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Community College Management Strategies for Balancing the Budgets

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
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Walden University
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Abstract

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by

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MBA, Shenandoah University, 2010

BS, Bridgewater College, 2007

Doctoral Study Submitted in Partial Fulfillment

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Walden University

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Abstract

During declining revenue, community college leaders may be unable to balance their budgets effectively. Community college managers who fail to balance budgets negatively impact a college’s financial sustainability. Grounded in Burn’s transactional leadership theory, the purpose of this qualitative single case study was to explore strategies community college managers use to balance their budgets in an environment of declining revenue. Data were collected from eight semistructured community college manager interviews and company documents: enrollment data, budget data, performance-based funding model data, and the strategic plan. Thematic analysis was used to analyze the data. Four themes emerged: (a) budget alignment with strategic planning; (b) vacancy savings; (c) enrollment-driven and performance-based funding models; and (d) alternative revenue streams, including strategic partnerships and grants. A key recommendation is for community college managers to collaborate to align and integrate budgeting processes with their institution’s strategic plan. The implications for positive social change include the potential for better responsiveness to community needs through a more skilled workforce. The identified strategies could improve the economic outlook where the colleges are located, thereby fulfilling these colleges’ primary mission.

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Dedication

This dissertation is dedicated to my mom, Carol Dodson, for her unwavering support, guidance, and encouragement throughout each step of this process. On May 5, 2011, she blessed me with a living donor kidney transplant, the ultimate gift of life. Her irreplaceable gift has allowed me the opportunity to pursue this doctoral degree with determination and persistence and live each and every day to its fullest. Mom, thank you for always setting the example and investing in our educational journey from the very beginning.

I also dedicate this dissertation in honor and memory of my grandparents, James Arvin and Dorothy Sullivan who were there for all the big milestones growing up: recitals, ball games, graduations etc. They taught me that with hard work, perseverance, and resiliency, anything is possible.

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Section 1: Foundation of the Study

Community college financial sustainability has been a topic of growing importance as college leadership struggles to balance budgetary needs and concerns appropriately. Community colleges are spending $1,448, or 16%, less per student in 2017 than they were before the 2008 economic recession (Mitchell et al., 2017). During the economic recession, community colleges experienced a resurgence of enrollment numbers and growth; nevertheless, recent data suggested students are returning to the workforce and full-time employment. In response to the economic recovery, colleges are forced to increase tuition rates per student and cut spending efforts to balance budgets. Reduction in spending impacts the quality of education offered to students directly (Mitchell et al., 2017).

Background of the Problem

Low enrollment numbers at community colleges have been attributed to the availability of state and federal financial aid (Koh et al., 2019). Grant aid programs serve as encouragement for students to enroll at the community college level (Protopsaltis & Parrott, 2019). Concurrently, there have been yearly increases in student tuition rates (Allen & Wolniak, 2019)

In regard to community college financial sustainability, management should address the impact of long-term strategic planning on the future viability of community colleges (McPhail &McPhail, 2020). Four necessary strategies on behalf of community colleges to remain successful include (a) adopting a strategic governance model, (b) embracing a comprehensive approach to organizational change, (c) utilizing a transactional or transformational leadership style, and (d) employing a consultant to aid in this facilitation process (Tschechtelin, 2011). Strategic planning is influential to the sustainability of community colleges (McPhail& McPhail, 2020). Future research opportunities can provide additional solutions to long-term planning for success.

Problem and Purpose

Problem Statement

Substantial declines in state revenue and reduced financial aid have led to a new norm in community college financial sustainability (Koh et al., 2019). Following the 2008 economic recession, community colleges were confronted with sharp reductions in public funding (Kolbe & Baker, 2018). Per the National Center for Education Statistics, enrollment numbers declined at a rate of 9% from 2010 to 2020. According to the Community College Research Center, community colleges serving the most disadvantaged population receive $8,700 per student, less than half of educational-related revenue received by 4-year colleges and universities per student; 53% of community college revenues per full time equivalent student were from state and local appropriations, 18% was from federal appropriations, and student tuition accounted for 17% of revenue. The general business problem is the financial crisis confronting community college management due to their inability to balance their budget during periods of declining revenue. The specific business problem is that some community college managers lack the strategies necessary to balance their budgets in an environment of declining revenue.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies community college managers use to balance their budgets in an environment of declining revenue. The population sample of this study consisted of community college managers from one of the 23 public community colleges located in the state of Virginia. This group of participants was appropriate for the study because these managers have balanced the budgets while being confronted with declines in revenue. The findings from this study could have implications for positive social change by helping community college managers balance budgets to ensure financial viability to meet the needs of their target populations. Society could benefit from these findings, as more students would be able to receive a community college education, thereby increasing the number of skilled workers available in the area, which could improve the economic outlook of the community.

Population and Sampling

Qualitative researchers choose the appropriate sample size based on a convenience sample, everyone who volunteers, a quota sample, or people with positions of interest related to the study (Yin, 2018). The population size for this case study included eight community college managers from one of the 23 public community colleges located in the state of Virginia. I used criterion sampling to select community college managers in the state of Virginia. The criterion sampling strategy is useful in selecting participants who meet specific criterion (Yin, 2018). Criterion sampling ensures potential study participants meet predetermined criteria significant to the study. I also collected information from college documents that pertained to balancing the budget strategies. The qualitative information I received from the interviews and analysis of college documentation resulted in themes. Data saturation occurred at the point in which no new information was gained from the study participants (Yang et al., 2022).

Nature of the Study

The three primary approaches to conducting research are qualitative, quantitative, and mixed methods. Researchers utilize the qualitative method to address the *what* or *ho*w of a phenomenon (Yin, 2018). I employed the qualitative methodology, incorporating participant interviews, because the purpose of my study was to provide an in-depth understanding of successful strategies for balancing community college budgets during periods of declining revenue. Researchers employ the quantitative approach when responding to research questions which test the significance of relationships among variables (Yin, 2018). Thus, I did not use the quantitative method of research. I also did not use the mixed method approach since it is a combination of the quantitative and qualitative methods (Rutberg & Bouikidis, 2018).

Three qualitative research designs are case study, ethnography, and phenomenology (Yin, 2016). Researchers use the case study design to explore individuals or organizations through complex interventions, relationships, communities, or programs (Yin, 2018). I applied the case study design to describe and explore the research topic phenomenon. Researchers use the ethnographic design when they seek to discern patterns and relationships of a social or cultural setting (Argyriadis, 2021). Phenomenological researchers explore the meanings of participants lived experiences of a particular phenomenon (Urcia, 2021). Therefore, I did not use the ethnographic and phenomenological designs.

Research Question

What are the strategies community college managers use to balance their budgets in an environment of declining revenue?

Interview Questions

1. What are the strategies you use to balance the budget in an environment of declining revenue?
2. How did you assess the effectiveness of these strategies?
3. What were some of the barriers you were confronted using these strategies?
4. How did you overcome these barriers while using these strategies?
5. What other information can you share related to balancing the budget in a period of declining revenue?

Conceptual Framework

Burns (1978) developed the transactional leadership theory, and Bass (1985) extended the work of Burns by explaining the psychological mechanisms that underlie transactional and transformational leadership. For the transactional leadership framework, Burns described leadership as a guiding mechanism toward which employees can reach goals, wherein leaders clearly define the roles and duties of individual employees (Burns, 1978). In transactional leadership, the leader refuses to deviate from the target, determines and corrects problem areas, and provides reinforcement as necessary (Northouse, 2018). Performance is based on the outcome of the individual's work and can bring positive or negative reinforcement (Northouse, 2018). Transactional leadership imposes conditional rewards to catalyze employee competence which provides positive feedback on performance (Jacobsen & Bogh Andersen, 2017). Contingent rewards strengthen self-efficacy which directly links to organizational performance. Extrinsic rewards utilized in transactional leadership models can be important tools for managers in the public education sector (Jacobsen & Bogh Andersen, 2017). As applied to community college budgets in this study, I expected the college's managers would have needed to ascertain their employees' performance through evaluation and determine the necessity and performance efficiencies for positions. Results of this study could contribute to the existing body of the relevance of the transactional leadership style by providing community college management with transactional strategies that could help them balance their budgets.

Operational Definitions

Balanced budget: Budget in which revenue equals expenditures.

Community college manager: Senior level administrator within the community college system.

Transactional leadership: Leadership style that focuses on the exchange relationship between leaders and followers and monitors deviation from agreed-upon normative standards (Bass, 1985; House, 1971, 1996; Popli & Rizvi, 2017).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are facts that the researcher considers to be true and can shape the research (Theofanidis & Fountouki, 2018). Qualitative researchers hold assumptions, including ideas and beliefs about the subject due to previous knowledge and experience (Yang et al., 2018). There are a number of assumptions I made based on the research completed during the literature review. The first assumption was that not all community college managers would use the same approach to achieving financial sustainability. Previous studies addressed causes of declining revenue including enrollment declines and state and federal funding cuts; however, research related to community colleges and budgeting is limited. The second assumption was that during the data collection phase of research each community college manager would be truthful in their response to the research questions posed. I also assumed that participants would comprehend the questions and relate their experiences without attaching personal bias. The third assumption was that the time scheduled for the interview session would be adequate and disruptions would not occur. The fourth assumption was that the qualitative single case design was the most appropriate for understanding how community college managers successfully balance the budgets during periods of declining revenue. I recorded, analyzed, and identified patterns and themes within the participant responses.

Limitations

Limitations include the weaknesses of the study (Munthe-Kaas et al, 2018). Researchers need to identify and explain the limitations or potential weaknesses and constraints in their research (Ross & Zaidi, 2019). Limitations of this study included the role of interview participants, sample size, geography, lack of transparency in responding to questions, and the disadvantage of being the sole, novice researcher.

The criteria for the study limited study participants to eight community college managers from one of the 23 public community colleges located in the state of Virginia. These individuals hold senior administrative positions within their organization and often made decisions reflecting a top-down management style. Decisions made at this level impact employees at all levels of the organization including those responsible for day-to-day operations; interviewing only these eight participants may have limited the validity of the study. In addition, this study was limited by geography. Participants were located at a community college in the state of Virginia, which may not be comprehensive and generalizable to the broader education field within the United States.

Receiving complete responses from the interview participants was also a potential limitation. Education is an industry that relies heavily on the confidentiality of information; as an example, community colleges must comply with federal and state regulations such as the Family Educational Rights and Privacy Act. Study participants may not have been completely transparent and withheld information that might give them a competitive edge within the education industry. The sample size and nature of the educational sector could limit my findings to this particular industry. Finally, as the sole researcher for this study, the depth and richness of data collected was limited.

Delimitations

Delimitations are the boundaries and scope of the study, including the beginning and end point of research (Yin, 2018). The scope of this study encompassed data from semistructured interviews. The eight managers who participated in this study were senior level administrators within the community college industry including college presidents, vice presidents, deans, and directors of finance and operations. I limited the study to strategies community college managers use to balance the budgets during periods of declining revenue. I utilized these delimitations to account for variances in population within community colleges in Virginia.

Significance of the Study

Contribution to Business Practice

The findings of this study have the potential to help area community college managers who need strategies to balance their budgets. Managers are responsible for overcoming enrollment fluctuations, rising tuition costs, and budget shortfalls to maintain financial viability (Kolbe & Baker, 2018). Area community college managers could benefit from strategies emanating from this study to achieve balance of their budgets.

Community colleges could, therefore, remain accessible for diverse populations because of lower costs (Kolbe & Baker, 2018).

Implications for Social Change

The findings from this study have implications for positive social change by helping community college managers balance budgets and meet the needs of their target populations. The community could benefit from these findings, as more area students can receive a community college education. This could increase the number of skilled workers available in the area, which could improve the economic outlook of the community.

A Review of the Professional and Academic Literature

Opening Narrative

The purpose of this literature review was to document the review of academic and scholarly literature sources regarding strategies community college managers use to balance budgets during periods of declining revenue. This review includes a discussion of the organization of the literature, research strategy, and a summary of peer-reviewed articles. Researchers develop literature reviews to justify their studies and develop credible evidence to support their research (Ribenfors, 2020). Within this review, I explored a diversity of resources associated with the study topic and strategies that community college managers could use to balance budgets during periods of declining revenue.

Organization of the Review

The literature review begins with my analysis of the conceptual framework of transactional leadership and ends with the study topic's main themes and significant elements. The conceptual framework was used as a guide to present a literature review that embodies a diversity of sources in the existing literature on community college management, leadership style, and budget balancing strategies. With this literature, I addressed the benefit of implementing management and leadership strategies to balance community college budgets. Next, I addressed the strategy for searching the literature. Then, I applied the business problem by incorporating the theory that built the conceptual framework, transactional leadership. The various teachings on transactional leadership provided insight into the importance of community college management's position and competing or opposing views relative to management's role in balancing budgets for community college sustainability. Finally, I discussed other significant elements of the study topic, such as (a) community college manager's positions becoming increasingly more financial, (b) diverse management and leadership strategies employed by community college administrators, (c) community college funding and strategic planning, and (d) the impact of student retention/success efforts on budgeting.

Strategy for Searching the Literature

I used key terms including *transactional leadership*, *community college budgeting*, *community college leadership and management*, *strategic planning*, and *performance-based funding* to review relevant academic literature as I gathered information to support this study. I used various academic databases accessible through Walden University's library resources, including EBSCO host, Business Source Complete, Emerald Insight, and Google Scholar to locate peer-reviewed and other articles as I developed the framework for this study. As best as possible, I set parameters for peer-reviewed publications between 2018 and 2023 to ensure the source information came from the most recent literature; however, historical research related to this topic was difficult to locate. Additionally, I worked to minimize the use of non-peer-reviewed sources, seminal works, and peer-reviewed publications before 2018.

