interviews were conducted and transcripts were developed through a professional transcription service, each participant was provided with the transcript for confirmation of accuracy. Two participants suggested minor corrections, and none of the participants were concerned about the content of their comments appearing in the study. Because participants received assurances that no personally identifiable information would be revealed to preserve confidentiality, all participants were described in the study with pseudonyms. Although the close-knit community of college administrators could allow for inferences to be drawn as to the specific identity of a person or institution, these relationships were sufficiently obscured by masking any reference to any identifiable institution, organization, or person that could be attributed to the respondent or their college. All participants received a \$25 Amazon gift card as a token of appreciation for their participation in the study.

Data Analysis Plan

Miles et al. (2014) advised qualitative researchers to begin analyzing data as they collect it, as opposed to analyzing the data after leaving the field. These researchers described the process of coding as analysis; therefore, some level of coding has to either exist initially, what the authors term as “First Cycle” coding, or revising the codes in the “Second Cycle” (p. 73). I created an initial set of codes from the conceptual framework and research question (“deductive” coding according to Miles et al., p. 81). This process provides a lens through which to start analyzing the data as they are collected, then adapt the codes in the second cycle as data are analyzed. Miles et al. suggested that creating an

initial set of codes would be extremely valuable in an unstructured interview to help keep the interview focused.

On the other hand, pre-coding could introduce an unintended level of bias--a danger of which qualitative researchers should constantly be vigilant (Miles et al., 2014). Miles et al. (2014) also suggested that, despite the potential for bias, the researcher conducting a relatively unstructured interview could use deductive coding to construct a boundary for the interview to avoid other types of bias creeping in. For this project, I decided to develop pre-codes primarily for the purpose of setting up boundaries--both for myself and for the participants--to help avoid bias and keep the interview on track.

To set up the boundaries using pre-codes, Yin (2013) suggested the use of what he termed “theoretical propositions” (p. 37). Theoretical propositions have multiple uses in a case study, such as focusing the interview questions, setting boundaries, developing alternative explanations of a phenomenon, and generalizing the results. The last use is what Yin describes as “analytic generalization” (p. 40), as opposed to the “statistical generalization” (p. 40), which is used to generalize the results from empirical studies. Using the literature review in Chapter 2 and the research question for this study, I developed two propositions to apply to coding data--one based on the results I expected to find from this study, and another rival explanation:

1. College leaders have proactively developed strategic plans that call for innovative and creative strategies to develop alternative revenue streams to replace state funding, have communicated those strategies to inspire a culture shift within the

internal college community, and have implemented those plans to successfully replace reduced state funds.

2. College leaders have been forced to react to the loss of state funding through tightening budgets, eliminating programs, and focusing on controlling costs as opposed to generating revenue.

Using these propositions, the research question for the study and the conceptual framework in Chapter 2, I developed the following list of pre-codes: *State fund**, *Strategic plan**, *Entrepreneur**, *Innovative*, *Creative*, *Revenue*, *Expense*, *Fund**, *Grant**, *Leadership*, *Practices*, *Budget**, *Communication*, *Community*, and *Partnership**. The asterisk after some terms denote a wildcard to be used in the search string to ensure all forms of the word were captured.

From this initial list of codes, and after the interviews had been transcribed, I used NVivo software to develop “pattern codes” (Miles et al., 2014, p. 86) to group the summaries from the initial codes into a smaller number of categories and themes. I studied the outputs to see what meaningful patterns emerged and compared those with the propositions previously developed. That analysis identified similarities, differences, or possible outcomes that had not been considered. There were no discrepant cases that did not support one of the propositions.

Issues of Trustworthiness

In this section I will describe how I ensured the trustworthiness of this study by addressing the issues of credibility, transferability, dependability, confirmability, and ethical procedures.

Credibility

To ensure credibility, I used three strategies: conducting “member checks” (Miles et al., 2014, p. 58), using “pattern matching” (Yin, 2013, p. 143), and addressing “rival explanations” (Yin, 2013, p. 45). Member checks allow for the collected data to be returned to the participants allow them to make corrections. The participants were provided with the interview transcript for confirmation of transcript accuracy, or correction of errors, and they were allowed to amend any statement they made as individuals. This process ensured that what was reported aligned with the intent of the participants’ statements.

Yin (2013) claimed pattern matching is one of the most valuable techniques to ensure internal validity in qualitative research. This technique involves predicting the outcome of the study, then comparing the results with that prediction. The first proposition developed for this study served as that prediction.

Rival explanations are useful to confirm that alternative explanations have not been excluded from the analysis (Yin, 2013). Addressing rival explanations by analyzing the findings against a rival explanation adds credibility to the study by confirming the data does not confirm contradictory explanations. The second proposition developed for this study served as the rival explanation.

Transferability

Yin (2013) described “analytic generalization” (p. 40) as a method of generalizing the lessons learned from a case study that can then be applied to other concrete situations.

The propositions developed for this study provided the groundwork for analytic generalization. The findings corroborated the propositions, and new concepts emerged.

An important point of analytical generalization is the realization that the generalization will be at a higher conceptual level, as opposed to the level of an individual case (Yin, 2013). Yin suggested qualitative studies should not be thought of as individual samples, but rather as opportunities to illuminate concepts or principles.

Dependability

Several methods were used to ensure dependability of the study. All data, including transcripts and supporting documents, have been stored electronically in a case study database to be made available for inspection by authorized parties after any personal data is redacted.

Yin (2013) stated that a “chain of evidence” (p. 126) will increase the reliability of a study. To establish the chain of evidence, all sources were cited in the dissertation, and those sources have been stored electronically in the study database. The documents were converted to pdf format, relevant information to the citation was highlighted, and the documents contain information on how and where they were developed. This process will allow an external party to independently verify the sources of the information contained in the study. Member checks allowed for the collected data to be fed back to the participants to ensure that what is reported aligned with the intent of the participants’ statements (Miles et al., 2014).

Confirmability

The internal coherence of data was confirmed through member checks because the collected data were sent back to the participants to ensure that what was reported aligned with the intent of the participants (Miles et al., 2014). In terms of bias, Patton (2001) described self-awareness as a critical component to qualitative research. As noted earlier, there was a risk of personal bias that could be present in this study; however, I was aware of that bias. The potential bias stems from my perspective that higher education serves the public good and should be financed through taxpayer-supported funding. Self-awareness of my bias enabled me to set it aside for research purposes.

Another potential bias could have presented itself through the sampling method. Interviews using a snowball sampling method could result in biased responses since the referral participants will be known to the existing participants, and may share the same ideas or perspectives. According to Patton (2001), purposeful sampling, such as snowball sampling, has the power to find cases with valuable, in-depth information, effectively turning a negative bias into a strength. As one participant validates the knowledge of another participant, a limited measure of confirmability is obtained.

Ethical Procedures

The research study began after receiving approval from the Institutional Review Board (IRB) at Walden University. The IRB approval number for this study is 07-27-16-0034040. To ensure study participants' understood the study and their role in it, and provide their consent to be interviewed, participants were provided with an informed consent form. This form explained the nature of study and the participants' role in it.

Participants were asked to sign the form acknowledging their willingness to participate. Following this step, arrangements were made to hold and record the interviews by telephone.

After the interviews were conducted and transcripts developed, the participants were provided with the transcript of their individual interview for confirmation of transcript accuracy or correction of errors, and they received assurances that no personally identifiable information would be revealed.

To preserve confidentiality, participants were assigned a pseudonym, ensuring that statements were not attributable to any person or institution. After providing the participants with a transcript, I followed up with them individually via e-mail to confirm their comfort level and accuracy of the transcripts.

