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NATIONAL LOUIS UNIVERSITY

BEYOND ACADEMICS: CHALLENGING ISSUES FACING COMMUNITY COLLEGE
NON-ACADEMIC SUPPORT SERVICES

A DISSERTATION CONCEPT PROPOSAL SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE

DOCTOR OF EDUCATION

In

COMMUNITY COLLEGE LEADERSHIP

By

JUDITH LYNN MITCHELL

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Dissertation Notification of Completion

Doctoral Candidate: Judith Lynn Mitchell

Title of Dissertation: Beyond Academics: Challenging Issues Facing Community College Non-Academic Support Services

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Date of Final Approval Meeting March 22, 2012

We certify this dissertation, submitted by the above named candidate, is fully adequate in scope and quality to satisfactorily meet the dissertation requirement for attaining the Doctor of Education degree in the Community College Leadership Doctoral Program.

Signature

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March 22, 2012
March 22, 2012
March 22, 2012

Dedication

This dissertation is dedicated to my husband, Rick, without whose continued love and support, I could not have completed this program. You have been by my side throughout this entire process, providing words of encouragement and giving me a shoulder to lean on when I most needed it. You allow me to follow my dreams, and for that, I will be forever grateful. I love you and I will always be there for you.

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Abstract

This research focused on identifying and exploring the significant current and emerging community college non-academic support service issues. These auxiliary services, not unlike academic or student affairs, support the community college mission and vision as well as students' academic success. Since December 2007, Americans have been experiencing a lasting recession and community colleges are no different. Due to the dramatic decrease of financial support from Federal and state funding, many institutions are struggling to remain viable as they continue to serve the constituents in their districts. The purpose of this study is to explore significant emerging non-academic support issues as identified by community college auxiliary service administrators.

The qualitative case study employed purposeful sampling with maximum variation and a sequential multimethod data collection design. A national survey was conducted of community college auxiliary service members of the National Association of College Auxiliary Services (NACAS). This was followed by a state survey (Illinois) which was given to all single campus community colleges auxiliary service administrators. Illinois participants, who took the survey, were asked to volunteer for face-to-face interviews. Representation was obtained from six of seven Illinois Community College Board (ICCB) designated peer groups. One peer group was excluded as it contained only one college system and it was not a single campus institution. Six auxiliary service administrators across Illinois were interviewed.

The findings revealed that the current and emerging primary issues, for community college auxiliary administrators, are the bookstore and food service operations. Other emerging issues are technology purchases, building and maintenance expenses associated with aging

buildings, and institutional subsidies for student support services such as early childhood centers. Within the departments managed by auxiliary administrators, both data-driven decision making and challenges regarding personnel were seen as taking most of their time and efforts. Findings illustrated how these administrators view the college as a whole organization and not as departmental silos. This unique “across the college perspective” can be of great benefit to senior leadership. As a result of the findings, the *Mitchell Model for Professional Development* is presented which can assist community college auxiliary service administrators in better preparing for the challenges they face today and in the future.

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CHAPTER 1

INTRODUCTION

The impact of the recession on community colleges across the country has resulted in an increase in students, an increase in budgets, and in many cases a decrease in funding. To keep the covenant of the generic community college mission (*affordability, accessibility, and serving the community in which it resides*), diligent management of academics, student services, and operations by knowledgeable administrators is crucial. Currently, research does not exist which explores the role or contributions made by community college auxiliary service administrators. The intent of this study is to explore the role of auxiliary service administrators, to improve an understanding of how and in what ways they accomplish their responsibilities, and to discover issues they believe will greatly affect community college auxiliary services in the future. The sharing of these insights and information can serve to assist administrators presently holding these positions, new auxiliary service administrators, and senior leadership striving to hire the right person for this vital position.

Background and Context of Issue

Education of its citizens is a hallmark of the United States. Since the early 1600s, higher education has developed and matured, as did the new nation. In the 1900s, two-year post-secondary institutions, commonly known today as community colleges, began to appear as another avenue to higher education. According to noted historians Cohen and Brawer (2008) “The American community college dates from the early years of the twentieth century” (p. 1). Since their inception, community colleges have increased in number due to the demands for higher education opportunities.

In 1944, President Franklin Roosevelt signed the Servicemen's Readjustment Act, also referred to as “the GI Bill of Rights”, to support returning soldiers. Included in the bill was a “large-scale financial aid package” (Cohen and Brawer, 2008, p. 31), providing increased opportunities for individuals to attend post-secondary institutions. The support was inclusive of tuition reimbursement, books and supplies, counseling, and living expenses. A few years later, community colleges in the United States “found their greatest support with initiatives from the Harry S. Truman administration and its *Commission on Higher Education for American Democracy* in 1947” (Burke, 2008, p. 1). The Truman Commission provided for the expansion of junior/community colleges as well as it extended educational opportunities for minorities, women, and working adults. As a direct result of the Commission, historian Kenneth Burke (2008) notes a restructuring of higher education; as a result, a place was made for two year post-secondary institutions where... “colleges organized to directly serve community needs, design programs for student occupational development, integrate academic learning and vocational study by offering a two-year degree, and provide for adult education” (p.1).