Application to Applied Business Problem

The purpose of this qualitative single case study was to explore strategies community college managers use to balance their budgets in an environment of declining revenue. A better understanding of the relationship between leadership style and management strategies may facilitate the development of better processes, procedures, and strategies to ensure community colleges remain financially sustainable. This study was grounded in the transactional leadership theory. Burn's (1978) transactional leadership theory describes leadership as a way to guide employees to reach goals by defining the roles and duties of individual employees. Educational institutions employ transactional leadership frameworks when integrating the budgetary process with the strategic planning process to balance their budgets during periods of declining revenue.

College Managers' Positions Increasingly More Financial

Balancing a community college budget requires strong management skills. Colleges are planning to hire a large percentage of senior-level administrator positions within the next five years due to the growing number of vacancies. A study of community college presidents in North Carolina asserted there are six critical financial challenges confronting these managers, who are called on to be visionaries, fundraisers, managers, mentors, arbitrators, economic developers, and public servants (Price et al., 2015). The study ranked the six most critical financial challenges including lack of funding, the overall financial health of the college, obsolete technology, lack of flexibility in the budget, lack of financial transparency, and increased debt volumes. Three of the most immediate concerns noted were maintaining student access during a period of increasing educational costs, maintaining enrollment during periods of decreased funding at both the federal and state level, and reducing costs without impacting the quality of education (Price et al., 2015).

College manager's jobs are increasingly more financial in today's economy. Administrators must understand the financial issues impacting the community college industry, determine resource allocation, and supplement state funding with alternate funding sources such as donations and grants to maintain or expand offerings to students (Price et al., 2015). One area of increased cost in higher education is related to the goal of managers who continuously strive to improve the quality of educational programs and services provided. Balancing a budget becomes problematic when considering how to lower costs without damaging the quality of education, student access, or participation (Price et al., 2015). Community colleges have been increasing student tuition and fees to offset major reductions in state revenues. Managers are required to come up with creative and flexible financing strategies to offset the loss of state funding (Price et al., 2015). Colleges should ensure compliance with federal and state laws and regulations. Costs associated with compliance are estimated to be as much as 10% or more of total expenditures and are growing more rapidly than instructional costs or total revenue (Price et al., 2015).

By far the largest budget expenditures for most higher education institutions are the personnel costs for faculty and staff. Personnel costs include salary and benefits; aging faculty demographics lead to a much higher cost. Faculty often retire later than employees in other industries, increasing salary and total compensation costs (Price et al., 2015). The hiring and training of new faculty members, as well as attracting and retaining faculty members is cost prohibitive; salaries also vary widely based on disciplines taught. The key cost drivers of higher education include faculty salaries, support staff needs, and equipment costs (Price et al., 2015).

Diverse Leadership/Management Strategies Employed by Community College Managers

Community college managers employ different leadership strategies to balance the budget during periods of declining revenue. Leadership is a process through which actions and interactions among leaders and followers leads to the realization of organizational goals and objectives (Basham, 2012). Leadership is one of the most important components in the success of an organization. Technological advances, increasing competition on a global scale, increased governmental regulation, and the changing needs and concerns of workers are a few of the challenges confronting today's leaders (Basham, 2012). Businesses must be adaptable to change, and leaders must have the skills necessary to implement those changes. The application of leadership has evolved throughout history; in the 20th century, numerous studies were done to evaluate the importance of leadership in organizations. For example, the Ford Motor Company was able to effectively close a plant without disturbing or relocating staff. Leadership within the military was also influential during this period; well-led forces were victorious over poorly led forces (Basham, 2012).

Policy makers and educators have suggested that the current educational process needs altered. Education has promoted individuals out of poverty, reduced intolerance, ignorance, and been a source of prosperity and foundation for democracy (Basham, 2013). But highly centralized management has been deemed ineffective in light of rapidly changing environments such as organizations which are in the knowledge industry. Only managers closest to the market and production processes access current information and ideas about what changes are necessary to accomplish goals (Basham, 2012). These individuals should be guided by budget discipline, or an overall spending target, through indicators toward the desired result. Indicators should measure spending and its outcomes, not the usage of a particular input or resource deployment by the different colleges and departments, who are nearest to the market and production process.

Community college leaders are responsible for maintaining existing institutional resources, creating new resources when necessary, overseeing non-academic activities, and public understanding. College finance officers are responsible for juggling the additional pressure to adapt, learn, and innovate to remain completive in a constantly changing environment. Transactional managers are focused on performing the necessary functions of management while simultaneously ensuring the college is running smoothly and efficiently. Transformational managers perform the management functions, but are more concerned with empowering employees, the delegation of teams, and acting as a visionary to chart a mission and direction (Basham, 2012). Organizations are learning systems dependent on the ability of leaders to give directions on the organization's goal towards continuous learning. Transformational leaders learn across their specialist discipline whereas transactional leaders are the at the top of their function or specialty and have a limited perspective to see what change is needed (Bass, 1985). Recent studies suggest transformational leadership may also enhance decision making, organizational commitment, and overall organizational effectiveness (Christian et al., 2013).

In addition to different management styles, public and private organizations operate differently regarding context and culture. The major leadership differences between the public and private sector are related to the characteristics of public organizations and the political environment in which they operate (Christian et al., 2013).

For instance, the transactional leadership style has been used often in the decision making of public political and governmental organizations and has been the preferred management style. Community colleges operate in a political environment in which decision making is decentralized and relies on service delivery and problem-solving where the student and college administrator meet, whereas private colleges and universities are more centralized than a community college and the driving force is business and not necessarily politics. Differences in the public and private sector lead to challenges in decision making, leadership, and motivation styles. Recent economic and social crises influencing government spending, budgetary policies, and action have directly impacted local citizens in a community college's service region (Christian et al., 2013). The weak economic environment due to the economic recession has shaped local government decisions. The external environment has required decision makers to meet increased demand for educational products and services to achieve goals. Local community college leaders need to increase service levels to satisfy the demands and needs of the community (Christian et al., 2013).

Educational institutions use transactional leadership extensively. Transactional leadership is the exchange of rewards contingent on performance (Khan, 2012). Transactional leadership relates to the leader and follower relationship, aligning in the education setting with the relationship between instructors and students. Students are required to complete assessments; students who perform well receive extrinsic rewards or high grades (Khan, 2012). The author stated that environmental readiness requires educational managers be confronted with changes in education to accommodate diverse social issues and develop new ways of thinking regarding educational access, economic issues, accountability, technology, and leadership. Educational institutions must develop practical leadership strategies as they navigate potential environmental changes.

Adaptive leaders are quick to react to environmental changes as their main priority is not reliance on previous experience to address today's problems, but instead looking at current challenges to achieve resolution (Khan, 2012). The author claimed that adaptive institutions should avoid repeating previous behaviors and be more open to being flexible as the situation arises. Adaptive leaders are focused on the current reality of the situation instead of the actions of the institution in the past. Transactional leadership focuses on potential situational or environmental changes as its main focus is on leader-follow interactions and not the external factors impacting the college. When leaders choose not to consider the external factors impacting a college, poor decision making is often the result. Educational institutions are complex organizations with an array of competing internal and external factors; managers should evaluate these factors when leading and making decisions. Educational institutions are plagued by difficult individual, current, and organizational complexity (Khan, 2012).

Transformational leaders employ behavioral strategies including setting goals and high expectations while providing followers with the autonomy to pursue their own developmental goals. Transformational leaders take risks and embrace progress, change, and innovation. Alternatively, transactional leaders employ behavioral strategies by distinguishing clear roles between the leader and the follower, identifying clear communication channels and closely observing employees' errors to ensure compliance with policies and procedures. The behavioral strategies employed by each leadership style impact the goal-pursuit strategies of the followers (Hamstra et al., 2014). First, transformational leadership relies on communication of a long-term vision for the organization and encouraging followers to develop new perspectives (Hamstra et al., 2014). Transformational leaders focus on a global level of construal versus a local level of construal. Through the use of growth and development of its followers, leaders can encourage their employees to try out novel ways of accomplishing goals. Second, the vision of transformational leaders propagates an ideal state of affairs (Hamstra et al., 2014). Third, transformational leaders communicate positively regarding the future of the organization, focusing on possibilities and opportunities rather than obstacles and impossibilities (Hamstra et al., 2014). In addition, transformational leaders are confident and display high expectations about their follower's ability to reach goals. Followers feel encouraged to be ambitious and expect positive outcomes. Fourth, transformational leaders accept personal risk and encourage followers to do so as well in an attempt to alter the status quo (Bass, 1985; Bass & Avolio, 1995).

In contrast, transactional leaders are focused on task-driven, short-term success and heavily manage the performance of their followers (Hamstra et al., 2014). The transactional approach leads to employees considering tasks and goals in a local, concrete way that encourages organization and detail-orientedness. Transactional leaders set up and enforce rules for exchange and agreements for performance. In addition, transactional leaders focus on compliance, encouraging followers to view their work goals as responsibilities and obligations (Hamstra et al., 2014).

Leadership styles within organizations directly influence work culture. Quality work culture is imperative in the financial institution sector as it is crucial to ensure employees provide superior service to the organization's customers. Researchers employed a study to determine which leadership style creates quality work institutions (Ali et al., 2015). Data collection occurred through survey and direct interviews with senior level financial institution executives. The multifactor leadership questionnaire was utilized to measure leadership styles and ask questions on quality work culture adopted from Geri McKeown (Bass & Avolio, 1995). Findings indicate transactional leadership produced the greatest influence on quality work culture. In addition, strong quality work culture is related to the number of years the financial institution has existed within the industry.

Leadership has been gaining more attention from researchers in the field of higher education; however, studies related to this topic are rare and difficult to locate (Davis et al., 2015). Community college managers respond to a myriad of opposing viewpoints from their constituents, the ever-changing demographic makeup of the student population, the lack of funding uncertainty, and growing demands from various stakeholders in the community leading to an increase in the complexity of systems these managers must be able to maintain. Recent literature has pointed to new models of leadership for those leaders responsible in increasingly uncertain and complex times. Systems thinking leadership seeks to help leaders respond to growing organizational complexities and transition leadership from a traditional bureaucratic model to a more adaptive model (Davis et al., 2015). Changes in the economy, technological innovation, and globalization have all led to the need for a more skilled workforce.

Strategic Planning and Community College Budgeting

Implementation of a strategic plan is no longer enough to meet the increasing call for accountability of funds usage within the public sector (Douglas, 2017). Public funding for higher education is now under extreme scrutiny as state legislatures and the general public continue to question how tax-supported dollar utilization occurs at colleges and universities. State legislatures continue to discuss the return on investment for public spending on higher education and whether the benefits outweigh the costs of state spending to support public institutions. Strategic plans are often utilized by higher education to demonstrate how the allocation of resources aligns with state and community priorities (Douglas, 2017). Strategic planning employs accountability mechanisms which relate to community college budgeting and meeting community needs, both of which translate to a positive impact on the community and marketing and public relations efforts. Strategic planning and resource allocation are necessary for university and large urban community college settings; however, literature has not previously addressed resource allocation about small community colleges confronted with unique challenges (Douglas, 2017).

Small community colleges deal with size, setting, expectation, and available resource challenges. Small community colleges need to understand integrated strategic planning and budgeting efforts so they will be able to prove fiscal responsibility and accountability at a time when community colleges and public colleges, in general, are required to do more and more to meet the needs of the community with gradually declining state investment. Rural or small community colleges outnumber suburban and urban community colleges by one and a half times; nevertheless, rural community colleges represent only one-third of all community college students but 60% of total community colleges (Douglas, 2017).

The mission of community colleges can vary depending on the size. Though the overall mission of community colleges is to meet the educational needs at every level of the service region and work to develop an appreciation for higher education, the size of the community college can impact service and product availability. Large community colleges can be more selective in the services provided as they are most likely able to partner with other community agencies to provide cultural, social, and economic development service whereas rural community colleges have been described as a broker of educational services and are not necessarily able to meet the educational needs of everyone in the community. Community colleges must plan strategically, educate the community, collaborate with other community agencies, build coalitions to avoid duplication of efforts and ensure the community's needs align with limited resources available. Smaller community colleges lack the industry that can be a source of funding for community colleges, forcing these institutions to continuously scan the environment and be comprehensive in their planning to anticipate needs and potential funding sources. Local and state financial shortfalls may significantly impact the operation and services of the community college (Douglas, 2017).

Community colleges managers must employ strategic planning and targeted budget allocation to demonstrate their planning for the future of the organization while remaining fiscally responsible. Strategic planning involves following the organizational mission, setting the vision and direction, and accomplishing goals and objectives. For decades American public colleges have struggled to integrate strategic planning and budget processes; however, the challenge has become more significant as community colleges have seen the erosion of financial support from state and local funding while the expectations of accountability have increased. Planning must set institutional priorities, followed by the maneuver of the budget to support the priorities. Aligning two traditional independent processes in (a) funding process that leads to a detailed budget or systems of budgets in the case of community colleges, and (b) strategic planning process that leads to a clear process and direction is difficult (Douglas, 2017).