All interview transcripts will be maintained in an electronic file that is encrypted and accessible by only me and stored in a safe location for a period of five years. If any transcript is requested for inspection by interested parties, all personal data will be redacted.

Summary

The purpose of this basic qualitative interview study of community college leaders was to understand leadership decision-making processes and specific strategies that respond to reductions in state aid and corresponding rises in tuition, and how those strategies contribute to a college culture that responds to the need for alternative revenue streams. Interviews with seven leaders in community colleges that have experienced

reductions in state aid served to identify key leadership strategies and creative financing methods to offset the reductions in state aid.

In this study, I used a basic qualitative interview to explore how community college leaders have learned to cope with the reductions in state aid, and how the culture of the organization is adapting to a new paradigm. Data were analyzed using both initial and pattern coding to address the research question: What are the specific strategies community college leaders use in adapting to the change in funding models as a result of the reduction of taxpayer-supported funding?

Chapter 4: Results

The purpose of this basic qualitative interview study of community college leaders was to understand the specific strategies community college leaders use to respond to reductions in state aid. Those strategies may be reactive in nature, such as raising tuition and reducing budgets through changes in programs or services, or the strategies could be proactive, building alternative revenue streams and a college culture that responds to the need for alternative revenue streams. The research question for this study was as follows: What are the specific strategies community college leaders use in adapting to the change in funding models as a result of the reduction of taxpayer-supported funding? In this chapter I describe the research setting, demographics of the study, processes for data collection, how the data were analyzed, procedures to establish trustworthiness, and results of the study.

Research Setting

Each participant was either a CFO or CEO of a public community college that had been subject to reductions of state aid since 2005. To my knowledge, and as confirmed by the participant responses, none of the reductions in state funding had been restored to these colleges at the time of the study. The participants all worked in colleges located in two states: one in the Southwest and one in the Midwest. The location of the colleges was not predetermined or limited; any college that met the criteria was eligible for participation. The circumstance of participants being located in two states was due to the referral recruitment strategy of the study. The initial two referrals were from two states, and subsequent referrals were from the same states. Three of the institutions were

considered large with enrollments over 10,000 students; two were considered medium size with enrollments of 5,000 to 10,000 students; and one college was considered small with enrollment of less than 5,000 students. Two of the institutions were multicollge districts, so the participants represented 18 separately accredited colleges. All of the interviews were conducted by phone with the participants in the setting of their choice.

Demographics

All participants were either CEOs or CFOs of their respective colleges and had some measure of control over their community college budget. One participant had retired three months prior to the interview; however, the participant had worked in that position for 13 years, and the interview was designed to capture events that had occurred in the previous 10 years, so this person was qualified to participate in the study. As noted in Table 1, six participants were CFOs, and one was a CEO. Having spent an average of 11 years at their current positions, the participants represented a wealth of community college financial experience, with an overall average of 19 years of experience. All participants worked as an executive officer of their college during times of the most extreme reductions in state aid, which uniquely qualified them to be participants in the study.

Table 1

Demographics of the Participants

Participant	Position	Institution size (# of students)	CC finance experience (years)	Total finance experience (years)	Years in current position
Participant 1	CFO	5 - 10,000	17	17	9
Participant 2	CFO	>10,000	12	22	12
Participant 3	CFO	>10,000	22	32	13
Participant 4	CFO	5 - 10,000	23	23	18
Participant 5	CEO	>10,000	12	12	4
Participant 6	CFO	<5,000	35	35	12
Participant 7	CFO	5 - 10,000	13	30	6
Average			19	24	11

Data Collection

Two participants were initially recruited from replies received from an emailed invitation to participate that was forwarded by the former CFO of a community college district to colleagues who may have been interested in participating. Per the snowball sampling method described in Chapter 3, one of those participants referred me to two more willing participants, one of those referred me to two more, and one of those referred me to the seventh participant. Those who were interested replied directly to me, and I provided them with an informed consent form, which explained the nature of study and the participant's role in it. Participants were asked to sign the form acknowledging their willingness to participate in the study. Following this step, arrangements were made to conduct and record the interviews.

The interviews were conducted by phone at a time that was convenient for the participant and in a location of the participant's choosing. The interviews took place

between August, 2016, and October, 2016, and were approximately one hour in length. The interviews contained open-ended questions and were recorded on two recording devices: a Philips DVT 8000 Voice Tracer digital recorder that has three microphones for accurate voice reproduction, and an Android smartphone. The redundancy of devices was necessary to ensure a complete recording in case one of the devices failed; in fact, one of the devices did fail during the first interview. Both devices had the capability of producing digital files that were exported to software to assist transcription.

The interview process went according to plan using the interview protocol. There were times I varied from the script to explore specific responses, but I was able to ask every question in the script. Given the mutual interest in the subject, it was sometimes difficult not to share personal experiences; however, I kept them short and quickly returned to the script. These slight variances seemed to build camaraderie between the participant and me, making the person more at ease and improving rather than detracting from the quality of the interview.

After the interviews were conducted and transcripts developed through a professional transcription service, the participants were provided with the transcript of their individual interview for transcript review (Miles et al., 2014), which included confirmation of transcript accuracy or correction of errors. Two participants suggested minor corrections, and none of the participants were concerned about the content of their comments appearing in the study. Participants received assurances that no personally identifiable information would be revealed, and no statements would be attributable to any specific person or institution. Participants were described in the study as Participant

1, Participant 2, etc., and any possible relationships that could be inferred were obscured in this report. All participants received a \$25 Amazon gift card as a token of appreciation for their participation in the study. There were no variations in data collection from the plan presented in Chapter 3, nor were any unusual circumstances encountered.

Data Analysis

Data analysis followed Miles et al.'s (2014) advice for qualitative researchers to begin analyzing data as they collect them, as opposed to analyzing the data after leaving the field, using "first cycle" coding and revising the codes in the "second cycle" (p. 73). I created an initial set of codes from the conceptual framework, research question, and propositions ("deductive" coding according to Miles et al., 2014, p. 81). This process provided a lens through which to start analyzing the data as they were collected; I then adapted the codes in the second cycle as data were further analyzed.

The second cycle included the use of the software program NVivo to run a frequency analysis of the initial codes to develop word maps, relational graphs, and concept maps to visualize how the terms related to one another. The initial set of codes were expanded to a list that included the following: *budget, communication, community, creative, entrepreneurial, expense, fund, grant, innovative, leadership, mission, partnership, practices, revenue, funding, and planning*. NVivo can be used to search for these words explicitly, as well as words that contain the stem from these words, so words containing plural or other endings were included in the search. The software allowed me to group the responses from each interview question into additional nodes so the responses from each individual participant could be viewed together.

Themes and Subthemes

Data analysis revealed the following themes in the study: *alignment of interests with the donors, alignment of interests with legislators, awareness of grant compliance and donor restrictions, declining state support, decreased access, innovative ideas, need for entrepreneurial efforts, reduction in programs or services, rising tuition, and strategies to reduce expenses*. Further analysis of the themes allowed the grouping of these themes into two categories: *consequences from the reduction in state funding and strategies to mitigate that reduction*. Table 2 illustrates these relationships.

Table 2

Themes and Subthemes

Consequences from the reduction in state funding:

Perceived need to raise tuition

Reduction of programs and/or services

Decreased access as a result of increased tuition

Strategies to mitigate that reduction:

Strategies to reduce expenses

Innovative ideas to raise revenue or reduce expenses

Alignment of interests with donors' interests

Alignment of interests with legislators' interests

Awareness of grant compliance and donor restrictions

All of these themes help to describe the specific strategies community college leaders use in adapting to the change in funding models as a result in the reduction of taxpayer-

supported funding. A brief description of each theme within its respective category will help to show how the data were analyzed to arrive at the findings in this study.