In the 1960's, the community college system encountered another dramatic increase in enrollment, predominantly due to the children known as the “baby boomers” of World War II soldiers. It was during this same time that a common universal mission was established by community colleges; the mission of these colleges declared they were affordable, accessible, and serving the people in the community. The building of community colleges and increasing enrollment continued to expand and by fall, 2002, the National Profile of Community Colleges: Trends & Statistics noted that 11.6 million students were enrolled in 1,158 community colleges (Phillipe & Gonzelez, 2005, p.3). Eight years later, increased enrollment and the importance of

community colleges continue “to evolve at 1,167 public and independent community colleges” (AACC, 2011) which were located in multiple districts throughout the country.

In 2008, the country encountered a severe economic crisis and many individuals, businesses, and higher education institutions experienced a great deal of financial turmoil. Funding resources, education post-secondary grants, specifically state and local apportionments, have gradually declined over the past several years. Within the state of Illinois alone, “thirty-nine community college districts have suffered a precipitous drop in state apportionment dollars since 2003; when adjusted for inflation, Illinois community colleges currently receive state funding at a 1993 level” (Illinois Community College Trustees Association, 2008). The financial crisis in the United States, along with the high unemployment rate, has resulted in a challenge for many colleges and universities.

Community colleges are now facing challenges never experienced before. While some institutions are forced to close their doors, others are eliminating programs and cutting services just when they are needed most. No doubt, individual institutions are re-evaluating their budgets and instituting creative avenues to increase revenues and reduce expenses.

Students attend institutions of higher education for various reasons. Many enroll in their local community college to take high-quality educational classes that are affordable, located close to home, have small class sizes, and are equipped to provide a range of needed student support services. These two-year institutions respond to the needs and demands of the communities they serve by offering diverse programming, including: career and technical programs and certificates; workforce retraining; continuing education; GED completion; personal development courses; and, transfer courses and degrees.

In general, students who attend community colleges are also known as “commuters” since many work (full or part-time), have limited time available to attend classes, and do not live on campus. Likewise, the demographics for these students have shifted greatly over the last three to four years, largely due to the increased unemployment rate and lack of jobs. In order to survive the economic downturn and its education competitors, it is critical for these two-year institutions to continually assess and readjust their programs and student support services to ensure the demands of this diverse population are met. Therefore, it is the responsibility of community college leaders to provide a comprehensive academic experience that is supportive of the needs of all students and community members.

Today, community college senior leadership is struggling to ensure a comprehensive academic experience for all students while facing critical decision making in this time of economic uncertainty. This research is timely and relevant as it seeks to identify the issues facing administrators of auxiliary services, and recognize what they need to know to sustain and support the mission and vision of their community college.

Community College Auxiliary Services

Since the 1940’s and into the 1960’s, as enrollment in community colleges increased, “services beyond basic food service such as student housing, retail support functions and other necessary campus services become a recognized need” (Sherwood and Pittman, 2009). Post-World War II these auxiliary services continued to expand by adding additional functions, including housing, dining, bookstores, health services, and recreational activities. Non-academic support services, such as the ones mentioned above, are also known as ancillary or auxiliary services; they provide support for the institution and typically run under a Business or Student Affairs administrative leadership model.

Changing demographics of an institution not only affect the academic and student service areas, but non-academic support services as well. The role of auxiliary services is to provide the highest quality, affordable, convenient services and programs to support the college's mission. It also serves all internal and external college constituents and provides management flexibility for campus operations. Although some services provide revenue to the institution, others are available to afford all manner of customer and employee support services. The challenge for the leaders of auxiliary services is to continually search for ways to improve operational efficiencies, find ways to become more cost effective, and to be creative in an ever-changing environment. Non-academic support services sustain the institution by serving the students and the community through a variety of services that are vital to the success of the community college experience.

Purpose of the Study

The purpose of this study is to explore significant emerging non-academic support issues as identified by auxiliary service administrators in community colleges.

Research Guiding Questions

The guiding questions arising from the research process are:

- 1) What are the non-academic support issues that are most significant to the community college?
- 2) What identified issues are expected to increase in intensity over the next five years?
- 3) What identified issues demand the greatest amount of auxiliary service administrators' time?
- 4) What identified issues currently require the largest expenditures of human and fiscal resources in community college auxiliary service administrators' time?

Significance of the Study

The American Association of Community Colleges (AACC) (2010) reports that “jobs requiring at least an associate degree are projected to grow twice as fast as those requiring no college experience” (p. 1). Additionally, the American Graduation Initiative: Stronger American Skills through Community Colleges was a commitment by President Obama to add five million college graduates over the next decade. This initiative will “increase the effectiveness of community colleges and bring both opportunities and challenges to community colleges to raise graduation rates, modernize facilities, and create new online learning opportunities” (AACC, 2010).