Strategic planning requires the alignment of the institution with its environment for long-term viability (Douglas, 2017). Resource allocation requires the allocation of resources in alignment with the priorities of the organization. One study evaluated the relationship between budgeting and planning at a large research university and found successful budgeting and planning required documentation of a detailed planning process, leveraging of resources to support institutional planning when available, centralized decision-making related to resources, and the need for strong managerial and administrative leadership utilizing a top-down management style approach (Phelps, 1996). A survey of community college executives found a disconnect between long-term strategic planning and resource allocation (Williams, 1998). Another study on the coordination of strategic planning and resource allocation at a large community college found the successful integration of both factors when the college places emphasis on structure, support, leadership, and planning linked to resource allocation and communication (Pagel, 2011).

Another study focused on understanding the community college process for developing the strategic plan and budget, determining how strategic goals and resource demands are established and prioritized, as well as identifying systems, documents, and processes that will allow the two factors to be integrated (Douglas, 2017). The study included interviews with thirteen institutional leaders directly involved with strategic planning and resource allocation at a rural community college. (Douglas, 2017). In addition, documents were collected and utilized as part of the data analysis process. Four emerging themes developed from the study including the importance of respecting the organizational environment, addressing changes with flexibility and responsiveness, the establishment of trust within the budgetary process, and the commitment of key managers and leadership in communicating the vision. These themes were necessary for progress and success to occur in integrating strategic planning and resource allocation; it is important to note that these elements may differ based on the location of the institution, climate, and organizational environment. Community colleges are complex organizations that report to a variety of stakeholders. The mission of community colleges is to serve a wide array of students, communities, and local industry needs. Through the marriage of strategic planning and resource allocation, community colleges can adapt to periods of declining state and local revenue and low-growth enrollment successfully (Douglas, 2017).

The number of college students lacking reading, writing, and mathematical skills continues to grow at an alarming rate. The disparity in basic skills is even larger when looking at the various ethnic, social, and socioeconomic groups who represent the largest growth in the workforce. Community colleges tackle these growing challenges while also recognizing the budgetary constraints and growing demand for accountability; community colleges will be called upon to meet the educational and employment needs of these underrepresented populations (Davis et al., 2015).

Nearly half of all undergraduate students in the United States are educated at community colleges, which serve as an entry point for the large majority of first-generation college students, minority students, financially restrained students, and non-traditional aged students (Davis et al., 2015). Community colleges are required to adapt to local, regional, and global needs through the balance of programs and services offered, and provide a gateway to four-year transfer institutes, vocational and career training for those students seeking employment, skill improvement, contracting for business and industry-specific needs, academic support for unprepared students, and personal enrichment courses for both children and adults. Complex adaptive systems are connected networks of agents in which system-wide patterns emerge and adapt over time much like community colleges have done (Davis et al., 2015). Researchers discovered behaviors within an academic department at a large university consistent with those in a complex adaptive system (Davis et al., 2015).

Community college enrollment grew 30% during the period of severe economic downtown, reporting 900,000 students in the North Carolina community college system (Okpala et al., 2011). Though student enrollment numbers increased, there was a simultaneous reduction in the number of full-time college faculty and funding received for student support services (Okpala et al., 2011). Community colleges rely on personnel and funding from the federal and state government to provide students with a positive experience and encourage part-time and full-time student retention rates. Researchers are also concerned with community colleges being successful during periods of both low and high enrollment (Eggins &West, 2011).

Budgeting is an important component within the administrative cycle. Community college budgets serve a two-fold purpose of accounting and controlling funds allocated to the institution by students, donors, and taxpayers while simultaneously implementing how unrestricted funds can be best allocated to assist the institution in achieving its mission (Palmer, 2014). The control and use of funds allocated to the college is a full-time job influenced and guided by generally accepted accounting principles, public statutes, and regulations which determine budget reporting. The second goal of determining how colleges utilize unrestricted funding includes those funds not relegated to law, board policy, or under stipulations to a specific institutional office or program is much more difficult. Budgets provide fiscal accountability and theories on the optimal use of resources to meet an organization's mission (Palmer, 2014).

Appropriate allocation of funding ensures colleges will meet goals related to student learning outcomes, persistence, degree and certificate completion, workforce development, and involvement in the communities or service regions the college is responsible for building relationships (Palmer, 2014). Different budgeting theories exist to determine community college funding allocation. The first, incremental budgeting, implements a conservative approach, utilizing experience in determining how colleges allocate money not tethered to a specific cause. Formula budgeting encourages analysis, costing the different programs and services needed by students and allocating resources based upon the information found (Palmer, 2014). Another theory, zero-based budgeting determines if programs and services offered previously are still functioning at the required capacity level. Planning, programming, and budgeting systems rely on the underlying goals of college programs and services. Resources for college programs and services are determined based upon the completion of a cost-benefit analysis which compares alternative ways of achieving the goals. The final budgeting theory is known as responsibility center budgeting. Responsibility center budgeting uses a market-oriented approach operating under an assumption that program leaders and department chairs will act in their interest to increase revenue for their respective college units (Palmer, 2014). Researchers support the idea that colleges rarely ever implement a single budgeting theory and instead utilize a hybrid approach of the theories when aligning the organizational politics and bargaining of each college (Barr & McCleellan, 2011).

Community college budgeting requires the linkage of resource decisions to planning (Saunders, 2014). Community college budgets are resource allocation decisions related to the college's strategic plan. Embedded within that strategic plan should be a clear vision for the future, institutional mission, and a set of defined values and goals. Strategic plans are the framework by which the values and goals translate into budget decisions, both short and long-term operational plans such as programs and services offered. Strategic plan success measures goal attainment and the financial costs incurred in reaching those goals. The strategic plan employs environmental scanning to analyze the college's competitive position amongst all educational institutions and training facilities. Four key foundational plans including academic, facilities, technology, and financial plans analyze the college's competitive position (Saunders, 2014). Some community college strategic plans are also considering areas such as enrollment management, advancement, student services, libraries, residence life, athletics, and some other institutional functions (Saunders, 2014).

External influences impact the development of a college's strategic plan. Strategic plans at public institutions must align with the system, or state strategic plans and budgets may limit what an individual college can do or may redirect state funding towards a statewide goal that is not a priority for the individual college (Saunders, 2014). Except for the rare scenario in which a new college starts, strategic planning and budgeting must not occur in a vacuum and must consider both what has happened in the past as well as how the decisions will impact the many internal and external stakeholders of the college. Walla Walla Community College, a 2013 recipient of the Aspen Prize of Community College Excellence, developed a strategic plan through reflection of current and historical data, economic and labor market analysis, demographic trends, an analysis of higher education trends in Washington state, as well as input and feedback from community college faculty, staff, students, and the community members served throughout the respective service regions (Saunders, 2014).

Environmental scanning identifies emerging needs in the community as well as areas of declining emphasis. Demographic, educational, and economic information regarding the service region is a part of the environmental scan which enables community colleges to gain a realistic picture of the communities they serve (Saunders, 2014). McHenry County College's environmental scan completed by the Center for Governmental Studies at Northern Illinois University includes information about the district's geography; data on population demographics such as age, educational attainment, race/ethnicity, and income; information regarding area industry, and occupational growth to include labor force participation (Saunders, 2014). Environmental scanning takes a snapshot of the current situation and also includes projections to help colleges determine the needs and characteristics of each service district in the years ahead. The McHenry County College example is a multi-dimensional environmental scan that most institutions lack the in-house skills or resources to complete and would need to hire consultants to perform this detailed of a scan. However, institutions must access all available resources to gain the best understanding of what is currently occurring and what is projected to occur in their service region. Most districts will experience substantial changes over time and if colleges are not aware it may reduce their capacity to serve the community (Saunders, 2014).

Colleges have a minimum of four foundational plans that must be considered in the strategic plan (Saunders, 2014). One or more of these foundational plans may precede the strategic plan or have multiyear commitments that extend into the time frame for a new strategic plan. The strategic plan sets the direction or broad goal incorporated into future foundational plans.

A foundational academic plan starts with a thorough review and analysis of the strengths and weaknesses of existing academic programs as well as the potential for new programs that emerge from the current curriculum or may represent brand new instructional areas (Saunders, 2014). For example, many business programs are expanding to include a degree related specifically to data analysis due to occupational trends. Beyond determining which academic plans are best for the service region an examination of instructional innovation and faculty development to implement the plans is necessary. Environmental scanning should provide the necessary information regarding community need and interest for academic programs; however, advisory committees, local businesses, industry leaders, and state and federal initiatives based on supply and demand of specific occupations can assist (Saunders, 2014). Cascadia Community College developed a ten-year academic plan with two main focus areas: access and excellence (Saunders, 2014). An academic plan may not include a specific timeline for accomplishing each action; these would be spelled out in an operational plan which is much more useful and can be revised on an annual basis as needed. The academic plan has numerous budget implications including determining the need for new faculty, staff, facilities, and equipment to sustain the quality of existing programs or to launch new programs. In addition, the start-up costs are important considerations. Some programs require specialized accreditation which set standards for student-faculty ratios and class sizes. Additional support staff may be needed to carry out functions to manage admissions processes for limited-admission programs such as nursing or negotiation of contracts with clinical and workplace sites. Sustaining a weak program influences opportunity cost. All of the above must be considered to determine the direct and indirect budget implications of the academic plan (Saunders, 2014).

The facilities foundational plan, or campus master plan, uses a long-term view to determine the time needed to plan, secure funding, build, or make major facility improvements (Saunders, 2014). Facilities or fixed costs must be connected to the strategic plan and budget. El Paso Community College's facility master plan utilizes a broad vision and detailed analysis of space utilization, condition of the existing facilities, and projections of future enrollments (Saunders, 2014). Facility planning covers a multiyear time horizon, and some do not require the creation of an annual plan. Facilities plans must anticipate the unexpected. Academic buildings need to be able to accommodate future needs such as space for computer technology development. If not, this may limit the capacity of an academic program to adapt to changing conditions. Flexibility in buildings can be very expensive; the costs versus benefits must be carefully considered (Saunders, 2014).

As new techniques in student support emerge, facilities plans must address needs for new or remodeled spaces (Saunders, 2014). Most community colleges, constructed in the 1970s and 1980s, rarely provided spaces for students to hang out or meet in small groups. However, today's emphasis on student engagement, group learning assignments, and increasing the scale and accessibility of support services such as tutoring has prompted colleges to rethink purposes for physical space on campuses to ensure they are both functional and appealing (Saunders, 2014). Colleges must also examine how the physical proximity of offices that provide student support services as well as traffic patterns to and from those locations, may encourage or discourage students from using the services offered (Saunders, 2014). Bringing student services such as admissions, advising, registration, and financial aid under one roof would have been a novel idea a decade ago; today colleges are building "one stops" to reduce the need for students to travel from one office to another (Saunders, 2014). Colleges are committing space to offer students amenities such as nap stations and coffee stations within libraries.

Technology planning is another foundational area of the strategic plan. Researching the future of technology can be very difficult as there is a constant development of new products and upgrades to existing products (Saunders, 2014). Staff training to manage technology transitions can be very costly regarding both time and intellectual energy. Technology is essential to community colleges in both managing administrative functions as well as providing support services for instruction. A technology plan should articulate a vision for the role of technology that can be utilized to develop budget requests and plans. Bellevue College's technology plan includes three major components, the infrastructure layer which relates to electronics and processing power that everything relies on, the information layer which addresses decision making to ensure the college is addressing its student's needs, and the interaction layer related to web services, data integration, and applications to empower staff, faculty, and students with the tools needed to be successful (Saunders, 2014). Technology plans should emphasize hardware, applications, and projects (Saunders, 2014).

The last of the four foundational plans is the financial plan. The financial plan will estimate revenue from sources such as tuition and fees, government support, investment earnings, property taxes, partnerships, auxiliary enterprises, grants, philanthropic donations, and income from the sale or rental of services (Saunders, 2014). Community colleges must also consider and plan for both short and long-term indebtedness as well as strategic decisions about funds from reserves, bond sales, and capital campaigns to fund facilities construction and other large ticket investments

(Saunders, 2014). Colleges that set their tuition rates and administer their financial aid programs should include fiscal projections for both in the plan. An institutional plan for tuition discounting should also be used to understand what revenue is available to meet the costs of operation. Colleges confronted with large numbers of faculty and staff who are approaching retirement age should consider how they will finance the costs of any college-funded retirement incentives or bonuses as well as the potential savings a college incurs when new and less experienced faculty are eligible for hire (Saunders, 2014).

A three to five-year financial plan, more general than a line-item annual budget will indicate far better how a program or service will grow or change over time (Saunders, 2014). College programs and initiatives may take time to mature and develop. The direct, indirect, short-term, and long-term resource costs are less apparent. A multiyear financial plan will also incorporate a feedback loop to include information about the progress of meeting a specific goal and how to continue supporting the initiative. Unexpected legislation and issues may impact a financial plan. In 2013, colleges were confronted with the Affordable Care Act's definition of full-time faculty, making numerous adjunct instructors eligible for health care insurance (Saunders, 2014). Colleges took different approaches to dealing with this unexpected challenge. Some colleges reduced the number of courses adjunct instructors could teach ensuring the adjunct faculty remained below the eligibility threshold, some colleges developed new categories of adjunct instructors which made some eligible for healthcare coverage, and other colleges reduced the number of course sections offered each term to reduce the need for adjunct instructors (Saunders, 2014).