In the category of *consequences from the reduction in state funding*, all participants agreed that *declining state support* was having a major impact on the operations of the colleges, and all of them had to *raise tuition* and *reduce programs and/or services*. Four of these participants stated or implied that the mission of the college could be affected due to *decreased access* as a result of the increased tuition and reduction of programs or services if students could not afford to attend, or the programs and services they needed were not offered. Two participants noted the lowering of faculty and staff morale as a consequence of the reduction in state funding, and two other participants suggested the reduction in state funding was leading to a shift away from higher education as a public good to a private good as students had to bear more of the cost of their education.

To *mitigate the reduction in state funding*, all participants had to find *strategies to reduce expenses*. There was general agreement that this was only a short-term strategy, and long-term solutions would have to be found to avoid further increases in tuition and/or reductions of programs and services. These long-term solutions would require *innovative ideas* and the need for *entrepreneurial efforts*. Long-term solutions included philanthropic contributions and a restoration of state funding. Several participants suggested that, for fundraising campaigns to be successful, the colleges need to understand and *align the interests of the donors* with the campaign. Similarly, any efforts to increase legislative appropriations need to be justified by *aligning interests between*

the colleges and the legislature. Furthermore, the colleges need to be *aware of any compliance requirements that accompany grants or donor restrictions on contributions.*

For example, many grants come with compliance requirements that necessitate substantial expenditures, and many contributions come with restrictions that may affect the academic integrity of programs or may not be allowed by law or policy.

Propositions

Using the categories and themes described above, I was able to construct another analytical perspective by comparing the results to the propositions developed before the study:

1. Proactive: College leaders have proactively developed strategic plans that call for innovative and creative strategies to develop alternative revenue streams to replace state funding, have communicated those strategies to inspire a culture shift within the internal college community, and have implemented plans to successfully replace reduced state funds.
2. Reactive: College leaders have been forced to react to the loss of state funding through tightening budgets, eliminating programs, focusing on controlling costs, and raising tuition to generating revenue.

The themes and propositions formed the basis for presenting the study results later in this chapter. Table 3 illustrates the relationship between the themes and the propositions.

Table 3

Themes and Propositions

Proposition 1 - Proactive:

Innovative ideas to raise revenue

Alignment of interests with donors

Alignment of interests with legislators

Awareness of grant costs and donor restrictions

Proposition 2 - Reactive:

Increased tuition

Strategies to reduce expenses

Reduction in programs and/or services

Decreased access due to efforts to balance budgets

Although not every participant contributed to every theme, no participant disagreed with the overall themes and simply provided different perspectives on the them; therefore, there were no discrepant cases in the study.

Evidence of Trustworthiness

To establish trustworthiness in this study, I used specific processes to ensure credibility through confirmation with participants, transferability by using analytic generalizations, dependability by establishing a chain of evidence, and confirmability by reducing any level of bias. The following sections will describe these processes.

Credibility

To ensure credibility, I used three strategies: conducting “member checks” (Miles et al., 2014, p. 58), using “pattern matching” (Yin, 2013, p. 143), and addressing “rival explanations” (Yin, 2013, p. 45). The participants were provided with the interview transcript for confirmation of transcript accuracy, or correction of errors, and they were allowed to amend any statement they made as individuals. This process ensured that what was reported aligns with the intent of the participants’ statements. Pattern matching involves predicting the outcome of the study, then comparing the results with that prediction. The first proposition developed for this study served as that prediction. Rival explanations are useful to confirm that alternative explanations were not excluded from the analysis and added credibility to the study by confirming the data did not confirm contradictory explanations. The second proposition developed for this study served as the rival explanation. None of these processes varied from those described in Chapter 3.

Transferability

The propositions used for analytic generalizations in this study serve as a method of generalizing the lessons learned from this qualitative interview study that can then be applied to other concrete situations. Yin (2013) suggested qualitative studies should not be thought of as individual samples, but rather as opportunities to illuminate theoretical concepts or principles. The findings generally aligned with the propositions; however, new concepts emerged that could be useful to future researchers and practitioners. These expectations align with what was proposed in Chapter 3.

Dependability

The member checks that provided credibility also provided dependability because they ensured that what is reported aligned with the intent of the participants' statements (Miles et al., 2014). Dependability was also increased by what Yin (2013) called a "chain of evidence" (p. 126). To establish the chain of evidence, all sources were cited in the dissertation, and those sources have been stored electronically in the study database. The documents were converted to pdf format, relevant information to the citation was highlighted, and the documents contain information on how and where they were developed. This process allows an external party to independently verify the sources of the information contained in the study. The dependability processes of this study did not vary from what was described in Chapter 3.

Confirmability

Miles et al. (2014) suggested the member checks described above would also serve to confirm the internal coherence of data. In terms of the bias that could affect confirmability, Patton (2001) described self-awareness as a critical component to qualitative research. As noted earlier, my perspective that higher education serves the public good and should be financed through taxpayer-supported funding had the potential to introduce bias to the study; however, self-awareness of my bias enabled me to set it aside for research purposes.

Confirmability was also obtained through one participant validating the knowledge of another participant. Although interviews using a snowball sampling method could result in biased responses since the participants may know other

participants and may share the same ideas or perspectives, Patton (2001) suggested that purposeful sampling, such as snowball sampling, has the power to find cases with valuable, in-depth information. As noted above, the participants in this study generally agreed on all themes but provided different perspectives on each of the themes, providing an overall confirmability of the study.

Study Results

The research question for this study was: What are the specific strategies community college leaders use in adapting to the change in funding models as a result in the reduction of taxpayer-supported funding? There was consensus that confirmed taxpayer-supported funding in the form of state support was declining. Participant 4 summarized the general mood by saying:

Well, I think it's been declining steadily for about 18 years that I know of. I mean it really, since I started here, if I track the statistics as far as our funding, it's been going really downhill. The problem of course is that we're really reaching a point of where states are not supporting community colleges.

Participant 5 concurred by saying "Do we have to start thinking of budgeting without any state money?", and Participant 6 said "I just see a general disinvestment in community colleges, in higher ed as a whole." Another respondent viewed the reduction of state aid in a larger context: "Society needs to realize, go back to believing that higher education investments are an investment for the public good, which would then require more spending by the federal and state governments for community colleges" (Participant 7).

Most participants suggested there is a need for innovative ideas and entrepreneurial efforts to generate revenue that would replace the loss of state aid.

To aid in the design of the study and analysis of the results, two propositions were developed that suggested what the answer to the research question might be. The themes and propositions will form the basis for reporting the study results in this chapter.

Proposition 1: Proactive

The first proposition (Proposition 1: Proactive) that would serve as an answer to the research question was:

College leaders have proactively developed strategic plans that call for innovative and creative strategies to develop alternative revenue streams to replace state funding, communicated those strategies to inspire a culture shift within the internal college community, and implemented plans to successfully replace reduced state funds.

The first part of this proposition states that college leaders have proactively developed financial strategic plans. Interview question 13 asks “Does the college have a strategic plan with regards to finance?”, and a follow-up question asks “If so, what specific commitments are there to fund goals identified in the strategic plan?” Although the participant responses indicated general agreement with an intent to develop strategic plans that call for alternative revenue streams and inspire a culture shift within the community, none would say that they had successfully achieved this goal. All participants acknowledged their institution has a strategic plan, and the strategic plan has funding mechanisms, but none of the respondents expressed much confidence in the

plans. Sample responses included: “It [the college] has a strategic plan, but I don’t know that it is particularly an effective strategic plan. It’s really a series of initiatives not tied together with particular purpose, and it’s not tied together with funding, quite honestly” (Participant 3). Participant 4 said: “Okay, so we have a strategic plan and financing is always part of it, [Laughter] that’s always been part of our strategic plan. Trying to increase funding sources is definitely on there.” Others acknowledged their plans were “best estimates” (Participant 6) due to the undependable funding from the state.