Although increased enrollment and college completion is what community colleges strive for, the sudden increase in enrollment presents both challenges and opportunities to all respective areas within the institution. Brent Cejda and Jay Leist (2006), University of Nebraska and Texas Tech University, categorize the issues and challenges facing community colleges today into six all-encompassing areas: “community needs; funding; technology; human resources-students; accountability and assessment; and human resources-leadership, faculty, and staff” (p. 255). Each issue affects academic and non-academic areas within the community college.

The majority of the community college research pertains to academic or student services, with little to no research available on auxiliary services and auxiliary administrators. The proposed study is twofold; to identify emerging auxiliary services issues and trends, and to identify issues currently requiring the most time and effort of auxiliary service administrators. The academic success of students, as well as the success of the community college, depends on all areas of the organization working together to build a stronger institution which is able to meet the student’s needs as they arise. “The hallmark of community colleges has always been flexible

and rapid response to learners' needs, so they are well positioned to lead this evolution”

(National Profile of Community Colleges: Trends & Statistics, 2005, p. 3). Due to the lack of information regarding issues facing non-academic support services in community college research, it is important to identify them in order to be ready to address these challenges and be successful.

The research process, by identifying emerging issues within non-academic support services, will provide rich data to enhance auxiliary service administrator's operational data-driven decision making. Community college leaders throughout the institution are managing in very unstable times. “Demographics are changing, budgets are constrained, natural resources are diminishing, families are struggling to pay for post-secondary education, and the public is increasing its demand for accountability” (Eldred, 2009). Due to the uncertainty of the future, the outlook appears laden with challenges and opportunities. The study's findings and the issues identified can assist to prepare auxiliary service administrators for the future. Community colleges cannot afford to make mistakes; they must revisit and recognize the contributions of non-academic support leaders.

Conceptual Framework

The conceptual framework for this study serves as the lens in which to situate the research and findings. To facilitate conceptual grounding of this study, an exploration of theories was undertaken applicable to this research topic. While numerous theories and concepts exist, three were determined appropriate to explain and be able to understand the decisions made by community college administration as well as administrators of non-academic support services. This brief literature review presents a general overview and historical background of the research topic. Additionally, a brief review is included of the concept and theories serving to situate the

research: (a) situational leadership theory, (b) data driven-decision making, and (c) open-system leadership theory.

Historical Background and Context of Auxiliary Services

Joliet Junior College was the nation's first community college, founded in 1901 under the influence of William Rainey Harper, President of the University of Chicago. In these early years, community colleges aligned the focus of academics with general liberal arts studies. Thirty years later, as the country entered the Great Depression, community colleges broadened their curricular offerings by adding vocational job-training programs to the academic offerings; job-training programs are now known as Career and Technical Education programs.

The following decades brought about added opportunities and support for community colleges. President Harry S. Truman assembled a group of educators and policy makers, known as the Truman Commission, in 1946, to investigate new directions for higher education. Their report published in 1947, *Commission on Higher Education for American Democracy*, served as a guiding force for higher education and led to "the creation of a network of public, community-based colleges to serve local needs" (American Association of Community Colleges, 2010, p. 18). By the end of 1949, 650 public and private two-year colleges were in existence across the country (AACC, 2010).

At the same time the growth of the community college system was taking place, enrollment was substantially increasing. "Throughout the nation, in city after city, as community colleges opened their doors, the percentage of students beginning college expanded dramatically" (Cohen and Brawer, 2008, p. 18), and by 1969, 993 public and private community colleges were in existence to support the largest growth period in community college history. The mission of community colleges also evolved to not only include academic transfer curricula

and career and technical (vocational) education certificates and programs, but to also provide offerings such as continuing education programs, community service courses, and business and industry customized training programs. Institutions struggled to keep up with student demand. As community colleges morphed into a more comprehensive institution, it was apparent that the availability of non-academic support services was crucial to student success and the institutions' continued growth.

In the 1940s, two predominant auxiliary services emerged to satisfy student's basic needs, centering on essential food service and small retail services such as the bookstore. The two services, for many years remained the cornerstone of community college auxiliary services. During the 1960s, community colleges grew in number and became more comprehensive in their offerings of degrees, certificates and community programs. At this time, a reciprocal expansion in the scope of non-academic services afforded essential support not only for students, but for faculty and administration. This period also solidified auxiliary services significance as a primary participant in the evolution of community colleges as a comprehensive institution.