Linking plans to the budget include numerous challenges for community colleges. Successful budgeting relies on a leader's capacity to merge internal and external stakeholders around the goals the college has established in the strategic and foundational plans. One challenge associated with reviewing the goals and resource requirements is to determine what should be the priority among college goals (Saunders, 2014). Colleges should remain focused on improving student retention and increasing graduation rates; the administration would need to determine which programs and services would be best to implement. Colleges need to fully understand the outcome of previous initiatives and what interventions are currently in place, what subgroups require more intensive efforts to help them achieve the desired level, and how the college can afford to bring an effective intervention to scale. In addition, should the resource savings be returned to the college general fund, allocated to bring interventions to scale, or launch new ones with far greater promise? Setting priorities can be the most difficult part of the planning and budgeting process. All of the goals are laudatory; however, the budget can rarely support them all.

Community college budgeting occurs in an environment of constrained resources and limited opportunities for growth. 80 percent of the annual budget is committed to the following resources, including existing staff, essential operations, and facilities overhead. Community college budgeting is incremental (Saunders, 2014). Zero-based budgeting was popular for a brief period; nevertheless, reexamining budget allocations every year has been difficult if not impossible to practice. Incremental budget changes can make significant improvements in the direction of the college. Government budget formulas impact colleges vastly differently; state funding may be 80% to 90% of the budget at some colleges whereas others only receive 20% to 30% of funding from the state. Unfortunately, government funding formulas do not always coincide with institutional strategic goals (Saunders, 2014). States may reward seat time more than graduation. Performance-based funding metrics may not accurately reflect the entire range of student outcomes a college hopes to achieve through the programs and services offered, ensuring the need for good planning and budget alignment.

Though budgeting flexibility may be limited, colleges have opportunities to reallocate funds to support programs and services that are in alignment with strategic and foundational plans. When faculty members retire, institutions can move money to faculty positions in other programs. Each college employs its own culture of budgeting and plan implementation (Saunders, 2014). Clear goals and measurable objectives are necessary. Institutional leaders and managers must demand budget allocations align with plans by engaging the campus in a greater understanding of the budgetary process (Saunders, 2014). All budget requests should identify how they support the plan. As state funding continues to decrease, the importance of philanthropy and foundations in obtaining revenue for community colleges continues to grow. Additional revenue requests should tie to the planning process. College foundations must identify grants, donors, contracts, partnerships, and business activities that will support the college's strategic plan. Colleges must also consider the costs of obtaining and administering these funds, including compliance with reporting mandates (Saunders, 2014).

The final challenge is to translate priorities into budget decision packages (Saunders, 2014). Strong planning and leadership that works to combat the challenges discussed before are equally as important as the need to document and assess the link between resource allocation decisions and the college's goals. Sometimes this is done through zero-based budgeting which wipes the slate clean at the beginning of each fiscal year and constructs the budget directly from goals found in institutional plans (Saunders, 2014). Other colleges use incremental budgeting as a crosswalk between the budget and the organization's goals. Budgets include line items organized under funds, programs, or departments that can make it difficult to determine or measure the resources following a specific strategic goal. Colleges are employing the budget decision packages alongside the college budget to address this problem by identifying monies directed towards specific initiatives regardless of which departments administer the funds (Saunders, 2014).

The majority of the articles considered the impact of long-term strategic planning on the future viability of community colleges. Researchers referenced four necessary strategies on behalf of community colleges to remain successful including (a) adopting a strategic governance model, (b) embracing a comprehensive approach to organizational change, (c) utilizing a transformational or transactional leadership style, and (d) employing a consultant to aid in this facilitation process (Tschechtelin, 2011). Another study also found common ground and considers strategic planning influential to the sustainability of today's community colleges (Harris, 2011; Mihel, 2010). Future research opportunities provide additional solutions to long-term planning for success.

Community College Funding

To understand the community college funding crisis, one must take a retrospective view on its history. Community colleges are confronted with various competitors including an increase in the number of for-profit colleges and universities, increases in the availability and accessibility of technology and online education, rapidly changing student and employer needs, and the increased calls for accountability and fiscal efficacy. All of these competitors influence the availability of community college funding streams and institutional sustainability (Phelan, 2014). Community colleges need to confront the crisis through a thorough examination of existing business models and financial structures so that community colleges can continue to serve both students, employers, and community needs. Community colleges must remain innovative to compete in the fast-paced digital, global, and volatile business environment.

A few of the most significant challenges confronting community colleges are the dramatic shifts from state and local funding to tuition and fee-based funding and a lack of substantial growth in student financial aid (Phelan, 2014). Community colleges are called on to continue improvements in the areas of student access, retention, outcomes, and completion rates despite serving a growing number of students at a reduced cost. Public concern regarding rising college tuition levels, the staggering student loan debt crisis that has eclipsed over one trillion dollars, poor job prospectus due to the economic recovery, and low salary levels for introductory level jobs following college graduation have illuminated the value proposition for a community college education (Phelan, 2014).

The emergence of community colleges occurred during the 1960s when expansion rates were approaching one new institution per week in response to new opportunities for growth. Demands were not being met by the public institutions established during the early 1900s (Phelan, 2014). The mission of community colleges is three-fold, transfer education, vocational education, and community service. Funding sources for this three-fold purpose occur within a financial model that includes federal government revenue, state support revenue, local property taxes, student tuition, fees, as well as other miscellaneous income sources. Total funding per state varies reflecting the different goals and expectations for community colleges within each state (Phelan, 2014).

Though some states supported the belief that student tuition should be zero or minimal at most, other states supported an equivalent mix of funding streams across state aid, local taxes, and student tuition. Finally, other states did not feel that property taxes should be considered a portion of the funding model. No singular financial model emerged at the national level due to the political, philosophical, and demographic diversity within each state. Community college funding has historically been both unpredictable and unstable relative to the discretionary aspect of state support. Researchers alluded to the routine periods of instability of public financial support for community colleges due to the competing priorities for federal, state, and local governments (Breneman & Nelson, 1981). The Trade Adjustment Assistance Community College and Career Training program (United States Department of Labor, 2011) launched by the Obama administration in 2009, as part of the American Recovery and Reinvestment Act (Phelan, 2014) provided 2 billion dollars over four years to fund community colleges that pursued, expanded, and improved programming around healthcare, information technology, and advanced manufacturing. Through this funding, President Obama set aside funding for programs that provided unemployed or underemployed individuals with the opportunity to obtain training and marketing credentials as a mechanism for economic recovery (Phelan, 2014). Community colleges reacted quickly by offering new, expanded, and accelerated programs that fell within the grant parameters. The grant-funded academic programs required new faculty hires, facility development and improvement, and the purchase of additional instructional equipment. Community college enrollments in these areas rose dramatically before falling off significantly following the conclusion of funding availability, resulting in employee layoffs, tuition increases, facility reductions, classroom management strategies, and an increased focus on new student markets. Discretionary funding from state and local governments, impulse funding initiatives, and accountability and performance requirements have been constant obstacles in finding stable and predictable revenue streams for community colleges. Revenue unpredictability makes it extremely difficult for college leaders, managers, boards, and system administrators to establish long-term confidence in budget development and allocation (Phelan, 2014).

No singular factor has contributed to the community college funding crisis; however, critical elements for consideration include declines in enrollment resulting in the loss of student tuition and fee revenue even while tuition and fee rates are simultaneously on the rise, reductions in state aid, unsustained incentives, unfunded mandates, and rising costs (Phelan, 2014). The policies implemented by local college boards and administration coupled with state and federal mandates impact the budget and finances at a community college. Policies include those related to tuition, fee structures, performance-based funding, and personnel policies. Even before the economic recession of 2008, deep tax cuts and reduced confidence in the public sector led to the erosion of public financial support for colleges and universities (Dowd & Shieh, 2014). In 2014, a study of community college presidents purported that whereas the private economy was rebounding, leaders in higher education disagreed strongly that the economic recession was over. This information is staggering based on the feedback from the American Association of State Colleges and Universities reporting that 37 of 48 states experienced an increase in state funding for the fiscal year 2014, an upward trend from the fiscal year 2013 in which thirty states saw increases in funding appropriations, and fiscal year 2012 when only eight states saw increases (Dowd & Shieh, 2014).

As the economy continues to fluctuate, fiscal appropriations remain a primary concern for higher education managers and leaders as many managers have seen a dramatic shift in the character of community colleges because of the lack of state investment. (Dowd & Shieh, 2014). Colleges continue to work towards raising revenue lost during the recession; however, fear remains that higher education is far less public than before. State funding has been offset by increases in student tuition and fees, ultimately placing the financial burden on the student which leads to the outpricing of many low income and minority populations (Dowd & Shieh, 2014). Colleges are required to do more with less and in most cases are not rehiring positions lost to retirement. The primary impact as a result of loss of state funding translates to a reduction in the variety of course offerings for students and the student support personnel available.

The weak economy has also increased legislative interest in policies that would compel colleges to use public funds more effectively to produce a degree. New legislation focuses on policies that would encourage colleges to develop funding mechanisms to increase degree and certificate credentials for students (Dowd & Shieh, 2014). Private firms and organizations, when confronted with fiscal policies and economic uncertainty, would evaluate the firm's bottom line or profits to determine if the president or chief executive officer was responding appropriately to the concerns (Dowd & Shieh, 2014). College leaders, however, do not operate in the same vacuum and are focused more on resource maximization rather than profit-maximizing in the case of private managers or leaders. One researcher likens the responsibility of community college development of careers, programs, and institutions to the need for greater resources rather than maximizing profits for shareholders (Ehrenberg, 2000). Economic markers such as supply, demand, and price when applied to the public sector require further clarification. Community college prices are subsidized, leading to an excess of demand for courses which exceeds the supply of those courses. Community colleges are not confronted with the same loss of customers when prices increase due to the limited supply of courses. There is a fixed quantity subsidy which increases the demand for community college education farther than the amount most states want to subsidize (Dowd & Shieh, 2014).

Public education divestment following the economic recession of 2008 rendered a significant decrease in per-student resources than any other sector of higher education. A 5.3% decrease in average state subsidy per full-time equivalent student impacted community colleges between 2005 and 2010 (Dowd & Shieh, 2014). Due to the lack of a diversified revenue portfolio, community college are heavily dependent on fluctuations in state and local appropriations which translate into 41.1% of community college revenues (Dowd & Shieh, 2014). Community colleges, unlike other institutions, are not capable of diversifying their revenue as their sole purpose is to serve local communities and meet the needs of the changing workforce demographics. Community colleges are working to offset the loss of state funding through a variety of nontraditional means including an increased emphasis on fundraising. Fiscal year 2013 saw over 200 million private dollars contributed to community college revenue funds. Nevertheless, private giving only contributes approximately 1% of college revenue; community colleges cannot rely on private giving as a substantial source of revenue (Dowd & Shieh, 2014).

During periods of economic fluctuation, changing trends in community college enrollment must be understood to highlight the necessity for changing tuition rates, course structuring, and the impact of for-profit institutions directly competing with community colleges (Dowd & Shieh, 2014). Tuition costs increased for community colleges in all states during the years immediately following the economic recession with an average hike of 19% from 2009 to 2012 and eleven states imposing hikes which ranged from 20% to 35%. These dramatic tuition increases were quite different from the 10% increases between 2006 and 2008 (Dowd & Shieh, 2014). These statistics suggest state legislators were unable to observe the typical constraints on annual tuition growth in economically distressed states. Other factors besides tuition increases may impact enrollment demand such as the increase in population within the state, competition with other colleges that may also offer affordable tuition rates, and the state economy.

Community colleges have also seen an increase in demand for online courses which translates into a reduction in the overburdening of campus facilities and classrooms. In 2008, 97% of two-year colleges offered online courses; comparatively, 66% of all higher education institutions offered online classes during the same year (Dowd & Shieh, 2014). The demand for online courses continues to increase, attracting many nontraditional students and those who may not be able to take courses on campus due to conflicting responsibilities of distance, transportation, work, and family obligations.

Research has also shown that a growing number of Hispanic students are enrolling in for-profit associate degree and technical programs. The percentage of students who studied at a for-profit institute tripled from 9% to 25% in the years between 1995 and 2004 (Dowd & Shieh, 2014). The risk associated with this trend is the number of students who are graduating with unmanageable debt obligations. 62 percent of associate degree students who graduate from a public community college graduate with no debt. Students who attend public community colleges can graduate without debt through the receipt of Pell grants, institutional aid, and state grants (Dowd & Shieh, 2014).

Another key concern for community college financial managers is the shift from enrollment-based state funding to performance-based funding. The basis for community college funding relies on specific student outcomes. Researchers explored the impact of performance funding on three different levels of credential completion including short-term certificates, medium-term certificates, and associate degrees through a panel dataset of 751 community colleges from 1990 to 2013 found in the Integrated Postsecondary Education Data System (Li & Kennedy, 2018). On average there were no significant changes in completion percentage of any of the three levels of certificates. However, when a greater proportion of performance funding ties directly to the budget, mission differentiation in performance metrics, the inclusion of minority metrics, and longer periods of operating years, there is a noticeable increase in short-term certificate attainment, no change in medium-certificate attainment, and a sharp decrease in associate degree completion. The findings of this study suggest completion and awarding of more short-term certificates is a quick and cost-effective way to capture these performance funds. Colleges may be churning out short-term certificates at alarming rates and steering the focus away from two-year degrees. Short-term certificates do not offer the same job and labor market benefits as compared to medium-term certificates and associates degrees (Li & Kennedy, 2018). Performance-based funding is another area where community colleges must determine how to budget and best maximize their resources in an attempt to boost college affordability, productivity, and student success. Colleges are encouraged to improve key student outcomes such as retention and degree completion and be less focused on student enrollment numbers. A focus on outcomes versus enrollment dramatically changes how funding is dictated by the state to community colleges (Dowd & Shieh, 2014).