The responses for this part of the proposition clearly indicated that planning to develop new revenues is essential, and all of the colleges were engaged in some sort of planning to generate revenue, but none of the participants indicated the plans were effective. For example, Participant 1 stated “We do have a strategic plan. It’s very specific. It has 16 projects. Each of those having a number of objectives within them. It’s very specific.” However, when queried about the success of the specific projects that addressed revenue generation, the participant implied those projects had not yet been successful, responding “We’re having now to focus much more on efficiency in doing the same thing we used to do just in a more efficient manner.”

Despite a lack of confidence in planning, there was general agreement in the need for alternative revenue streams to replace state funding as evidenced by the themes of *need for entrepreneurial efforts* and *innovative ideas to raise revenue*. With respect to the need for entrepreneurial efforts, many of the comments were similar: “I think that’s a direction that we’re definitely going to have to look at” (Participant 5). “I don’t think we

have a choice” (Participant 1). “I think that is essential” (Participant 3). Participant 3 passionately summarizes the need for innovative thinking:

I think that something bold needs to happen, and I don't think that it's bold in terms of organizational structure; I think it's bold in terms of service delivery. I think if we get bogged down into structure, it's kind of form over substance, and I think we really need to be thinking of new programs, new approaches that meet what students want from us and meet what the community wants from us. And I think we need to be seeking out new markets. When I think about some of the things that XXX has done, everything from partnering with XXX -- WOW that's just huge!

The colleges had many innovative ideas, and the administrators interviewed were exploring these ideas, and even trying to implement a few. The examples spanned a wide range, from minor tweaks of existing ideas like differential tuition that could be expanded from the traditional model based on residency to a tuition based on program cost or students' future earnings potential, to building an Internet service infrastructure that provides Internet service to an entire community. Several colleges have implemented experimental tuition models based on program cost, and one college is close to piloting a tuition program based on earnings potential, but none of these colleges have made the tuition changes permanent. The Internet service project at one college is still under consideration.

Other ideas included innovation funds, revenue generation committees, housing cell towers or windfarms, building partnerships with businesses who will invest in

classroom equipment and labs, and selling working cash bonds that will be paid back with tax dollars. Participant 6 is using this new idea of working cash bonds to generate new revenue that can be used for operating expenses, but this is difficult because it requires voter approval. Traditionally, bonds have been sold to finance capital expenditures that are paid back through a property tax levy, but the concept of working cash bonds is to finance a revolving fund that can be lent to other funds and the interest generated can be used for operating expenses. The bonds are retired through a property tax levy and once paid off, the college gets to keep the money. The difficulty in obtaining voter approval has been mitigated by only proposing new working cash bonds as previous capital bonds are retired so that there is no increase in tax, just a replacement of one bond for another. Participant 6 acknowledged this as a long-term strategy, but nevertheless, one that has had some limited success and has the potential to eventually provide an alternative revenue stream. None of these ideas by themselves would replace all of the lost state funding; however, Participant 5 summed it up: “We’ve had some pretty clever ideas out there that could work. Are they \$1 million? No! Collectively if we can keep getting in those tens of thousands of dollars, it helps.” Clearly, the need to replace the loss of state funding was at the forefront of these executives’ priorities.

With respect to communication of the need for alternative revenue streams and a shift in culture toward recognizing that need, a word search revealed only one occurrence of the word ‘communication’ in the entire set of interviews, so there does not appear to be much emphasis on communication. A specific question probed the effect of fundraising programs on the culture of the college. Interview question 10d asked “Do

you think the philanthropic efforts have had an effect on the attitudes of the college's students and employees and the overall culture of the institution?" The majority of respondents claimed that faculty and staff have responded positively to fund-raising efforts by the college; however, one respondent detected a negative effect due to the fact the employees had gone for so long without raises, and now they were being asked to support the college financially. The positive response to fund-raising efforts indicated that employees were willing to contribute personally; however, these contributions were in the form of funding student scholarships. The interviews did not indicate these employees recognized a relationship between the loss of state aid and the need to develop sustainable revenue streams over the long term. Perhaps this is because the communication of a scholarship contribution campaign is usually a simple message of helping students, whereas the message to inspire a collective desire to create alternative revenue streams would be much more complex and may require a long-term marketing campaign as opposed to a short-term scholarship campaign.

Several participants suggested that, in order for fundraising campaigns to be successful, the colleges need to understand and align the interests of the donors with the fundraising campaign. Participant 3 said:

I don't think any of the campaigns I've seen in my 22 years have gone nearly as well as what the ambitions were, except for some really early ones that were very small approaches. The two larger ones I can recall really fell far off the mark, and I don't really know what the strategies need to be, but I think you have to be

touching potential donors in a way that meets the needs that they want to have met. You can't be trying to pitch something that they have no interest in.

Participant 5 concurred by saying

If you deliver the message correctly and you share with them all of the benefits, it could be okay. Educating them early on and not all of sudden just coming to them saying, 'We're turning to you now to help us'.

According to Participant 6, an effort needs to be made to align donors and gifts: "they [the Development Office] know how to help people understand the needs for the gifts and connect the right donor with the right gift. It's yielded a great deal of equipment for our college that we otherwise couldn't afford." One participant suggested that community colleges have a unique opportunity to convince large donors their contribution would have a much larger impact at the community college level than it would at a larger institution. This participant recalled the story of a \$1 million gift to a small community college in New Jersey and compared the substantial effect that gift had on that college as opposed to the trivial effect of giving it to an Ivy League foundation. "I don't think we've sold that story to big donors" (Participant 2).

Similarly, Participant 3 noted any efforts to increase legislative appropriations need to be justified by aligning interests between the colleges and the legislature.

They've got to feel at the end of the day that we have something to offer. If we have nothing to offer, some value propositions, then they don't care. We're just another person. But if we have a solution to whatever their problem is, they might be interested. For whatever reason, they have tended not to view us as any

kind of solution toward workforce development problems, or economic development, or whatever. So we have to figure out what they think the problems are and what we have to offer, or talk to them about the problems they think that we could offer solutions for. If we go in there and say well here's our problems, they don't care, because it's not their problem. We have to turn the table on how we present ourselves.

Several participants stated that many legislators do not understand what community colleges do and what services they provide. "Again, it's all about the marketing; it's all about the communication piece" (Participant 5).

All of the colleges attempt to influence legislation through lobbying efforts.

Participant 7 said "Our president does [lobbying], and all the presidents I've worked for have made it a part of their job to get to know their legislators [on a] first name basis -- be able to pick up the phone and call them". Each college had an individual lobbyist, and the colleges had a statewide community college association that also employed a lobbyist. Despite these efforts, the evidence suggested the efforts have not been very successful given that the two Southwestern and Midwestern states represented in this study have suffered some of the largest reductions in state funding. On the other hand, one college described a large success by influencing legislation that lifted expenditure limitations to allow them to spend more of local tax appropriations. In this example, the legislators not only needed to be convinced of the benefits, but a statewide tax research organization that initially opposed the legislation also had to be convinced of the benefits.

This is a clear example of how marketing and communication can indicate an alignment of interests with those legislators.

In another innovative idea of how legislative interests could be aligned, Participant 7 suggested states might be encouraged to restore some state funding if the federal government were to require a 'maintenance of effort' by the states to qualify for federal financial aid. This concept is similar to what is now being required by the federal government with the Medicaid program. States receive a subsidy from the federal government to supplement the expense of providing healthcare to low-income people, but the states only receive the subsidy if they maintain a certain level of spending on the program. Perhaps this concept could be applied to the federal assistance given in the form of Pell grants and subsidized student loans.