Responsibilities of auxiliary service administrators correspondingly grew in scope and are reflected in the range of support services fundamental to specific colleges. This includes the planning, coordinating, and directing of services in a variety of areas that enhance the efficacy of the institution. Although the duties of auxiliary administrators conform to the size and need of the institution, three key elements are noteworthy. First, auxiliary administrators are responsible for a diverse array of departments. Second, many of these non-academic support departments are revenue generating and contribute to the financial well-being of the institution. Third, the educational level and maturity of the staff hired in these non-academic support services are as diverse as the services themselves.

Auxiliary service operations not only assist with supporting students, but enhance the effectiveness and viability of the college. In addition, they provide extensive support for both internal and external customers, including but not limited to retail, food service, childcare, technology, facilities and maintenance, and security. Configuration of these departments and service under auxiliary service administrators are specific only to a particular community college. As community colleges enter the twenty-first century, auxiliary services provide academic and financial support in more than twenty areas throughout the institution. During this time of financial instability and significant increase in enrollments, auxiliary service administrators need to become leaders in their field and assist in positioning the comprehensive community college's longevity for the future.

Situational Leadership Theory

Pamela Eddy and Kim VanDerLinden (2006), authors of *Emerging definitions of leadership in higher education: new visions of leadership or same old "hero" leader?* suggest "that alternative leadership styles are replacing the traditionally held definitions of leadership and provide new and different, and possibly superior, ways to understand leadership" (p. 1). Furthermore, they report that during the latter half of the 20th century, scholars spent a great deal of time "postulating the requirements and definitions of leadership" (p. 1). Throughout history, theorists have attempted to recognize similar traits possessed by exemplary leaders, which are essential to getting extraordinary things accomplished as well as demonstrating values and goals within their institution.

Noted historians Cohen and Brawer (2008) also identified leaders and leadership as those who exhibit "vision, personal commitment, empowerment, and risk" (p. 152). Administrative leaders for non-academic support services must possess a large knowledge base and a variety of

leadership abilities inclusive of interpersonal and analytical skills. Of great importance to a smooth operation, is that these administrators are detail-oriented, adaptable, and decisive. They must possess a skill set which allows them to lead a diverse group of non-academic support services as well as others who are working in these areas to fulfill the mission of the college.

It is essential for auxiliary service administrators to possess strong leadership skills in order to quickly and effectively deal with the myriad of personnel and operational situations that arise. Auxiliary service administrators assume the responsibility of making the smallest of decisions in one service area and then immediately taking control of a situation that requires technical review or legal counsel. In addition to simple and complex decision making, auxiliary service leaders have direct responsibility of an extremely diverse staff. Reporting personnel may consist of managers, support staff, union and non-union staff members; this requires various levels of expertise and leadership.

Paul Hersey and Ken Blanchard, authors of *Management of Organizational Behavior*, identify situational leadership theory as one that rests on two primary concepts: the leadership style of the administrator and maturity level of their employees. They believe “Leaders should adapt their style to follower development style (or maturity), based on how ready and willing the follower is to perform required tasks (that is, their competence and motivation)” (Changingminds.org, 2010). The situational leadership theory characterizes leaders into four behavior types: telling, selling, participating, and delegating. Due to the diversity in the support staff, these leadership behavioral styles are relevant and applicable to the various reporting positions. Maturity levels for direct reports are broken down into four levels which include a level of being led to being a follower; this depends on the group or individual being directed.

Situational leadership theory is applicable and relevant to this study. Non-academic administrators deal with constant change in their departments, and consequently with staff. This study provides insights surrounding the perceptions of non-academic support leaders as support community college senior administrators in conducting business efficiently and effectively.

Data Driven Decision-Making

Non-academic support administrators make decisions daily that have the potential to affect students, staff and administration, and the community for which they serve. Decisions may include budget and expenditure recommendations, purchases and payments affecting the institution, marketing decisions beneficial to retail services, or the awarding of contracts based on institutional policies and procedures. It is critical for current and relevant data to be readily available for administrators in order to make well-informed responsible decisions and recommendations to senior administrators, and thus the Board of Trustees.

Auxiliary service administrators are accountable for each of their non-academic support areas. Making decisions without the correct data and information could be costly to the institution. Data-driven decision making (DDDM) is both an accountability tool as well as a diagnostic tool; it is identified as the second concept relevant for this study.

According to the March, Pane, and Hamilton (2006), DDDM, in education refers to staff, faculty, and administrators “systematically collecting and analyzing various types of data, including input, process, outcome and satisfaction data, to guide a range of decisions to help improve the success of students and schools” (p. 1). DDDM is about gathering relevant information and data to support the institutional decision-making process. Although the DDDM process remains a constant and is similar for many institutions, the final decision may vary depending on the specific information gathered during the data collection process, methods for

analysis utilized, and the individuals involved. The concept of DDDM is significant for this study, as the systematic process guides auxiliary service administrators' decision-making process within the institution and holds individuals and departments accountable for their actions.