Researchers attribute low enrollment numbers at community colleges to the availability of state and federal financial aid (Kennamer et al., 2010). Grant aid programs served as encouragement for students to enroll at the community college level (Cellin, 2010). Another study instead attributes the low growth to yearly increases in student tuition rates Helmet & Melcotte, 2011). Community colleges restricted by state and federal funding must offset their expenses by increasing tuition rates incrementally. Nationwide community colleges are spending 28% less per student currently than they were before the 2008 economic recession (Palacios et al., 2013).

Impact of Student Retention and Success on Community College Budgeting

Researchers have addressed student retention efforts in online classes in higher education. Sixteen faculty members who teach online at a community college in the Northeast were interviewed using a semistructured, in-depth interview at random (Russo-Gleicher, 2014). Interview questions sought to understand the behaviors of online students which made faculty concerned, their discussion and conversation with these particular students, and the approach taken by the faculty member regarding referral to the college's support staff. (Russo-Gleicher, 2014). Qualitative analysis indicates online instructors rarely report students they are concerned about to community college support personnel due to lack of knowledge regarding support services available and lack of support for these programs (Russo-Gleicher, 2014). This article directly relates to my doctoral research topic and specifically focuses on student success in online learning (Russo-Gleicher, 2014). Online course offerings are on the rise at community colleges across the United States. Nevertheless, attrition rates may be almost 20% higher amongst online students compared to students meeting face to face (Russo-Gleicher, 2014). The implications of this study dictate the need for improved referral policies of struggling online students to ensure federal and state financial aid programs continue.

One study employed a longitudinal, qualitative study exploring developmental learning remediation and its impact on community college student success (Schnee, 2014). Data collection occurred through semistructured interviews of a cohort of 15 students over a three-year period placed in a developmental learning community. Results indicated that despite the small cohort of students who associated a stigma with being placed in a developmental learning community, overall, their college experiences were positive (Schnee, 2014). This study will directly impact my doctoral research study. Developmental learning is a growing area of community college education as students come unprepared to experience higher education. Decreases in financial aid at the state and federal level will influence money granted towards developmental learning. Individuals also need to determine how to easily transition students from developmental cohorts to mainstream students (Schnee, 2014).

Transition

Section 1 included the background of the problem, problem statement, purpose statement, research questions, nature of the study, and conceptual framework. This section also included operational definitions, assumptions, limitations, and delimitations, followed by the significance of the study. At the end of this section, a literature review contained extensive information on early and current research regarding Burn's transactional leadership theory, the state of community college budgeting, and current challenges, along with strategies being utilized to address decreasing enrollment and revenue streams.

Section 2 begins with the role of the researcher and participants of the study, followed by a thorough discussion and analysis of the research method and design. This section also includes the population and sampling, ethical research, data collection instruments and technique, and information about data organizational technique and analysis components. Reliability and validity conclude the section and transitions to Section 3.

Section 3 concludes with the findings of the study and incorporates the following elements: application to professional practice, implications for social changes, recommendations for action and further research, reflections, and conclusion.

Section 2: The Project

Purpose Statement

The purpose of this qualitative single case study was to explore strategies community college managers use to balance their budgets in an environment of declining revenue. The population sample for this study consisted of community college managers from one of the 23 public community colleges located in the state of Virginia. This group of participants was appropriate for the study because these managers have balanced the budgets while being confronted with declines in revenue. The findings from this study could have implications for positive social change by helping community college managers balance budgets to ensure financial viability in meeting the needs of their target populations. Society could benefit from these findings, as more students would be able to receive a community college education, thereby increasing the number of skilled workers available in the area, which could improve the economic outlook of the community.

Role of the Researcher

In this qualitative single case study, I was the recruiter, interviewer, data collector, and analysis instrument (Yin, 2018). My role as the researcher was to select the appropriate research methodology and design, develop strategies to identify the community college managers who have successfully balanced the budgets during an environment of declining revenue, contact the participants to set up interviews, interview participants, and collect and analyze the data recorded. As the researcher, my role in the data collection process involved conducting semistructured interviews with open-ended questions and a review of company documentation from successful community college managers.

I am a professor of business management and administration and business program lead at a community college located in Virginia. The college is one of 23 community colleges that comprise the Virginia community college system. I am familiar with the managers working at the college, but not at any of the other community colleges within the system. This topic was of interest to me as I plan to work in community college administration in the future. I have always had an interest in understanding community college budgeting and finance and its direct relationship to improving the economic outlook of the state of Virginia, thereby increasing the number of skilled workers, and educated citizens.

As the researcher, I followed the three basic principles of research involving human subjects to ensure respect and justice for the participants of the study, including the principles of (a) respect of persons, (b) beneficence, and (c) justice (Adashi et al., 2018). The *Belmont Report* (1979), developed by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research Subjects of Research, summarizes the basic ethical principles that should guide research involving human subjects.

The researcher should be aware of potential bias at all stages of the doctoral study. Systemic bias can occur during the recruiter stage, data collection stage, and results reporting stage (Marshall et al., 2021). Following the appropriate qualitative study guidelines ensures the researcher will reduce error and minimize bias; however, eliminating one particular bias may inadvertently introduce another bias (Marshall et al., 2021). Mitigating potential bias occurs in a number of ways including (a) developing an interview protocol, (b) member checking, (c) ensuring data saturation, and (d) and additional tools to eliminate personal bias (Brear, 2019).

Participants

The population for this qualitative, single case study included managers from one of the 23 public community colleges located in the state of Virginia. Participants were required to be finance and budget managers at their community college to meet the eligibility criterion. Participants had experience with strategies designed to balance budgets during periods of declining revenue in their organizations. The term *manager* refers to college presidents, vice presidents, deans, and directors of finance and operations, who have a working relationship with college budgets. Using college managers for this study was important because the managers provided their experience related to successfully balancing community college budgets.

The sampling technique for obtaining the participants was criterion sampling. Criterion sampling guarantees that participants are knowledgeable and meet the predetermined criteria of the research topic (Yin, 2018). Community college managers of this study had a minimum of 2–3 years of experience, enabling a more thorough and exhaustive interview process to ensure responses garnered were from a more experienced manager. There were no age or gender requirements for the participants. The recruitment of prospective community college managers occurred through diverse approaches such as the use of employee directories, rosters, and colleagues with contact information for participants who met specific criteria (Windsong, 2018). The recruitment process involved no coerciveness.

Strategies for gaining access to participants in this study included the use of employee directories to locate managers with the applicable requirements and experience. In addition, I requested contact information from the vice president of finance and operations at the college where I am currently employed. Another resource for locating participants was the Chronicle for Higher Education. Additionally, a working relationship with each of the participants was necessary to meet respect and ethics obligations (Guillemin et al., 2018). Working relationships ensure each participant remains comfortable throughout the interview process. I planned to contact participants via phone and email a minimum of 2 days before the interview to provide them with any needed information (Gamo-Sanchez & Cegarra-Navarro, 2015). Following the interview, participants were provided a minimum of 1 week to contact me via phone or email with any information regarding strategies for balancing the budget relevant to the qualitative, single case study.

Research Method and Design

Research Method

The three primary research methods are qualitative, quantitative, and mixed methods. I employed the qualitative research method for this study. Qualitative research is designed to discover, understand, explore, describe experiences, and report stories (Brooks et al., 2018). The qualitative method is concerned with the *why* and the *how* of the decision-making process rather than the *what*. Exploration rather than examination provides the major focus for this approach (Yin, 2018). Qualitative analysis uses a small focus group of participants and collects data primarily through open-ended questions in an interview format. In addition, qualitative analysis allows the researcher to ask additional questions or to expand beyond the interview protocol questions to gain a more in-depth understanding of the business problem (Windsong, 2018).

The quantitative method of research is the ability to measure and quantify a phenomenon, specifically eliciting testable research questions and hypotheses (Yin, 2018). Quantitative analysis defines the relationship between the dependent variable, the independent variable, and establishes a control throughout the experiment. Quantitative researchers determine a focus group of study participants to compile the required tests, surveys, experiments, and data analysis (Yin, 2018).

A mixed methods approach encompasses both qualitative and quantitative techniques in a single study. This study did not require evaluating the relationship among variables (Alavi et, al, 2018). Thus, the quantitative and mixed methods approaches were not appropriate for this study. A qualitative methodology was most appropriate for this study in exploring how community college managers balance budgets during periods of declining revenue.

Research Design

I selected a single case study design for this qualitative research study. The three most utilized qualitative research designs are case study, ethnography, and phenomenology (Yin, 2016). Researchers use the case study design to explore individuals or organizations through complex interventions, relationships, communities, or programs (Yin, 2018). I applied the case study design to describe and explore the research topic phenomenon using single data types. The phenomenological research approach identifies a particular phenomenon and collects data from the lived experiences of individuals. Phenomenological studies embrace interviews, documents, observations, and art to collect data (Marshall et al., 2018). Data are synthesized into a composite description respective of all participants. The phenomenological approach would not be appropriate for my study, as I am not addressing the lived experiences of individuals (Urcia, 2021). Ethnography research studies a cultural group in a natural setting over an extended period. The ethnographic approach explores the significance behind particular behaviors, language, and interaction among cultural group members. Observations and interviews are the preferred data collection forms (Argyriadis, 2021). The ethnographic approach was not appropriate, as I was not focused on behaviors, language, or interaction between cultural groups.

Population and Sampling

The population size for this case study included eight community college managers from one of the 23 public community colleges located in the state of Virginia.

Qualitative researchers choose the appropriate sample size based on a convenience sample, everyone who volunteers, a quota sample, or people with particular positions of interest related to the study (Islam & Aldaihani, 2022). This study involved interviewing a sample size of eight community college managers located in the state of Virginia who volunteered and collecting information from college documents which pertained to balancing the budget strategies. I employed the use of the criterion sampling method as the sampling method to select community college managers in the state of Virginia. The criterion sampling strategy is useful in selecting participants who meet a specific criterion. Criterion sampling ensures potential study participants meet predetermined criteria significant to the study (Brooks et al., 2018). The qualitative information I received from the interviews includes transcripts from the semistructured interviews and qualitative analysis of college documentation, resulting in themes. Data saturation occurred at the point in which no new information is gained from the study participants (Yang et al., 2022).

Ethical Research

The participants of this study, community college managers who have successfully balanced budgets during an environment of declining revenue, received a letter of invitation through email, explaining the purpose of the study. The email included the Participant Consent Form, located in Appendix A of this study. The Participant Consent Form included background information that described the purpose of the study, the procedures of the study, the voluntary nature of the study, risk, and benefits of being included in the study, payment, privacy, and obtaining your consent components. In addition, the form included a list of sample interview questions, a statement advising the researcher planned to collect company documentation, and that participation in the study was voluntary. Participants in the study could withdraw at any time, without penalization. There was no compensation or incentive for participation in the study. I emailed the results and findings of the study to each participant following the study. Participants were required to review and electronically agree to participate in the study by responding to the email invitation with I consent. I contacted participants via telephone to schedule an interview date and time that worked for both parties. I conducted this study after receiving approval from the Institutional Review Board (#04-06-20-0488873) at Walden University.

Data Collection Instruments

The data collection instruments for this qualitative, single case study included me as the primary data collection instrument and incorporated semistructured interviews with each of the participants. In qualitative research, the researcher is the primary data collection instrument because the researcher hears, sees, and interprets the data (Yin, 2018; Marshall et al., 2021). The goal for the data collection instrument was to gain as much data from community college managers to identify the strategies necessary to balance community college budgets during periods of declining revenue. A standard interview protocol was implemented to collect data from community college business leaders. The interview protocol set the ground rules for interviewing participants during the interview process further ensuring the validity of the interview content and removing the need for collection of unnecessary information (Yeong et al., 2018). During the semistructured interviews with community college managers, I participated by asking interview questions to determine the budget balancing strategies employed by these leaders. Interview duration was dependent on participant response length to questions. During the recruitment phase, I requested each participant set aside 30 to 45 minutes of time for the interview. Before conducting the interviews with community college leaders, participants received a copy of interview questions in advance. Reliability and validity of the data received occurred through member checking (Caretta & Perez, 2019). I ensured the reliability and validity of the data collection instrument and process through the implementation of member checking with the participants. Participants clarified their responses if results were not reliable following the data interpretation and analysis component of the study (Taherdoost, 2022).

Data Collection Technique

There are a number of different data collection techniques available for the qualitative researcher. Each researcher must determine which technique will provide the highest quality research. The depth and quality of data is instrumental when considering qualitative data collection. For this study, a semistructured interview was the primary data collection technique. Responses noted from the interviews during the semistructured interview process served as the data collected. Interviews are the predominant data collection technique in qualitative studies (Yin, 2018). Researchers suggest a combination of interviews and another source of data to provide the most complete view for analysis. Review of company documentation was the secondary data collection technique implemented in this study (Thelwall & Nevill, 2022).

Interviews are defined as a conversation between two individuals with a defined purpose, allowing the individual to discuss a topic in depth and explain a particular phenomenon (Thelwall & Nevill, 2022). Semistructured interviews include a set of preselected questions that each participant must answer; however, the interviewer can be flexible with the structure and phrasing of the preselected questions (Draper & Swift, 2011). Semistructured interviews provide the opportunity for probing questions but may allow for inconsistencies in the wording of each question (Draper & Swift, 2011). The interviewer is responsible for ensuring each participant receives the most consistent interview process to promote fairness and quality.