Furthermore, the colleges need to be aware of any restrictions that accompany the grants or contributions. For example, many grants come with compliance requirements that entail substantial expenditures, and many contributions come with restrictions that may affect the academic integrity of programs or may not be allowed by law or policy. Participant 4 described this challenge by saying:

You have to be very careful in that you look at it, and you make sure there aren't any strings attached. Then one other caveat for grants is that many of them have lots of compliance requirements. Realize when you get that money that's great, you can provide this wonderful service. Then, if you have very heavy duty compliance, you're spending a lot of time and a lot of research with amounts of documentation that you would just not believe.

While most respondents agreed that community colleges are looking to grants and donations to help replace the lost state funding, the use of the monies is restricted such that they cannot be used to offset operational expenses. “They give you resources to be able to do something nice and extra” (Participant 2), and Participant 7 concurred by saying “I’m a little bit more sanguine about [grants] because they only supplement what you’re going to do. They’re not really helping your operating funds. They are good to help with new programs that may generate revenue down the way.” All colleges in this study had found it difficult to replace lost state aid with grants and contributions.

In summary, the evidence did not support the first proposition as an answer to the research question. On the other hand, the responses indicated a collective desire to get their institutions to a point where there would be strategic plans that support alternative revenue streams to replace the loss of state aid, and specific plans to implement the objectives. The evidence from the interviews suggested that community college leaders acknowledged the need for new revenue streams to replace state aid; however, efforts have not been truly strategic with planned programs that have been communicated to college constituents. Furthermore, there has been a lack of specific strategies to implement these programs and encourage a college culture that acknowledges the need to develop alternative revenue streams. Reliance on increasing grants and contributions has not been as successful as hoped, and these sources of revenue often come with burdensome restrictions and compliance costs.

Proposition 2: Reactive

This analysis now continues with the second proposition (Proposition 2: Reactive) that served as an answer to the research question:

College leaders have been forced to react to the loss of state funding through tightening budgets, eliminating programs, and focusing on controlling costs and raising tuition to generating revenue.

The majority of respondents expressed concern that the lack of funding would lead to some students being denied access to higher education because of higher tuition and a reduction in programs and services. Participant 6 said, “What troubles me is that even now, I think access is becoming more limited. Many of us have raised our tuition rates in amounts larger than we would choose in normal times.” Participant 5 spoke to the cuts in programs and services: “I’m sure you’ve read in the papers how many colleges have had to reduce staff, there are layoffs. Cutting programs.” These concerns strike at the heart of the community college mission as evidenced by the comment by Participant 2 who said, “It’s forcing us to reevaluate our mission as an institution. What most of us have assumed as our mission in the past, we simply cannot fulfill that any longer.” The concern also extended to the community colleges’ support for the community. Participant 4 said:

On the revenue side, we had to keep increasing tuition as mentioned earlier. It was again kind of looking at both sides. We are concerned about the access side of are we still being as accessible to students as we should be? Are we being as responsive to businesses in our local area in our county as we should be? Are we

providing the training that they need in order to have—to be successful at operating their business?

Clearly, the community college traditional mission of access could be threatened by the loss of state aid if alternative revenue streams were not found to replace that aid.

Although all participants interviewed engaged in some form of revenue generation, none of the programs or ideas had the potential to replace the loss of state funding; therefore, these administrators have been forced to resort to tightening budgets, eliminating programs, and focusing on controlling costs.

The strategies to reduce expenses revealed in the interviews were numerous and included:

- reductions in workforce
- elimination of programs
- elimination of services
- campus closures
- increasing class sizes
- more use of adjunct faculty
- increase of hourly work weeks
- fringe benefit restructuring
- spending freezes
- hiring freezes
- delaying capital projects
- and many others.

Most of the colleges had specific targets and established some measure of prioritization to ensure students felt the least impact. Participant 4 described their process this way:

Thinking of it in terms of concentric rings and that the things and the services that were furthest or most remote or didn't touch the students as much is where we started. Anything that was like institutional or business side, they were going through their cuts first. Everything, every little thing was on the table. I have pages and pages of examples.

Some colleges had very sophisticated prioritization programs. At one institution, every department, including academic, student services, and administrative had to submit reports that detailed how their programs satisfied the college mission, and how every line item in the budget aligned with the mission. These reports were then used to determine spending priorities. According to the respondent (Participant 3), this project was a massive undertaking, similar to program reviews, at every operating unit of the college. The results yielded a lot of data, and committees comprised of broad representation from the various employee groups developed recommendations ranging from travel policy revisions to program eliminations. Some of the easier and less controversial recommendations, such as the travel approval process, have been implemented. The other, more controversial recommendations, such as academic program elimination or consolidation, elimination of athletics, reduction in force, and class and compensation studies, are still awaiting administrative decisions and implementation.

Participant 1 provided some specific examples of spending reductions and increased efficiencies, including reducing faculty, performing the same functions with less fulltime people, increasing class sizes, and reducing programs that historically lost money but had been kept because of the benefits they provided to the community.

We are eliminating one or two programs a year when we went for decades without eliminating programs. Sometimes it's not that they are losing money, it's that they are maybe not contributing a lot. Especially when there's not a critical need for that program in the area of jobs-wise.”

Several other participants described other examples of program and service elimination such as closing child-care centers and reduced access to athletic facilities.

In summary, the colleges have had to react to cuts in state aid through raising tuition and implementing cost-cutting mechanisms such as program reductions, employee layoffs, reduction of services, increased class sizes, and a variety of other measures. Many of the colleges have developed creative and innovative programs to raise revenues; however, these programs have not matured enough to replace the reduction in state aid.

Summary

The research setting for this study was 18 public community colleges located in either one Southwestern state or one Midwestern state that had been subject to reductions in state aid since 2005. All participants in the study were either CEOs or CFOs of their respective colleges who had some measure of control or influence over a college budget and had an average of 11 years in their current position. The participants were recruited through a referral snowball recruitment strategy, and the data were collected through

telephone interviews with the participants. The data were analyzed using NVivo software to develop themes and sub-themes. To establish trustworthiness in this study, specific processes were used to ensure credibility through confirmation with participants, transferability by using analytic generalizations, dependability by establishing a chain of evidence, and confirmability by reducing any level of bias.

The study found that community college leaders have had to react to the loss of state aid by raising tuition and reducing budgets. These colleges all acknowledged the need for strategic plans to develop alternative revenue streams to replace state funding. Although all the interviewed colleges have such plans, none would say these plans have been effective. Large-scale attempts to replace the loss of revenue through grants, fundraising, and restoration of legislative appropriations have met several challenges because grants come with associated compliance costs, many donations carry restrictions, and lobbying efforts have mostly proven ineffective. On the other hand, several smaller-scale creative and innovative attempts to replace state aid have been implemented, such as expanding differential tuition strategies, selling working cash bonds, and developing infrastructure projects like cell towers or windfarms; however, none of them seem to have the capacity to replace major sources of funding. The failure to generate alternative revenue streams has prompted a reliance on raising tuition and identifying cost-cutting mechanisms through sophisticated prioritization initiatives to implement program reductions, employee layoffs, reduction of services, increased class sizes, and a variety of other measures to balance budgets. The increase in tuition and reduction of programs has led to a perception that decreased access could potentially endanger the community

college mission. Perhaps the future of community college funding has shifted from the reliance on the three traditionally large sources (i.e. tuition, taxes, and state aid) to a combination of smaller, multiple sources that will be aggregated to provide sufficient funding.