Open System Theory

The open system theory, due to its relevance and relationship to any and all outcomes of the DDDM process, is identified as the third concept that is appropriate for this study. Described as a system continuously interacting with its environment, an open system is applicable to multiple system organizations such as colleges. The term open system is based on the belief that all organizations are unique, primarily due to the unique environment in which they operate, and therefore, each system should be constructed or structured to address specific challenges, problems, and opportunities. Author Carter McNamara (2006) describes open system boundaries as being flexible and dynamic, allowing feedback to be exchanged and understood as well as having an uncontrolled external environment that is inclusive of all external entities which affect the institution.

In support of the DDDM concept, the open system theory strengthens the decision-making process and recognizes there are repercussions to decisions such as intended and non-intended consequences. The open system theory assumes all large organizations, such as a colleges, are comprised of multiple subsystems such as departments. The interplay of each subsystem relies on the constant receiving of information and data (inputs) from other subsystems and the reciprocal sending of information and data out (outputs) for use by other subsystems. Each service or department, within an institution's designated auxiliary services, is involved in this subsystem interplay. It is important that non-academic service administrators

foster this continuous open system interchange and recognize that their decisions have consequences for the organization.

Methodology

It is from the purpose of the study that the research methodology is derived. It is important to clearly and concisely explain the study's design to establish the credibility of the research and trustworthiness of the findings. In selecting an appropriate research paradigm, consideration must be given to the nature of the research questions being posed. The decision can then be guided by two succinct factors: (a) explanation, indicating a quantitative design; and (b) exploration, indicating a qualitative design (Creswell, 2008). Qualitative research employs rich thick data, information, and insights garnered from study participants, allowing for an understanding of a phenomena for which little is known. As this study is exploratory in nature, it is for these reasons that the study is situated in the qualitative paradigm. Merriam (2009) emphasizes qualitative studies containing common fundamentals: focus on phenomena occurring in their natural setting and attempting to study the phenomena in all of its complexity.

This is a qualitative inquiry using a single case study methodology and a sequential multimethod data collection design. A multimethod study is employed for qualitative research when "the larger study encompassed the case study" (Yin, 2003). For this research, a national survey will first be conducted in order to enlarge the sample size, followed by a local state survey and a smaller number of face-to-face participant interviews. Moreover, purposeful sampling will guide the selection process and identify the individual participants most appropriate for the study: auxiliary services administrators. Johnson and Christensen (2008) identify purposeful sampling as the researcher specifying the characteristics of the required population and then locating individuals who identify with those characteristics. Purposeful

sampling includes selected participants who can provide rich, thick data regarding information pertaining to the purpose of the study Creswell (2007).

Site Selection

The site selection encompasses national community colleges and Illinois single campus community colleges. The National Association of College Auxiliary Services (NACAS) is an organization which encompasses all higher education auxiliary and ancillary services for the U.S. NACAS currently has members located in 700 institutions throughout the United States and has agreed to work with the researcher regarding data collection and distribution of the survey to its community college members.

The second survey will be sent to auxiliary services administrators of 37 single campus Illinois community colleges. It was believed if the college was part of a college system, the role and ultimately the decisions made by the auxiliary service administrator might not be their own, but decisions that were made at the system's central office. Therefore, single campus settings were selected for the study because the auxiliary service administrator is accountable to the college vice president and/or president.

Participant Selection

Eligible participants are those in auxiliary services administrative positions in the 37 single campus community colleges. Participants meeting the criteria will be identified through the Illinois Community College Board (ICCB) auxiliary administrator database. Face-to-face interviews of the Illinois participants will be conducted with the first six respondents, each representing one of the six identified peer groups. Using the ICCB peer groups as part of the selection criteria will enhance the maximum variation of the sample. Thus the diversity of the

interviewees will shed light on those issues relevant to community colleges residing in various locations throughout the State of Illinois.

Data Collection

In qualitative research, multiple data sources are used to gather pertinent data and information relevant to the research topic. To collect data, four methods of data collection will be used: (a) surveys, (b) documents, (c) interviews, and (d) field notes.

A national survey will be sent to community college members of the National Association of College Auxiliary Services (NACAS). Surveys are a tool used to gather data and information when direct observations are not appropriate for the research; they are non-experimental and a descriptive data collection method. A survey will also be sent to all single campus Illinois community colleges non-academic support services administrators. The two surveys pose the same four primary questions, with the Illinois survey including additional demographic questions and a request for face-to-face interviews.

Organizational charts will be gathered and reviewed from the Illinois survey participants. The organizational charts will be themed and coded in order to identify where auxiliary services are positioned within the hierarchy of each institution and to identify the level of authority, or span of control, overseen by each administrator.