The interviews occurred via Zoom due to ongoing COVID19 pandemic regulations at a predetermined time selected by the interviewer and confirmed by the participant. Appendix B includes the interview protocol for the semistructured interviews. A benefit of electronic and telephone interviews versus face-to-face interviews is the potential for garnering sensitive information from participants; however, this can decrease the ability to observe nonverbal behaviors and body language (Draper & Swift, 2011). Interviews were recorded to provide the opportunity to develop electronic transcripts. Review of company documentation occurred through a planned site visit at the college. Researchers must be able to interpret the experiences of each participant as accurately as possible (Harvey, 2015). Member checking provides the opportunity to take the interpreted information gathered back to each of the participants so that they may confirm the accuracy of the information presented (Houghton, Casey, Shaw & Murphy, 2013). Following interview transcription, I provided my interpretations to each of the participants for an accuracy check; this process continued until no further information was available. Beyond member checking, I incorporated methodological triangulation, or the process of gathering data related to phenomenon via multiple methods (Carteret al., 2014). Member checking and triangulation are two ways of ensuring the rigor of the study is strong.

Data Organization Technique

Four data collection principles include the use of multiple sources of evidence, organization and documentation of the data, a chain of evidence to increase reliability, and the safe and appropriate storage of electronic sources (Yin, 2018; Marshall et al., 2021). I stored data for this study in numerous locations including Microsoft Word in which transcription of the raw data occurred and NVivo, a tool useful in identifying in identifying codes and themes resulting from the transcripts (Saunders et al., 2018). Codes rather than names were used to identify all participants and organizations to further protect participants. Participants were named Participant 1, 2, 3, 4, 5, 6, 7 and 8. The researcher stored electronic data using a password protected USB drive. Electronic and paper documentation storage occurred in a locked file cabinet. The data will remain in the locked cabinet for up to five years. I will destroy all data relevant to the study after the five-year term expires.

Data Analysis

I used methodological triangulation to analyze data from this study. Yin (2018) referred to triangulation as the practice of using more than one approach to confirm the consistency of data presented. Methodological triangulation is a study design which utilizes multiple sources of data which are then integrated to provide a comprehensive evaluation of the effectiveness of a specific technique (Marshall et al., 2018). This technique further reinforces that multiple sources of data give a different picture of the phenomenon occurring. The data should be considered individually as well as combined for a comprehensive view. Semistructured interviews and review of company documentation were the primary and secondary sources of data obtained to ensure methodological triangulation. Transcription of the raw data occurred following the completion of the interviews. Following the transcription and evaluation phases, I reconvened with the participants for the member checking interview process to determine data accuracy. Member checking was the third method of data collection. Member checking is the process of working with each of the participants to ensure interpretations of the data collected by the researcher are accurate (Marshall et al., 2018).

Furthermore, participants can continue to be a part of the research process by validating information collected (Castillo-Montoya, 2016). When the accuracy of the data was confirmed, I uploaded interpretations of the data into NVivo, an instrument useful in coding and analysis which assisted in locating texts, occurrences, and themes in the data collected (Yin, 2018). Common phrases, ideas, or codes abound among the research participants and assist in drawing conclusions regarding the data collected (Saunders et al., 2018).

Reliability and Validity

Qualitative research contributes differently to research in comparison to quantitative research due to differences in the overall approach (Smith & Gannon, 2018). These distinct differences in approach require qualitative researchers to employ techniques and procedures to ensure reliability and validity. Though qualitative procedures do not necessarily guarantee the reliability of a study, they increase confidence in the data collected and the results of the study. Researchers implement dependability, credibility, transferability, and confirmability to confirm the rigor of a qualitative study and that the research findings are as accurate as possible (Fusch et al., 2018).

Reliability

Reliability is synonymous with the term dependability and is defined as how constant the data is in the study (Korstjens & Moser, 2018). To ensure reliability in my study, three steps were taken including audiotaping each participant's interview for transcription purposes, member checking of data interpretation, and use of the interview protocol located in Appendix B. Audiotaping increases dependability by ensuring there is a valid source to compare for transcription purposes. Member checking increases reliability by ensuring participants in the study review the data interpretations of the researcher. Member checking should occur until data saturation occurs or no new information is present (Yang et al., 2022). A standard interview protocol was necessary to ensure each participant's interview was consistent, further increasing reliability (Houghton et al., 2013).

Validity

Qualitative research validity refers to the appropriateness of the tools, processes, and data are for the study (Yin, 2018). Credible studies consider the perspectives of each participant from a number of different angles to ensure an authentic explanation of the phenomenon occurring results (Fusch et al., 2018; Yin, 2018). Interview questions, engagement with the interviewee, and question probing increase the credibility and permit the participant to answer questions from different angles in an attempt to provide a more holistic and complete perspective (DeJonckheere &Vaughn, 2019). Transferability determines whether the findings of the current study can be applied towards a similar context or situation while maintaining the meanings and inferences. Readers of the study must be able to adequately judge whether or not the findings are available in another study (Fusch et al., 2018). Confirmability is the accuracy and unbiased nature related to the data from the study (Korstjens & Moser, 2018). Methodological triangulation and member checking of the semistructured interview and review of company documentation ensures confirmability (Korstjens & Moser, 2018).

Transition and Summary

The purpose of this qualitative single case study was to explore strategies community college managers use to balance their budgets in an environment of declining revenue. The single case study site emerged from one of twenty-three colleges in the state of Virginia. Participants were community college managers working with budgets. My role in this study was to understand the question, collect, organize, analyze, and ensure the reliability and validity of the data for the case. Reliability and validity occurred through the use of member checking and data source triangulation. The final section of this project, Section 3, incorporates the findings and recommendations of the research project.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative, single case study was to explore strategies community college managers use to balance their budgets in an environment of declining revenue. I used Burns’ (1978) transactional leadership theory as the conceptual framework. I sought to identify the strategies to balance community college budgets during periods of declining revenue by interviewing eight community college managers. When asked how to balance budgets during periods of declining revenue, the participants mentioned numerous factors, including strategic planning, vacancy savings, performance-based funding, strategic partnerships, and alternative revenue funding strategies. The findings from this study have implications for positive social change by providing information that can help community college managers balance budgets and meet the needs of their target population. As more students within their service region can receive a community college education, the number of skilled workers and economic outlook of the community can be improved. In Section 3, the presentation of the findings, application to professional practice, implications for social change, recommendations for action, future research, and the conclusion are documented.

Presentation of the Findings

The overarching research question was the following: What are the strategies community college managers use to balance their budgets in an environment of declining revenue? The primary data collection method for this case study included semistructured interviews conducted through Zoom video conferencing to comply with ongoing COVID19 pandemic regulations at the institution. All participants agreed to the required consent form and received a copy for their records before the interviews commenced. Each interview lasted 30-45 minutes. I organized the data to ensure the participants' security and used identifiers such Participant 1 (P1), Participant 2 (P2) to protect the identities of the participants (see Table 1). After completion of the interviews, I started the process of transcription and data analysis. I recorded and transcribed the participants' interview responses as Microsoft Word documents. Upon transcribing the interviews, I conducted member checking but did not receive new information from the participants' feedback.

Table 1

Demographics of Semistructured Interview Participants

	Position	Institution Size	CC Management Experience (Years in Current Position)
Participant 1	President	5,000-10,000	22 (4)
Participant 2	Provost	5,000-10,000	14 (6)
Participant 3	VP	5,000-10,000	22 (15)
Participant 4	Assoc. VP	5,000-10,000	7 (5)
Participant 5	Dean	5,000-10,000	22 (4)
Participant 6	Dean	5,000-10,000	9 (2)
Participant 7	Director	5,000-10,000	9 (2)
Participant 8	Director	5,000-10,000	11 (6)

I imported the data into the NVivo software application, coded the transcribed data, and utilized nodes to group the data into themes. Qualitative researchers use NVivo v.11 to code themes into categories and process nonnumerical data such as interviews surveys; and review, merge, and refine the data (Zamawe, 2015). I triangulated data from interview transcripts (primary data collection source) with publicly available company documents (secondary data collection source). The grouped nodes resulted in common themes, and the majority aligned with the conceptual framework used for the study. I will retain the interview data in a secure location and on a password-protected computer for 5 years before destroying the data, as per Walden University's Institutional Review Board requirements, by erasing all electronic data and shredding paper documents.

During the data analysis, I focused on the common themes that emerged and were relevant to the research question and the conceptual framework. The findings presented the barriers recognized and strategies used to balance community college budgets during periods of declining revenue (see Table 2). The following four themes emerged from the data analysis: (a) the importance of aligning budget priorities with strategic planning goals, (b) reliance on vacancy savings as a budgeting practice, (c) movement from enrollment-driven funding models to a combination of enrollment-driven and performance-based funding models, and (d) the importance of strategic partnerships and alternative revenue streams including grant funding.

Table 2

Frequency of Themes Identifying Strategies to Balance Community College Budgets

Theme	*n*	% Interviews
Strategic Planning	58	100%
Vacancy Funding	26	100%
Performance-Based Funding	20	100%
Strategic Partnerships/Alternative Revenue	14	100%

Note. n = interview frequency

Theme 1: Alignment of Strategic Planning with Budgeting Priorities

Alignment of budgeting priorities with the college's strategic plan was the first theme that appeared following analysis of the participants' responses of strategies to balance budgets. This theme occurred 58 times throughout the interviews. All eight participants explained the importance of planning as part of the budgetary process, noting that community colleges must anticipate economic challenges, forecast changing demographics, respond to federal and state funding challenges, and prepare for lean budgetary years. P1 noted, "the college has gone from years where there was a great deal of money to a recession, when administrators were asked to reduce budgets by 5%, 7% and 10%, not knowing which was going to hold."

Strategic planning in higher education did not become common practice until the 1983 publication of Keller's *Academic Strategy* (Illich & Herwick, 2020). Major accreditation agencies have since begun to require that institutions have strategic plans to ensure compliance with criteria (Illich & Herwick, 2020). The largest accrediting agency in the United States, the Higher Learning Commission, calls on institutions to engage in systemic and integrated planning that encompasses the institution as a whole and considers the perspectives of internal and external constituent groups. Higher education has often been criticized for their inability to prioritize, relevancy due to the rapidly changing landscape, and limited support amongst constituents (Illich & Herwick, 2020). Though a number of practical models have been introduced in recent years, many colleges still struggle with implementation, communication, and transparency of the strategic planning process across all stakeholders (Illich & Herwick, 2020).

Community college managers must lead their organization in the development of a strategic plan aligned with the institutional budget, which demonstrates long-term planning and fiscal responsibility (Smith, 2016). Studies have focused on the integration of strategic planning with budgeting in the higher education sector (Smith, 2016), indicating the need for detailed and specific planning, leveraging resources to support institutional goals, centralized decision making and resource allocation, and the need for strong leadership at the executive level to ensure the successful integration of budgeting and strategic planning (Phelps, 1996). P6 shared that if a strategic plan is in place, then the plan needs to be tied to the budget. When somebody submits their non-personnel budget, as an example, people need to think about how that request aligns with the strategic plan:

> Every dollar you spend needs to be tied to the strategic plan and it helps move everybody in the same direction, otherwise you run into situations where people have displaced goals and they are spending money on things that don’t matter.

P7 outlined the budgetary process at the institution,

> We don’t do zero based budgeting at the institution. We generally do start from a budget from the previous year. One of things that we have tried to do is look over a 3-year period to see what actions versus how much we had budgeted to try to make adjustments. Our process has been to solicit feedback based on the prior year’s budget from departments and ask for any requests for new funding or adjustments to funding and then a justification for those and how they tie into either the strategic plan or institutional goals that we’re working on. We sit down with a listing of all the requests and then we prioritize those on a spreadsheet, color code them in terms of priorities, and ensure that all the requests coming forward are advocated for and supported by a vice president. We want to know what their top priorities are because you know we may or may not be able to fund all of the requests, and generally we cannot. We estimate the money we will receive from student tuition and state funding from the college system. We also make sure to put in a little bit of cushion to anticipate having leftover funds.

P7 also noted that the budgetary process is similar across almost all the colleges within the system. The major difference lies in the individual’s scope within the college leadership structure:

> Regardless of your position, the goal is to align priorities and look at what folks need for their programs. Dependent upon the position you may also be searching for other funding sources that can be tapped including grants as a one-time

> expense or recurring expense. It's just the level/position where you're looking at it, but the process itself is similar across and within colleges.

If a college's strategic planning sets forth the goals and initiatives of the institution and the budget funds the strategic plan, the institutional budget process should be closely coordinated with the strategic planning process (Smith, 2016). An issue that often arises is the need to integrate a funding process that leads to a detailed budget with a strategic planning process that leads to a clear, mission, vision, and direction (Smith, 2016). Alignment of these independent processes can be difficult but a strategic plan that guides budgetary decisions is vital to meeting the need for accountability in public higher education (Smith, 2016).

P3 shared:

> Budgeting is really the art of planning and then identifying those resources to scale and grow your programs for your students, for your employees, and then being good stewards of forecasting the revenue it's going to take to finance that type of an investment.

Several of the participants including P6 and P7 commented on the budgetary mistake many colleges fall into by only looking at the budget once a year as an exercise. P6 mentioned that many employees see the budget exercise as a repetitive action, filling in blanks from last year and carrying it all forward based on the previous years' experience although some throw things into the budget if they need something this year to see if it sticks. P7 outlined the importance of budgeting being an ongoing process with feedback, a constant feedback loop. As an example, P7's college has included a line item on their purchase order requisition where employees are required to determine what the requisition is tied to in terms of strategic planning.