Chapter 5 will continue with a further interpretation of these findings, limitations of the study, recommendations for further research, implications for positive social change, and conclusions for the study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this basic qualitative interview study of community college leaders was to understand the specific strategies community college leaders use to respond to reductions in state aid and corresponding increases in tuition. Those strategies may be reactive in nature, such as reducing budgets through changes in programs or services, or the strategies could be proactive, building alternative revenue streams and a college culture that responds to the need for alternative revenue streams. I used a basic qualitative interview design to explore the specific strategies community college leaders use in adapting to the change in community college funding. There was a gap in the current research regarding how institutions are managing this culture shift to develop other resources. This study helped to identify specific strategies community college leaders have used to adapt to change in funding models. I also explored the strategies community college leaders have developed to mitigate the reduction in state aid, and how those strategies have been implemented.

The findings indicated that community college leaders have had to react to the loss of state aid by raising tuition and reducing budgets. Large-scale attempts to replace the revenue through fundraising and restoration of legislative appropriations have been met with several challenges. Several small-scale, innovative attempts to replace state aid have been implemented; however, none seemed to have the capacity to replace major sources of funding.

Interpretation of Findings

Current research suggests that over the last three decades, there has been a shift away from taxpayer funding of higher education toward a businesslike model relying on fundraising, profit-oriented research, sophisticated financing, and higher tuition (Dowd & Grant, 2007; Kapitulik et al., 2007; Kennamer et al., 2010; Newfield, 2010a; Tollefson, 2009). Although this study was not designed to provide empirical evidence of this shift, all participants acknowledged the reduction in taxpayer support, the need for more fundraising, and the need to raise tuition. Although community colleges typically are not engaged in research, there were some examples of sophisticated financing. At the community college level, bond financing is usually limited to support for capital projects; however, Participant 6 described a sophisticated financing method using working cash bonds to fund operational expenses using the method that has traditionally been reserved for generating capital funds. Participant 7 had to promise to raise tuition to provide operating funds for the buildings proposed in a capital funding campaign. The slogan used for this campaign was “shared responsibility.” This study supported the research that indicated a shift in community college funding away from state aid toward alternative revenue sources.

Pfeffer and Salancik’s (2003) theory of resource dependency (RDT) views organizations as being connected with networks of social relationships and interdependencies. Strickland (2013) gave an interpretive definition of these characteristics as they apply to community colleges and resource development. The continual decline of state aid means, in Strickland’s view, that community colleges

cannot be dependent on external resources; they must learn to understand the environment and become interdependent with those external resources by constructing lasting relationships. Pfeffer and Salancik's theory provided a satisfactory framework for this study, and the findings of this study supported the theory.

The findings in this study demonstrated that colleges must align their interests with those of donors and legislators to develop external funding. Several participants stated that many legislators do not understand what community colleges do and what services they provide. Although these colleges employ lobbyists, the evidence suggested the alignment of interests has not been successful, given that two states represented in this study have suffered some of the largest reductions in state funding. On the other hand, one participant described major success in influencing legislation that lifted expenditure limitations and allowed the college to spend more of local tax appropriations. In this example, the legislators needed to be convinced of the benefits, and a statewide tax research organization that initially opposed the legislation had to be convinced of the benefits. This is a clear example of how marketing and communication can indicate an alignment of interests. This finding also aligns with Ruggiano and Talliafero's (2012) finding that nonprofits need to rely on political lobbying to secure external resources. However, when an alignment of interests can be demonstrated to generate external funding, this study revealed other potential problems with generating external funds.

To offset state funding losses, several authors suggested community colleges will have to generate alternative revenue streams to avoid further increases in student tuition, and the alternative revenue streams envisioned would probably be based on grant

development and fundraising (Dowd & Grant, 2007; Drummer & Marshburn, 2014; Fernandez, 2011; Mullin & Honeyman, 2008). The findings revealed that, although the colleges described in this study were relying on grant development and fundraising as a source of funds to replace reduced state aid, most have not been successful and have identified potential problems with the sources of funding. Many grants, for example, come with compliance requirements that necessitate substantial expenditures, and many contributions come with restrictions that may affect the academic integrity of programs, or may not be allowed by law or policy. Furthermore, many grants and contributions provide the initial funding to get a project or program developed; however, the maintenance of effort to sustain the project can be detrimental to a community college budget because the project will need ongoing operational support. Increasing grants and donations also requires a commitment from the employees of the institution.

Renninger et al. (2007) suggested community college faculty may have to rethink their role in the institution, which has been a role of teacher rather than researcher. Although the study was specifically designed to reveal cultural shifts in the attitudes toward the need for fundraising to replace lost revenues, the only finding from the study was that faculty and staff have become more willing to personally contribute to fundraising campaigns but have not become actively involved in the efforts. There was no evidence to suggest there has been a culture shift among faculty and staff to respond to the need for alternative revenue streams. This finding could be the result of a general lack of communication and marketing program designed to inspire a collective desire to create alternative revenue streams. Based on the limited results of this study, grant

development and fundraising may play a part in replacing state aid, but they will not be the sole substitutes.

Fundraising and grants are not the only alternative revenue streams colleges can use to replace state funding. According to Renninger et al. (2007), community colleges have been exploring alternative means of raising revenue, such as leasing space, creating courses and other intellectual property that can be sold, and offering more training to private corporations. The colleges described in this study had many innovative ideas, and the administrators interviewed were exploring these ideas and trying to implement a few of the promising ones. The examples spanned a wide range of ideas from differential tuition to building an Internet service infrastructure that provides Internet service to an entire community. The differential tuition ideas diverged from the traditional in-state or out-of-state rates based on residency, to rates based on program cost or students' future earnings potential. Other ideas included innovation funds, revenue generation committees, housing cell towers or windfarms, building separate colleges to provide workforce training at higher tuition rates, building partnerships with businesses who will invest in classroom equipment and labs, and promoting a new type of public financing that extends the concept of capital bonds to working cash bonds. The general agreement among the participants was there is no single source that would replace state aid, but several innovative sources combined could possibly restore the funding necessary to keep tuition low so that the traditional open access mission of community colleges is not threatened.

Community colleges have historically been known to provide open access to higher education through open admissions and relatively low tuition (Cohen et al., 2013; Davidson, 2013; Gilbert & Heller, 2013; Phelan, 2014; Strickland, 2013; Tschechtelin, 2011). Phelan (2014) posited this mission is now at risk due to a crisis in the funding of community colleges, and the community college mission of open access and opportunity for all “now seems to be unsustainable” (p. 12). Most of the respondents in this study expressed concern that the lack of funding would lead to some students being denied access to higher education because of higher tuition and a reduction in programs and services. All respondents have had to raise tuition and curtail programs and services to balance their budgets. This finding is especially troubling for lower SES students who will likely have to resort to student loans to fund their education. Three participants suggested this loss of public funding for higher education was due to the perception of higher education as a private good rather than a public good, and this perception could lead to further separation of socioeconomic classes.

The current literature on the social ramifications of the transformation of community college funding describes the evolution of the community college as an institution that provided higher education access to the lower SES classes to facilitate their upward mobility and enable them to enter the middle and upper classes of society (Beach, 2011; Cohen et al., 2013; Levin & Kater, 2012). The increase in tuition, and education costs in general, may be limiting access to higher education for lower SES students, especially those who do not earn as much over their lifetime as their higher SES counterparts (Bartik & Hershbein, 2016; Gilbert & Heller, 2013). Some researchers

contend the quality of education is suffering due to a shift in focus away from the students toward efforts to replace the reductions in state aid (Rhoades, 2012). The findings in this study did not support the assertion that the quality of education is being eroded because most of the colleges in this study had a mechanism in place to prioritize the reductions in budgets to protect educational quality. On the other hand, most of the respondents recognized the short-term nature of these strategies, and some had begun to reduce student support services that could have impacts over the long run. Therefore, the logical conclusion seems to be that, if new funding sources are not developed soon, the quality of education will be eroded in the long term. The findings in this study support the apparent consensus among current authors that the reduction of state aid and corresponding increase in tuition will have long-term social and economic ramifications due to reduced access and the higher costs of tuition being allocated to students who have no other means to pay that tuition except to incur debt.