Auxiliary service administrators consenting to be interviewed will be identified from the survey. Face-to-face interviews will take place at administrators' respective college campuses. Interviews will be semi-structured and based on a series of questions that address the driving questions and purpose of the study. Merriam (2009) discusses the various qualities of a semi-structured interview as: (a) a mix of more and less structured interview questions, (b) questions allowing for flexibility, (c) specific data required from all participants, (d) guided questions to be

explored, and (d) no predetermined wording. In preparation for the interview, the participants will be provided the interview questions in advance, along with a copy of the consent form describing the nature of the research. The interview will be recorded and transcribed for later analysis. Interviews will last approximately 60 minutes; field notes will be taken. Following the interview, each participant will have the opportunity to review and correct the interview transcript prior to theming and coding.

Field notes will be completed immediately after the interview process to ensure that significant details are not lost. Field notes can present added triangulation of perceptions, attitudes, and other non-verbal communication in interview settings (Merriam, 1998). Two types of field notes will be used: observational and reflective. Observational field notes will be highly descriptive of the locations and settings where the interview will be conducted. Reflective field notes will be used to capture the participant's feelings, reactions, and interpretations while conducting the face-to-face interviews.

Data Analysis

Because this study is exploratory, data analysis will focus on the emergent themes that are collected from the data. Merriam (2009) describes the case study data analysis process as challenging and emphasizes that it adds to the tremendous amount of data. She states "data sources may present disparate, incompatible, even apparently contradictory information" (p. 203). She also explains that the challenge of constructing themes is to identify recurring patterns that cut across the data. It is essential for themes to be "abstractions derived from the data, not the data themselves" (Merriam, 2009, p.181).

The transcription of interviews and survey data will be systematically reviewed for descriptions, patterns, and relationships between categories. Data will be themed and coded to

capture emerging issues of auxiliary services. Analysis of the data will be guided by the *a priori* themes of the theories, forming the study's conceptual framework. Subsequently, the exploration of identified emergent themes will take place through the lens of the situational leadership theory, data-driven decision making, and the open system theory.

Organization of the Dissertation

Chapter two highlights the review of literature as related to auxiliary services and serves as the framework with which to view this study and its findings. A brief history of the American community college system and challenges facing auxiliary administrators are central to this research. The conceptual framework, which forms the foundation for this chapter, is introduced and provides an overview of: (a) Situational Leadership Theory (Hershey et al., 2004); (b) Data-driven Decision Making (Marsh et al., 2006); and (c) Open System Theory (Bertalanffy, 1969; Katz and Kahn, 1978; Boulding, 1950; Senge, 1990).

Chapter three provides an overview of the research design, identifying it as a qualitative case study situated within an interpretive paradigm. A discussion on purposeful sampling and maximum variation is included with the explanation of selection criteria that will be used for selection of the study sites and participants. A description of the multimethod data collection, analysis procedures, and ethical considerations will also be provided. The chapter concludes with the limitations of the study and a section regarding the researcher as the instrument.

Chapter four highlights the data collection process and the strategies used for analysis. The data gleaned from the national and state surveys will be summarized in a series of tables and figures, in order to facilitate the understanding of the data that will be gathered and to categorize emergent themes.

Chapter five continues with the data analysis of the participant interviews and lends a more holistic perspective. Triangulation of data and information, obtained from the national and state surveys and participant interviews, will be used to identify significant emerging non-academic support issues identified by community college auxiliary service administrators.

Chapter six provides the rich, holistic descriptions of the phenomenon as provided by the participants. Conclusion of the findings are presented and their implications for community colleges. As a result of the findings, the *Mitchell Certification Preparation Model*, which provides professional development strategies for auxiliary service administrators, is presented. Lastly, recommendations for future research are presented.

CHAPTER 2

LITERATURE REVIEW

This chapter will review the literature related to non-academic support services in the community college environment. Although these support services are essential to the functioning of the community college, they are typically not viewed as a significant strategic partner supporting academic and student affairs. Research does not exist in the literature regarding the functions of auxiliary (ancillary) services or the importance of their contributions to community colleges. Therefore, a noteworthy gap in the literature does exist.

Auxiliary services are structured differently within each community college due to the demands of the institution and the institution's geographic location. Key for each community college auxiliary department is to identify the functionality required of each service situated within the department and to meet or surpass those requirements. However, to accomplish this, leaders of auxiliary non-academic service departments need to be knowledgeable regarding three areas: (a) how and in what ways the department facilitates the function of the college as a whole; (b) the impact of the department's leadership on its successful functionality; and (c) an awareness of the issues and challenges that will affect the success of the department's services in the future.

Due to the distinctive multi-faceted configuration of the auxiliary service support departments, it was essential to evaluate applicable theories and concepts from a wider more encompassing perspective. Since auxiliary services provide a variety of distinct and diverse functions, applicable theories and concepts in which to situate this research could have been drawn from several disciplines such as business, economics, social sciences, and psychology.

Therefore, a variety of theories were selected providing a more eclectic perspective with which to situate the study and analyze the findings.