P8 shared the importance of meeting regularly to review the budget:

> Within my department we meet monthly to see where we are headed. Then it is just a matter of if someone has questions for me, then I make time and meet with them about their particular budget. I meet monthly with them, go over it, and if there are questions, we address them. If there are requests for additional positions, equipment, or other non-personnel costs there is a requirement to justify the need and how it meets the mission of the college.

Educational institutions use transactional leadership extensively, so the framework is closely aligned to the theme of integrating the budgetary process with the strategic planning process. One of the areas most commented on by participants during interviews was how the COVID 19 pandemic has revolutionized the higher education sector and influenced both the strategic planning and budgeting process. The institution had to develop a 6-year strategic plan during the middle of the pandemic; the leadership team chose to develop a 6-year plan but focused on two sets of 3-year plans and embedded yearly short-term measurable goals and objectives to allow flexibility in addressing the rapidly shifting higher education landscape. P6 commented on the need to nimble and responsive in addressing the changing needs. As community colleges continue to respond to the COVID 19 pandemic, decreasing revenue streams, declining enrollment, the student loan crisis, and need for an immediate, skilled workforce, these short-term yearly goals embedded within the strategic plan are becoming even more meaningful. P3 shared the implementation of an instrument tool called Traction which overlays tightly with strategic planning. Traction is a software tool based on the entrepreneurial operating system by Gina Whitman. P3's department develops its 3-year strategic plan to align with the college's 6-year strategic plan. Within the 3-year plan, the department has 1-year plans and quarterly plans related to program growth, facility expansion, and increased staffing. P3 shared that decisions are made based on, "when we are fiscally ready to commit to those goals, because we knew the revenue growth, we had to hit."

Theme 2: Vacancy Savings as a Budgeting Practice (Cost-Savings)

Another important factor in balancing budgets that emerged from the data analysis, was the use of vacancy savings as a budgeting/cost savings practice. The theme vacancy savings occurred a total of 26 times throughout the interview process. The use of vacancy savings as budgeting tool is an effective and realistic method for budget development and budgetary control. Vacancy savings is the money saved or generated in personnel services and employee related expenditures by, (1) not filling a position which has been vacant by termination/retirement of an employee, (2) not filling a newly authorized position, (3) filling an authorized position at a grade, step, or class lower than authorized, or the (4) downward reclassification of an authorized position. Many of the participants interviewed discussed the responsibility that comes with their job that a lot of people do not realize.

P7 shared:

> It's my job to make sure that we are not going to lose a position or job because of my inability to manage money. I would do and have done whatever it takes to avoid somebody losing their job because that's a big deal to me and that's the kind of thing that keeps you up at a night. I tell people this all the time, especially if they are new managers or supervisors.

P6 expressed the following need:

> Community college managers must be strategic about backfilling positions, sharing that if you keep a position open as long as you can suffer through that, then you can take those vacancy savings and bundle them up. That offset is one of the top ways to cut off the 5% budget decrease during lean years. Following vacancy savings, you begin looking at the non-personnel things like vehicles and equipment.

P7 shared that the institution reviews annually the savings from individuals who leave and the position remains unfilled. The college could use this money as a contingency fund if needed. Another example was a time in which management had employees take up to a week of furlough days to reduce overall expenditures to balance the budget.

P6 noted:

> This can serve as a team building exercise when you pull everybody together and explain the budget situation. It makes everybody feel like now they have some sort of skin in the game. This is a real situation and what they are doing is saving other people's jobs.

The transactional leadership theory closely aligns with the philosophy of cost savings in the budgeting process and has been commonly used in public college settings and is considered the preferred management style (Seligman, 1950; Burns, 1978). Transactional leadership is focused on performance driven results, efficiency, productivity, the bottom line, and ensuring profitability. This leadership style enables employees to understand how their goals are tied to business growth and easily comprehend the impact they are having on the business. Meeting or exceeding goals creates a more efficient organization and increases revenue. Transactional leaders would employ the vacancy saving approach when determining the necessity and performance efficiencies for positions.

Theme 3: Community College Funding Models Driven by Enrollment and Performance-Based/Driven

Historically, state funding for community colleges has been tied primarily to current costs, enrollment numbers, and increases relative to inflation, an approach often criticized for its reliance on unnecessary expenditures and inability to flex to changing demographics and student needs (Li & Kennedy, 2018). In the past decade a number of states have moved away from this funding model towards a combined enrollment-driven and performance-based funding (PBF) model. Lack of taxpayer trust in public higher education due to the rising cost of tuition amidst steep reductions in federal and state funding, along with continued low completion rates at community colleges have fueled the increase in PBF models, designed to ensure public community colleges operate more efficiently and effectively to meet strategic goals and initiatives aligned with funding incentives (Li & Kennedy, 2018).

The theme PBF occurred a total of 20 times throughout the interview process. All eight of the participants noted the shift from 100% enrollment-based funding to an 80% enrollment based, 20% PBF model has promoted the importance of focusing on student success factors to balance budgets. The United States is currently confronted with a large number of baby boomers leaving the workplace in combination with a lower but extremely diverse number of high school graduates. The demand for a skilled workforce with postsecondary credential attainment continues to increase (Romano et al., 2019). 41 of 50 states have adopted PBF metrics related to educational outcomes (Boggs, 2019; Hillman et al. 2018). PBF models directly align with Burn's (1978) theory of transactional leadership. Transactional leaders monitor employee performance based on established goals and targets. Leaders acknowledge when employees meet predetermined goals and reward them for doing so while simultaneously withholding rewards or punishing employees with poor performance. PBF models reward those colleges who meet the performance metrics outlined in the PBF model. Under the incentive-funding model at this organization, institutions that meet certain performance criteria are able to retain unexpended funds (Hu, 2019). According to P7, incentive funding metrics include completion of college-level math and English, student retention for one-year and two years, student retention data aligned with the required number of credit hours and grade point average, earning of awards (degrees, diplomas, and certificates), students transferring with at least 16 or more credit hours, and students transferring and earning a bachelor's degree. The outcomes-funding metric model was phased in over a four-year period; 12% of total funding was dependent on the PBF in the first year, while 20% of total funding was depending on the PBF model in the fourth year. P7 noted that the community college budget system is complex, and that some of it is needlessly complex. Secondary data that I analyzed included the verified distribution report, outlining what all the colleges are receiving in terms of PBF across the system. P7 shared that you have to really dig into it and understand the metrics involved, once you separate 80% of it is enrollment based. The PBF model is where probably 80% of the metrics are but only makes up 20% of total college funding.

P7 shared the following with regards to PBF models:

> To me that's a little bit backwards, because the biggest piece of the pie, has the least number of metrics but, again, it makes sense if you think if you take the approach that enrollment should probably dictate how much money you're getting.

All participants interviewed communicated the importance of communication and transparency in how their position helped meet the PBF metrics.

Theme 4: Strategic Partnership/Alternative Revenue Streams as Revenue Generator

College policies such as open admissions, flexible course scheduling, low or no tuition, and geographic accessibility have provided almost 10 million Americans the opportunity to pursue postsecondary degree and workforce preparation attainment (Kolbe & Baker, 2018). Growing concern remains over the ability of existing community college funding model sustainability (Koh, Katsinas, Bray, & Hardy, 2019). Following the 2008 economic recession, community colleges were confronted with sharp reductions in public funding (Kolbe & Baker, 2018). More than any other higher education entity, community colleges rely significantly on state and local appropriations to offset and keep tuition as affordable as possible (Romano & Palmer, 2016). Between 2001 and 2011, state and local appropriations declined by 23% (Romano & Palmer, 2016), further affirming the importance of public funding for community colleges and important discussions about states providing sufficient funding to support access to postsecondary degree attainment and workforce preparation. Community colleges respond to reductions in federal and state support by raising tuition and cutting spending. Community colleges' tuition and fees increased by 47% and expenditures fell by 12% (Romano & Palmer, 2016). According to the Community College Research Center in 2019-2020, 53% of community college revenues per full time equivalent student were from state and local appropriations; 18% was from federal appropriations; student tuition accounted for 17% of revenue per student.

The importance of strategic partnerships and alternative revenue streams in generating revenue for community colleges was the fourth theme that appeared following analysis of the participants' responses of strategies to balance budgets. The theme of strategic partnership/alternative revenue streams as a revenue generator occurred a total of 14 times throughout the interview process. It was clear that participants felt that reductions in federal and state funding, along with increases in student tuition required community colleges to seek out creative ways to increase their revenue streams. Participants in the semistructured interviews shared their experience in benchmarking, managing, and overseeing grants and strategic partnerships ranging from $30,000 to $1.7 million dollars total.

P1 shared the importance of looking for grant opportunities during lean times.

> We have always been able to do so, and a lot of that is just about building relationships with others and then partnerships with other people to collaborate. In my case it has been the ability to express what our needs are to business/industry and secondary partners, because a lot of times they are willing to step up and help you fund things that you're not able to fund.

P1 went on to share a scenario in which the college developed a strategic partnership with a local high school to fund a career coach position; the college paid half with grant funding and the school division paid the other half of the career coach's salary.

P7 described that aside from purchasing and things that have an impact on your expenses, the college is fairly limited in terms of raising their own revenue.

> The college has been fairly creative in terms of building buildings and using our foundation, but there are not a lot of revenue streams that you can do, unless you create an auxiliary sort of enterprise. We don't do a lot of public private partnerships because of the process it takes to get through. The majority of expenses are personnel related examples so you are somewhat limited in how to raise money. In the state system you do not have as many options as a private college.

Documentation Analysis

My review of company documentation included college enrollment data, student tuition and fee reports, funding received from federal and state governments, operating budgets (both personnel and non-personnel), and the verified distribution report outlining the performance-funding model for the 23 colleges in the system, all of which directly supported the interview data and major themes discovered following analysis of the semistructured interviews. The enrollment report supported the concerns regarding reductions in student enrollment whereas the student tuition and fee reports along with the funding received from the federal and state government demonstrated the rising increase in student tuition and the decrease in funding and support at both the federal and state level. The operating budgets reinforced the need to evaluate vacancy savings as a cost saving function and the importance of aligning the organization's planning with the budget process, to ensure appropriate allocation of resources in supporting the mission of the college. The performance-funding verified distribution report confirmed the strategy of moving the focus away from enrollment-driven initiatives to a more outcomes-based model and directly aligned with Burn's transactional leadership theory. The managers of the organization also shared PowerPoint presentations from budgeting presentations that had been shared with various college stakeholders, including employees and the college board. Finally, I located news articles regarding the institution that specifically referenced their strategic partnerships in the community along with the alternative revenue streams the college had embraced.

Summary of the Findings

The analysis focused on one research question: What are the strategies community college managers use to balance their budgets in an environment of declining revenue? Most of the interview participants justified Burn's (1978) transactional leadership theory. The participants spoke frequently of the importance in balancing budgets as extremely vital for financial and long-term sustainability of community colleges. The following four themes emerged from the data analysis: (1) the importance of aligning budget priorities with strategic planning goals, (2) reliance on vacancy savings as a budgeting practice, (3) movement from enrollment-driven funding models to a combination of enrollment-driven and performance-based funding models, and (4) the importance of strategic partnerships and alterative revenue streams including grant funding. Community college managers, based on a thorough data analysis of the participants and supporting documentation, implemented successful strategies to balance community college budgets when confronted with declining student enrollments, federal and state funding, external economic factors, and changing demographics.

Applications to Professional Practice

The purpose of this qualitative, single case study was to identify the strategies that community college managers use to balance their budget during periods of declining revenue. The sample was comprised of eight managers from a community college in the state of Virginia. Participation in this study was voluntary. Through the implementation of semistructured interviews participants provided insight into strategies they used help balance budgets. The strategies shared by the participants might contribute to social change by serving as the foundation for other managers to use in balancing their budgets. The findings could add to current budgeting strategies used to ensure organizations remain financially viable, sustainable, and could result in improving business processes.

Business leaders can apply the findings from this study to professional practice by developing effective strategies to balance budgets during periods of declining revenue. Although this study is primarily focused on the education industry, balancing budgets when confronted with declining revenue is a skill employed by managers across all industries. Integration of strategic planning with the organization’s budget, vacancy savings as a cost savings method/contingency plan, performance-funding models, strategic partnerships, and alternative revenue streams are effective strategies that managers in any sector can utilize to balance their budgets.

My objective in conducting this study was to provide managers in the community college industry with knowledge about the use of strategies effective to balancing budgets. Managers are responsible for overcoming enrollment fluctuations, rising tuition costs and budget shortfalls to maintain financial viability (Kolbe & Baker, 2018). Area community college managers could benefit from strategies emanating from this study to achieve balance of their budgets. Community colleges could, therefore, remain accessible for diverse populations because of lower costs (Kolbe & Baker, 2018).

Implications for Social Change

The implications for social change include strategic plan and budgeting process alignment, vacancy savings, performance-based focused outcomes rather than enrollment-based initiatives, strategic partnerships, and alternative revenue streams to balance budgets during periods of declining revenue. Colleges implementing the above strategies will benefit as they experience financial viability, increased revenue, and sustainability for years to come. Employees will benefit as there will be limited use of vacancy savings, an absence of reductions in force, and the ability to offer more employment opportunities in the communities in which the colleges operate and serve. Students will benefit from expansion of access to degree programs and workforce/vocational preparation programs. Additionally, students will have access to alternative revenue streams, grant funding, and strategic partnerships to offset rising tuition costs. Business and industry partners in the service region will benefit from the pipeline of skilled workers to fill desperately needed positions.