Limitations of the Study

The limitations identified in Chapter 1 that could affect the trustworthiness of this study included the variation in the nature and contributory percentage of state funding from state to state, the personal characteristics of participants, the effect of specific strategies on other financial functions, the effect of a limited number of participants being able to describe an institution-wide shift in culture, and the necessity of conducting phone interviews that limited observation of nonverbal information.

Although there are variations in how states distribute funds, the funding models in the states represented in this study are similar enough to other states so that the strategies

identified in this study could be useful to any college that has experienced a reduction of any type of state funding. The limitations based on personal characteristics still hold because administrators in other states may be more (or less) risk averse in utilizing these strategies. The study revealed how the usefulness of these strategies could be limited by other financial functions such as the need to provide ongoing operational support for a project that was initiated with one-time funding. No evidence suggested there has been a culture shift among faculty and staff to recognize a need for alternative revenue streams, but the lack of evidence could be a result of the limited perspective of an administrative position. Expanding the study to include other positions might reveal there has been a culture shift. Similarly, in-person interviews may have been helpful to explore the potential cultural shifts.

The participant selection method was a snowball recruitment strategy that relied on personal referrals. The referrals were exhausted after the seventh interview, which could have limited the study if saturation had not been reached. To continue the study would have required exerting more pressure on the existing participants, or requesting an amendment to the IRB approval. Expanding the study was not necessary because the sixth and seventh interviews reaffirmed what had been said in previous interviews; therefore, saturation had been achieved.

Recommendations for Further Research

This study revealed several possibilities for future research based on several findings. The respondents generally agreed that new initiatives are necessary to either restore or replace state funding. A broader exploration of what colleges are doing to

restore or replace is warranted. Restoring state funding would require that colleges align interests with legislators and develop successful legislative tactics. To replace state funding, colleges will need to research and develop bold initiatives, craft successful communication and marketing strategies, and facilitate a culture shift within their institution that embraces the need for alternative revenue streams. That research needs to be focused on college awareness of the cost of complying with restrictions associated with the revenue stream or ongoing maintenance of the project, and the costs should not exceed the benefit of those sources of revenue. Finally, the overall impact of reduced funding on the community college mission, student access, and community support are issues that need further study. The following suggestions for future research could help illuminate these issues.

The nature of this qualitative interview study was to explore strategies to replace the reduction in state funding. Most of the strategies identified in this study were not sufficient to replace that funding. Research on several small-scale innovative attempts to replace state aid may show promise, such as expanding differential tuition strategies, selling working cash bonds, and developing infrastructure projects like cell towers or windfarms; however, more time will be needed to confirm the efficacy of these strategies. Findings from the current literature indicated that grants and contributions would be the likely source of funds to replace state aid, but this study did not support those conclusions. Perhaps a broader survey of colleges uses of grants would produce additional insight. Findings from the current literature also suggested that community

colleges would need to explore creative and innovative ideas, and this study found that several colleges were beginning to experiment with such ideas.

All respondents recognized the need for innovative ideas, but one participant claimed these ideas need to be “bold” (Participant 3). As an example, Participant 3 highlighted an arrangement between a major university and a large corporation to enable their employees to complete a college degree, which would increase enrollment for the university. Participant 6 described an innovative strategy to extend the public financing of capital projects through bond funding to include a type of working cash bond. Now may be the time to expand the search for similar strategies by surveying a broad range of community colleges. Perhaps the survey could be sponsored by a national organization such as the American Association of Colleges and Universities, or the American Association of Community Colleges. Sponsorship by such a large organization could provide a representative sample of the larger population of community colleges. The survey and the degree of innovation (passive to bold) of identified strategies, and also on the success or failure of any legislative tactics, and how the institutions used marketing and communication to align interests with legislators. Follow-up research could then further explore the specific items identified so that other community colleges could employ variations of the same strategies. This recommendation could illuminate how colleges are using bold initiatives to restore state funding, and how the institutions are using marketing and communication to align interests with donors and legislators.

Prior research had identified the need to explore the attitudes of faculty and staff regarding the need for developing alternative revenue streams and a culture that embraces

that need. Due to the nature of this study that only interviewed employees from a specific group (administrators), the single identified change in culture or attitude was a willingness of employees to contribute financially to a college foundation. This seemed to be a very narrow perspective. A broader qualitative study would be useful to interview employees from a variety of employee groups to determine the attitudes toward the need for generating revenue, and how employees from different groups see their role as contributing to the fulfillment of that need. This recommendation could help identify means to encourage a culture shift in employees to embrace the need to develop alternative revenue streams. Perhaps the results could form the basis of a communication and marketing strategy that aligns the interests of the employees with the institution.

Although prior research suggested that grants and contributions would likely be the main mechanisms to replace state funding, the participants in this study suggested that grants and contributions may not be the ideal strategy due to the costs and restrictions imposed by the grantors or donors. A broader study of colleges could reveal whether this is just a perception based on anecdotal evidence, or if the costs truly outweigh the benefits of grants and donations that can effectively replace state aid. If such a study could be sponsored by a national organization such as the Association of College and University Budget Officers, the sample might be representative of most community colleges. This study could identify the costs associated with complying with grant requirements, as well as the costs associated with maintaining the effort of an initially funded project. The results could then be used to inform colleges on where to focus their efforts to generate additional revenue. This recommendation could help determine if the

anecdotal findings in this study that suggested the costs of compliance and restrictions might outweigh the benefits of grants and contributions are representative of other community colleges.

Finally, the impact that reduced state funding has had on the community college mission, student access, and surrounding communities cannot be understated. Prior research, supported (though not conclusively confirmed) by the findings in this study, alludes to the impact that higher tuition will have on students' ability to get a higher education, and the need to finance that tuition with debt. That impact could be especially burdensome on lower SES students because prior studies have found they do not earn as much as higher SES students over their lifetimes, so amortizing that debt is even more difficult than for those students who earn more. The higher tuition and accompanying debt inhibits the opportunity for lower SES students to get a college degree, which contributes to higher costs for the surrounding communities and the larger society in the form of the lack of a qualified workforce, higher medical costs, lower life expectancy, and less civic participation. Prior studies have analyzed isolated factors affecting the education of lower SES students and student access in general, but none have specifically studied the broader impact of reduced state funding on mission, access, and community. Such a study would be broad in scope and require much collaboration, but hard data from such a study could inform the larger question posed by several of this study's participants: Is higher education becoming a private good instead of a public good that could lead to even more socioeconomic class divide in the United States? Whether education is a private or public good is partly a question of values, and it might not be

easy to answer through objective research. However, there are costs and consequences associated with assigning financial responsibility for education primarily either to the individual or to society, and research can attempt to identify and measure those costs and consequences.

Implications

This study has several implications that could contribute to positive social change. Community college administrators must consider how to adapt to the changing landscape of community college funding; legislators will need to consider social policy considerations that balance the needs of society versus the individual; future researchers could use this study as a basis for further exploration; and, most importantly, students will be faced with a difficult choice over the value of a college degree versus the cost and debt associated with that degree. This section will describe these implications.