To examine the community college as a whole and auxiliary services' place within the institution, organizational and systems theories were evaluated. The open system theory was selected, as most appropriate, for its relevance to the uniqueness of the organization (the community college) as a system, for how it continuously interacts with the environment, and for the synchronicity of decisions made by elements of the college system. The supporting concept selected for this research, germane to all areas of community colleges, was data driven-decision making (DDDM). Vast amounts of institutional data are collected for use by community college leaders throughout each academic year. However, the key to its usefulness is selectivity in the data gathering process and formatting so the results are available in a timely manner, assisting each administrator to extract data and information vital to the decision making process. Finally, leadership theories were compared by historical time periods and environmental influences. Situational leadership was identified as most applicable for administrators of auxiliary services due to their decision making process caused by situations in each area which are ever changing and often challenging. These theories will provide a context in which to explore significant emerging auxiliary service support issues and create an increased awareness of the vital role performed by the leaders of auxiliary service support department in higher education institutions.

Community Colleges and Auxiliary Service

Community colleges are truly a 20th century American invention, situated between high school and four-year universities. William Rainey Harper, president of the University of Chicago, and J. Stanley Brown, superintendent of Joliet Township High School, 1901, founded the first community college, Joliet Junior College, Joliet, Illinois. At its inception, the

community college focused on two years of general liberal arts in order to prepare students for their final years at four-year institutions. Thirty years later, the Depression initiated change within community colleges, necessitating job-training programs to help ease the widespread unemployment. The need for a skilled workforce continued to evolve, grow and diversify following World War II.

After World War II, countless changes took place in higher education. Not only was this a direct result of the obligation to the large numbers of returning military personnel, but the responsibility to address social needs in the United States. Two major Federal events driving the higher education changes were: 1) the Servicemen's Readjustment Act, known as the GI Bill, and 2) the Commission on Higher Education for American Democracy, known as the Truman Commission.

On June 22, 1944, President Franklin D. Roosevelt signed into law the Serviceman's Readjustment Act of 1944, commonly known as the GI Bill of Rights. This bill immediately granted financial support, in the form of unemployment insurance, to the returned veterans. Far more important, were generous educational opportunities which included vocational and on-the-job training, as well as higher education. The GI Bill was the first significant financial aid package which helped make it possible for many people to be reimbursed for tuition and living expenses. The provisions of the GI Bill were the same for every veteran. A predominate legacy of the GI Bill is the social democratization belief that education should be available to everyone, regardless of age, race, sex, religion, and family status (Greenburg, 2008). "The philosophy of the GI Bill as well as later student aid programs has had, and continues to have enormous impact on community colleges enrollment, in the diversity of students enrolled, and on programs and missions" (Vaughan, 2006, p. 29).

The second significant factor in support of community colleges stemmed from the President's Commission on Higher Education. The Truman Commission examined the United States higher education system, its objectives, methods, facilities, societal responsibility and its role in educating a democratic society. According to Vaughan (2006), the Truman Commission was:

written to help ensure that higher education would play a major role in preserving and enhancing the democratic ideals for which the nation's citizens had fought during the war. The commission asserted that 49% of high school graduates could profit from two years of education beyond high school and sought a way to offer more opportunities for college attendance (p. 29).

The report recommended sweeping changes to the higher education system and gave unequivocal support to the community, junior and technical colleges. It also suggested the use of a common reference for two year post-secondary institutions, *community college*. "The Commission advocated that junior colleges become an avenue to enhance access and advocated that they use the term *community college* to convey the intent of these institutions to offer a comprehensive curricular mission, an intent that permeates community colleges of today" (Townsend & Bragg, 2006, p. xx). The goals of the Commission were to restructure the role of higher education in order to: 1) serve the needs of the community, 2) create programs for student occupational advancement, 3) offer two-year degrees by combining academic learning and vocational study, and 4) serve the adult population. Between 1944 and 1947, two-year institutions continued to grow and enrollment more than doubled as a result of the impact of both the GI Bill and the Truman Commission.

In 1965, the Higher Education Act was passed allowing equal access to thousands of middle-income individuals, with financial need, through a new program for federal financial aid, the Guaranteed Student Loan (GSL). This time marked the rapidly expanding higher education

enrollment and the reciprocal need for new community college campuses. Cohen and Brawer (2008) note that in the 1960s a community college had been organized in every state and by the mid-1970s nearly eleven hundred community colleges had opened. Today, the American Association of Community Colleges (AACC) reports 1,173 community colleges in existence, each of which supports the fundamental mission of affordability, accessibility, and providing educational opportunities for those living in the community college district. Gleazer (1980) concurs with the AACC and states “the community college is uniquely qualified to become the nexus of a community learning system, relating organizations with educational functions into a complex sufficient to respond to the population’s learning needs” (p. 10).

The primary focus of community college academics and faculty was, and to this day, is student learning. “As arbiters of the curriculum, the faculty transmit concepts and ideas, decide on course content and level, select textbooks, prepare and evaluate examinations, and generally structure learning conditions for the students (Cohen & Brawer, 2008, p. 81). It is this paradigm which focuses faculty’s responsibilities on student learning.