Community colleges are integral to the success of our country and contribute to our long-term economic and workforce development goals. Community colleges have provided almost 10 million Americans the opportunity to pursue postsecondary degree and workforce preparation attainment. Historically underrepresented populations including minority, low-income, part-time, first-generation, and adult students attending community colleges has led to substantial increases in higher education sector participation (Shapiro et al., 2017). Half of community college students are from racial and ethnic minority groups and one third are considered first-generation college students (Shapiro et al., 2017). The findings from this study could have implications for positive social change by helping community college managers balance budgets and meet the needs of their target populations. The community could benefit from these findings, as more students can receive a community college education, thereby increasing the number of skilled workers available in the region, which could improve the economic outlook of the community.

Recommendations for Action

The information shared by participants during the semistructured interviews provides community college managers with new insight that they can use to balance budgets during periods of declining revenue. Balancing the budget is critical to maintaining the financial viability of community colleges and community college managers are aided by the four key themes that developed throughout the interview process: (1) the importance of aligning budget priorities with strategic planning goals, (2) reliance on vacancy savings as a budgeting practice, (3) movement from enrollment-driven funding models to a combination of enrollment-driven and performance-based funding models, (4) the importance of strategic partnerships, and alternative revenue streams including grant funding. The following recommendations are focused on improving the budgetary process given the current challenges confronting community colleges including response to the COVID19 pandemic, decreasing revenue streams, declining enrollment, the student loan crisis, the need for an immediate, skilled workforce along with increased external pressures being directed toward public community colleges for accountability in their use of taxpayer dollars.

The first recommendation is that community colleges must work to align budgeting processes with the institution's strategic plan. Community colleges are confronted with unique challenges including size, setting, expectations, and available resources (Kolbe & Baker, 2018). Participants throughout the interview process communicated how important it was to link budgeting priorities to the strategic plan, communicating the way in which it moves everyone in the same direction and eliminates concerns over displaced goals and people spending money on things that do not matter. Integration of strategic planning and budgeting is necessary to demonstrate fiscal responsibility and is essential when community colleges continue to be asked to do more with less state money (Smith, 2016). There are a number of ways to address the recommendation including: (1) beginning the budget process earlier in the year, (2) utilizing documentation that requires consideration of how purchase requests align to the strategic plan, (3) implementing a regular schedule and constant feedback loop/planning calendar, and (4) reducing reliance on the budget carry over approach currently being utilized in a majority of the community college sector. If the budget process is started earlier this would allow senior administration, budget directors, and employee stakeholders the opportunity for more time to be involved, discussion to occur, and feedback to be provided. This time could be better used to focus on the important discussion of how to align resources with the strategic plan. It is also recommended that colleges embed within their purchasing requisitions the need for employees to communicate how their particular funding request directly ties to the strategic plan as a constant and repetitive reminder of the need to align both these goals. Regular reviews and a constant feedback loop are also necessary for success; the budget process should not be something that is only looked at on a yearly basis, a planning calendar could be helpful in this approach. The calendar should be visible to all college stakeholders (both internal and external) to improve the transparency of the planning process. It should be widely distributed and available on the college's website for inclusion of the community and external partners. The planning calendar acts as an accountability measure and provides information on events related to strategic planning and budget integration and their proposed day/time.

The second recommendation is for community colleges to move away from focusing primarily on enrollment-driven initiatives to a more outcomes-based approach. The performance-funding model implements a formula to allocate state funding to community colleges based on student outcomes. Performance funding has shifted a portion (dependent upon state) of dollars from an enrollment-based model to an outcomes-based model. Outcomes include student retention rates, transfer rates to two and four-year institutions, credit hours, graduation rates, degrees conferred, and job placement. Participants shared the importance once again of linking the strategic plan and college initiatives with the budgetary process, providing transparency as to which metrics are a part of the college's performance-funding model, and ensuring that all stakeholders are including in the discussion of how to meet and advance these goals so they can realize the impact their position has on fostering student success.

The third recommendation is for community colleges to find creative ways to ensure they balance their budgets during periods of declining revenue, including the use of vacancy savings, strategic partnerships, and alternative revenue streams to offset the reduced federal, state, and student tuition dollars. Utilizing these strategies will assist in offsetting the impact of decreased funding and appropriations from the federal and state government, along with rising tuition costs. Participants did note the importance of ensuring you have individuals who are able to manage the grants coming in through development of a management plan and benchmarking tools.

The findings of this study will be shared with managers and stakeholders in the community college industry through scholarly journals and business publications. I plan to seek out opportunities to share the findings of this research through meetings and conferences related to community college administration. This study will also be available through the ProQuest/UMI dissertation database for future scholars and other organizations. Finally, I will share the results of this research through formal and informal conversations and meetings with all interested community college employees and stakeholders.

Recommendations for Further Research

Community colleges provide affordable postsecondary education opportunities as a pathway to a four-year degree or job attainment. For community colleges to continue to succeed and serve as a center of economic development in the service regions they occupy, managers and leaders must implement strategies to offset declines in revenue and ensure financial viability. There are a number of recommendations to consider for further study related to exploring strategies community college managers use to balance their budgets in an environment of declining revenue. First, due to a lack of responsiveness from community colleges managers interested in participating in the semistructured interviews during the COVID19 pandemic, this research was limited by the use of a single case study. The original intent was to complete a multiple case study; however, managers at only one of 23 community colleges in Virginia chose to participate. Other colleges chose not to participate as their institution was not engaging in outside research due to the COVID19 pandemic or did not respond at all. The study was limited to eight community college managers within the state of Virginia. These individuals hold senior administrative positions within their respective organizations and often make decisions reflecting a top-down management style. Decisions made at this level impact employees at all levels of the organization including those responsible for day-to-day operations. This research should be repeated on a larger scale, using a multiple case study approach to reach generalizable results. Second, this research should also be applied to other private and public 2-year and 4-year colleges and universities to better understand strategies implemented to balance budgets. Third, the qualitative case study approach was employed to achieve in-depth, detailed, and lived experiences of participants in this research. This research should be repeated using the quantitative method to measure the relationship between the major themes identified and their ability to impact institutions which are confronted with declining revenues. Fourth, this study should be replicated in other geographical areas of the United States, outside of Virginia which would increase the sample pool of participants, allowing for a more diverse set of demographics when analyzing results. Participants included one community college in the state of Virginia which may not be comprehensive and generalizable to the broader education field within the United States. Very little research has been done with regards to the impact of balancing budgets within the community college sector and its linkage to the strategic planning of the organization. Another recommendation is to repeat this research with a singular focus on performance-funding models and its impact on combatting declining revenue. During the process of conducting this study and the semistructured interviews, COVID19 presented additional research possibilities looking at the overall viability of community colleges in light of the move to completely remote/online operations and its impact on enrollment, revenue decline, and balancing of budgets.

Reflections

The Doctor of Business Administration (DBA) program at Walden University was a challenging and worthwhile experience. At the beginning of this journey my goal was to obtain a degree in higher education to help better support students in the classroom while also planning for the future and the potential of a college administrative position. During my time in the program, I have had the opportunity to work towards overcoming a number of personal and professional barriers during different stages of the doctoral study journey as I persevered to complete the goal of earning my doctorate. Those barriers included changes in topic, methodology, the impact of COVID19 on the ability to complete semistructured interviews, replacement of a committee chair, changes professionally in the workplace as I took on more responsibility following the retirements of colleagues within the same division, and perhaps most impactful the deaths of multiple grandparents. I have learned to manage failure and recognize that although intelligence is important, perseverance can be even more integral to success. Critical thinking, analysis, problem-solving, and communication are a few of the essential competencies I worked to master throughout this journey.

The topic of this research, exploring strategies community college managers use to balance their budgets in an environment of declining revenue, was determined based on both my professional and personal interest levels. I currently serve as a professor of business management and administration, along with program lead and partnership coordinator, for the community college at which I am employed. Although much of my responsibility lies in working with students in the classroom, I participate and am involved in committee work both at the local college level as well as the state system. The viability of higher education institutions, following the COVID19 pandemic, decreasing revenue streams, declining enrollment, student loan crisis, and need for an immediate, skilled workforce has been called into question (Harden, 2013). Over a decade ago a prediction was made that half of the colleges and universities in the United States would close within the next 50 years (Harden, 2018). Community colleges are often the most important institution in their service region, playing a critical role in workforce development across the nation with a mission to provide academic programming and skills training to prepare students for jobs or to transfer to a four-year college and university (Kolbe & Baker, 2018). Given the importance of the role of community colleges and discussion regarding the viability of community colleges in the future, it became my desire to explore and publish research related to strategies used to successfully balance budgets during periods of declining revenue.

One of the most significant challenges was to ensure I did not influence the participants with my personal views and opinions during the data collection phase in which semistructured interviews were completed with the eight community college managers. I have been interested in the ways in which these institutions remain financially sustainable. During their tenure, community colleges have moved from primarily federal government, state government, student tuition dollar revenue streams to a performance-funding models and alternative revenue streams such as grants and strategic partnerships with business and industry. I worked to ensure proper interview protocol and reduce both verbal and non-verbal behaviors that could affect the responses of the participants and influence their answers. My preconceived notions among the themes were that strategic planning and alternative revenue streams such as grants would be the most significant. After I coded the transcript and reviewed the data, I realized that my preconception was not accurate. After self-reflection, I let go of my biases to accept the findings.

Conclusion

The purpose of this qualitative single case study was to explore strategies community college managers use to balance their budgets in an environment of declining revenue. The participants of the study included community college managers from the 23 community colleges in Virginia. Data collection occurred through semistructured interviews and review of publicly available company documents. Interviews occurred through Zoom video conferencing technology as a result of the ongoing COVID19 pandemic. Four themes emerged from the data analysis: (1) the importance of aligning budget priorities with strategic planning goals, (2) reliance on vacancy savings as a budgeting practice, (3) movement from enrollment-driven funding models to a combination of enrollment-driven and performance-based funding models, and (4) the importance of strategic partnerships and alternative revenue streams including grant funding.

Balancing community college budgets during periods of declining revenue is a complex and challenging task. The findings of this study have the potential to help community college managers who need strategies to balance their budgets. Community college leaders are responsible for overcoming a myriad of obstacles, including the COVID19 pandemic, decreasing revenue streams, declining enrollment, student loan crisis, and need for an immediate, skilled workforce. Other community college managers may benefit from the strategies explored in this study to ensure future viability to meet the academic programming and skills training so desperately needed by the populations they serve. As more students receive a community college education, the number of skilled workers available in the area increases, further improving the economic outlook of the community.

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Appendix A: Letter (Email) of Invitation

Greetings,

You are invited to participate in a research study conducted by Rachel Dodson, a student at Walden University. The study fulfills a part of Rachel Dodson's academic requirements at Walden University. Upon completion of the study, the researcher hopes to better understand the strategies necessary to balance community college budgets during a period of declining revenue. The findings from this study could have implications for positive social change by helping community college managers balance budgets to ensure financial viability to meet the needs of their target populations. You are invited to participate in this study because you are community college manager with 2-years of experience in working with budgets.

Your participation in this study is voluntary. If you decide to participate, you may withdraw your consent and discontinue participation at any time without penalty. If you choose to participate in this study, you will agree to participate in a one-on-one interview. For the interview, you and Rachel Dodson will meet one time for 30 to 45 minutes. The interview will be recorded. You will be provided the opportunity and encouraged to review the transcript of your interview for accuracy.

If you are interested in participating, please review the attached consent form. If you have questions or are interested in participating in this research, please contact Rachel Dodson by cell or email.

Thank you for your interest in participating.

Best wishes, Rachel Dodson

Appendix B: Interview Protocol

Participant's Numeric Identifier: ____

Date/Time of Interview: ____

1. I will begin the Zoom videoconferencing interview by welcoming the participant(s), introducing myself to the participant(s), expressing my gratitude for them taking time out of their busy schedule, and remain sensitive to the time allotted for the interview.
2. I will explain the purpose of the study and go over the consent form, review the contents of the consent form, answer any participant(s) questions, and address any concerns of the participant(s).
3. I will ask permission to turn on the Zoom audio-recording device, followed by turning on the audio-recording device.
4. I will notify the participant that I am recording the interview and reiterate that it will be strictly confidential.
5. I will introduce participant(s) with an identifier (P1, P2, etc.) and coded identification, noting the date and time of the interview.
6. The interview will be a minimum of 30 minutes but last no longer than 45 minutes, as previously indicated in the consent form.
7. I will ask the five open-ended semistructured interview questions (Appendix C), in order of question one through question five.

8. As the interviewer, I will be observing my body language and tone of voice to avoid unintentionally expressing my personal opinions and introducing bias.
9. I will paraphrase the statements as needed for clarity.
10. At the end of the interview question portion, I will notify the participant that they will have the opportunity to review the transcripts of the conversation for accuracy. I will schedule the follow up for member checking and provide my email address and contact number.
11. I will conclude the interview

End of the interview protocol.

Appendix C: Interview Questions

1. What are the strategies you use to balance the budget in an environment of declining revenue?

2. How did you assess the effectiveness of these strategies?

3. What were some of the barriers you were confronted using these strategies?

4. How did you overcome these barriers while using these strategies?

5. What other information can you share related to balancing the budget in a period of declining revenue?