The shift away from public funding of higher education due to the decrease in taxpayer support has been accompanied by a corresponding increase in student tuition; however, this study found the increase in tuition, along with other attempts to generate revenue, have not been enough to replace the reduction in state aid, so institutions have been forced to look for other means to reduce operational expenses such as consolidating programs, limiting enrollment, closing campuses, hiring more part-time faculty at lower salaries, and relying on technology for course delivery. This study helped to identify specific strategies community college leaders have used to adapt to the change in funding models, mitigate the reduction in state aid, how those strategies have been implemented, and which have succeeded or failed. Community college leaders have attempted to

generate more grants and donations, but found the compliance costs and restrictions did not rise to the level of replacing state aid. Differential tuition strategies and the sale of working cash bonds contributed to the replacement of funding, but these strategies will need more time to fully develop. Prioritization initiatives have helped to increase efficiency by identifying redundancies, but large scale restructuring will take time to implement because of resistance to change and political barriers. Entrepreneurial ideas, such as using college resources to build Internet infrastructure, cell towers, or wind farms, have been conceptually developed but not yet implemented. Other smaller initiatives have contributed some revenue, but not enough to offset the loss of state aid.

The implication for administrators is that no single source, such as grants or contributions, will be sufficient to replace state aid; however, a combination of smaller, creative, and innovative strategies could potentially combine to be the new funding source. The results could be valuable to many other community college leaders who are experiencing reductions in state aid. If the strategies are limited to managing expenses to balance budgets with decreasing revenues or increasing tuition to balance those budgets, community colleges may risk not being able to fulfill the mission of open access. Limiting access to higher education could indicate a shift in society's perception of higher education as a private good rather than a public good, and legislators may have to take these perceptions into consideration as they formulate public policy.

Some stakeholders, for example, would argue an educated populace benefits all of society – the 'rising tide lifts all boats' argument (Dowd, 2008; Doyle, 2012; Levin & Kater, 2012; Ross, 2013). These stakeholders point to the benefits of an educated

electorate in a democracy as well as an educated workforce in an increasingly complex economy. Others would argue that, since higher education will enable an individual to earn more during a lifetime, perhaps the cost should be borne by the individual (Cohen et al., 2013; Dowd, 2008; Dwyer et al., 2013; Katsinas et al., 2013). Legislators will continue to struggle with social policy considerations that balance the needs of society versus the individual. This study could inform those considerations as it has confirmed a shift in funding patterns toward increased reliance on tuition that could threaten the open access mission of the public community college system. That loss of access could be devastating to lower SES students who, without a college education, would likely contribute less to the overall good of society and could even become a burden to society. Social policy that either restores public funding or promotes the development of alternative revenue streams could contribute to positive social change by enabling the community college system to fund its mission of providing a higher education to all students, regardless of their SES.

With respect to alternative revenue streams, the results of this study suggested that new ideas for generating revenue would have to be extremely innovative, revenues that originate from grantors and donors would require an alignment of interests between the colleges and funders, and that grants and contributions may not be the ideal strategy due to the costs and restrictions imposed by the grantors or donors. Future studies could explore the degree of innovation inherent in new funding ideas, how interests are aligned and communicated to potential funders, and how the costs associated with complying with grant requirements and maintaining the effort of an initially funded project are

justifiable. The results could then be used to inform colleges on where to focus their efforts to generate additional revenue. The findings from this study suggest that community college leaders may have to look at a combination of funding sources to replace state aid.

Prior studies have analyzed isolated factors affecting the education of lower SES students and student access in general, but none have specifically studied the broader impact of reduced state funding on mission, access, and community. The findings in this study generally support the conclusion that increased tuition and reduction of programs and services could be limiting access – especially for lower SES students. Future research that extends this study could produce hard data that could be used to inform decisions on how to protect access and ensure the opportunity for lower SES students.

The most profound implication of this study would probably be the impact on students. Although the institutions in this study have been attempting to find replacements of state funding, as of the date of the study, the colleges have been relying on increased tuition and budget cuts to cope with reductions in state funding. If funding is not restored, or alternative resources identified to replace that funding, tuition will likely continue to rise, programs will be reduced or eliminated, lower SES students will be priced out of an education, and even students of moderate means will be faced with the difficult choice over the value of a college degree versus the cost and debt associated with that degree. If that occurs, society will suffer a loss of trained workers, reduced lifespans, higher medical costs, and an educated populace of critical thinkers who improve society through civic participation.

Conclusions

The growth in community colleges has been tremendous, but a major challenge accompanying that growth has been the source of funding to pay for higher education. Traditional funding has consisted of tuition, local taxes, and state aid; however, the trend has been toward more reliance on tuition and less reliance on state funding. Current research suggests this shift has been toward a reliance on grants and fundraising; however, large-scale attempts to replace the revenue through fundraising and restoration of legislative appropriations have met several challenges. The evidence suggests that community college leaders have reacted to the loss of state aid by raising tuition and reducing budgets. On the other hand, several small-scale, creative, and innovative attempts to replace state aid have been implemented; however, none of them seem to have the capacity to replace major sources of funding. Perhaps the future of community college funding has shifted from the reliance on the three traditionally large sources (i.e. tuition, taxes, and state aid) to a combination of smaller, multiple sources that will be aggregated to provide sufficient funding.

Without the ability to restore state funding or develop alternative revenue sources, the rise in tuition, and education costs in general, may be limiting access to higher education for students, especially for lower SES students who cannot afford the debt necessary to fund the higher tuition. Limiting access for these students suggests society will suffer a loss of trained workers, reduced lifespans, higher medical costs, and an educated populace and loss of critical thinkers who improve society through civic participation. If we are to avert this trend, this study recommends the full college

community must become aware of the impacts of any change in funding, and be engaged in a discussion of their what role should be, and will be, with a focus on students' ability to enroll and succeed in college and life.

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Appendix: Interview Questions

Demographic Questions:

What is your current position?

- 1) How long have you worked with community college finance and/or budgeting?
- 2) How long have you worked with any nonprofit finance and/or budgeting (including community colleges)?
- 3) How long have you held your current position?
- 4) How long have you worked with the current community college?

Interview Questions:

- 5) What is your view of the current state of community college financing and budgeting in the United States?
- 6) Do you feel there needs to be a change in the way community colleges are funded?
 - a. If so, what changes would you suggest?
 - b. What obstacles do you envision?
- 7) What systemic processes does your institution have in place to develop successful programs for generating alternative revenue streams and encourage revenue growth?
- 8) What are your thoughts with regard to whether public community colleges should adopt more entrepreneurial methods to generate revenue?

- 9) How does your college attempt to influence funding decisions that are made externally such as legislative appropriations, property tax assessments, governing board decisions, or philanthropic contributions?
- a. If philanthropic efforts successfully replaced a portion of the lost state aid, what was the involvement of the faculty and staff in those efforts?
 - b. What do faculty and staff do to support the fundraising efforts?
 - c. Do the restrictions that often accompany philanthropic contributions affect the college's autonomy with respect to the nature of the courses and other services that the community college provides?
 - d. Do you think the philanthropic efforts have had an effect on the attitudes of the college's students and employees and the overall culture of the institution?
- 10) What systemic processes does your institution have in place to prioritize and limit expenditures in order to balance those expenditures with anticipated revenues?
- a. Has the institution been able to offset the reduction in state aid solely through prioritizing and limiting expenditures?
 - b. Have academic programs or enrollments been affected by these decisions?
 - c. What other impacts have these decisions had on the institution?
- 11) What specific strategies have your institution's leaders implemented that contribute to a culture for creative solutions related to community college finance?

- 12) Does the college have a strategic plan with regard to financing?
 - a. If so, what specific commitments are there to fund goals identified in the strategic plan?
- 13) What kinds of community partnership, support, and involvement exist with the college?
- 14) Are there any other thoughts you would like to share with me?
- 15) Do you have any questions about this process?