Since the 1960s, the colleges experienced a precipitous growth in the number and diversity of their students, the number and types of courses and programs offered, and the outreach endeavors to address business needs in their communities. It was this continuously evolving organizational complexity that precipitated the need for an expansion of academic and student support infrastructures.

With the increasing needs for academics, faculty members organized themselves into disciplines and departments such as arts and sciences, liberal arts, vocational, and continuing education for customized training. The increased demands of faculty resulted in an inability or unwillingness of faculty to oversee the myriad of student support services required to assist

students to enroll and attend the college. Therefore, departments housing the non-academic student support services were instituted.

Student Affairs Department

Prior to the establishment of community colleges, higher education in the United States mirrored the English university system; holistic in nature with a focus on educating the “whole” student. Colleges were predominately church-related and primarily concerned with the development of the student’s intellect, social, spiritual, moral, and physical well-being. However, during the latter half of the 1800s, the movement towards more secular and pluralist education, as well as a more intellectual approach to academics, changed higher education forever. As the faculty concentrated on teaching academics, others were designated to attend to the student’s registration, food and housing, social events and discipline. This division of labor, crafted to better serve the development of the whole student, has been fundamental in the American higher education system since the late 1800s.

A seminal report pertinent to student affairs was authored by the American Council on Education (ACE) in 1937 entitled *The Student Personnel Point of View*. This report codified the philosophical foundation of higher education and the role student personnel services holds. The report was a reaffirmation of the earlier intent of higher education and its faculty to foster the development of individuals to their fullest potential. The report made a distinct contribution in the personnel field:

- delimiting personnel activities from other administrative and instructional functions more clearly than had any previous statement
- stressing the importance of coordinating various types of personnel services
- pointing the way for future studies and providing special brochures regarding student affairs and services, and

- leading to the appointment by the Council of its Committee on Student Personnel work (Williamson, et al., 1949).

The report also provided a list of 23 recommended functions, to be incorporated in an inclusive student affairs department, intended to service students. The primary purpose of these functions was to concentrate on the coordination of dynamics between administration and instruction and to assist in the well-rounded development of students while supporting the academic mission of the institution.

Interesting to note, the secretary of ACE, who authored the report, was George F. Zook, president of American Council on Education (ACE). Later in 1946, President Truman appointed Zook to chair the Truman Commission on Higher Education. The Truman Commission (1944) had recommended removing barriers such as race, age, income, religion, and geography, in order for students to have access to post-secondary education. The Truman Commission stressed the importance of growing the number of junior colleges in communities throughout the country. As a result, shortly afterward, the familiar term *community college* became popularized and began to be applied to the majority of two year academic institutions.

Due to the diligent work and growth in the area of student personnel and the addition of Federal emphasis on expanding higher education in the U.S., the original 1937 report, *Student Personnel Point of View*, was revisited in 1949. The updated report was more encompassing and prescriptive, outlining the elements of a student personnel program, the administration of student personnel work and the importance of relevant research. The concepts, well-defined in both reports, continue to be the foundation and philosophical beliefs of college and university student affairs departments and student services professionals.

During the late 1950s and early 1960s, colleges consolidated the various student services and activities into student affairs departments. At this same time, the legal status of a student

was changed, driven by the decision of *Dixon v. Alabama State Board of Education*, 1961, which implicitly rejected the “in loco percents” concept which had been granted to colleges. As a result, students attending higher education institutions had the same rights as adults, therefore shifting the college emphasis from administration and discipline of the students to the students themselves. This change complimented the general mission of the community college with its focus on providing affordable and accessible educational opportunities for commuter students and students of all ages, not merely those 18 to 21 years of age.

Focus shifted to centering on how and in what ways student affairs departments could take on a more active role in supporting the academic mission of the institution. In 1972, a monograph was presented by Robert Brown on behalf of the American College Personnel Association (Nuss, 1996). Brown sought to expand the purview and scope of the student affairs departments, believing it was essential for student services personnel to support the development of students, to work in tandem with faculty to create and support curricular and extracurricular programs. Throughout the 1970s, faculty concentrated on teaching and student learning, while student affairs personnel provided basic support services, for students outside the classroom, in areas such as admissions, enrollment, advising, and the basic food and retail functions (bookstore and cafeteria). “Student affairs staff became accountable for all policies and procedures that related to student development, behavior, recruitment and retention” (Sherwood and Pittman, 2009, p. 26).

During the 1990s, these basic student support services evolved and expanded to include financial aid, student life development, career services, counseling, child care services, academic tutorial services, disabled student resources, testing and assessment, and college libraries (Maloney, 1999; Nuss, 1996). However, to be useful to each individual student in facilitating a

beneficial higher education experience, these support services and student activities must be coordinated as well as understood by the students. Knoop (2001) corroborates this need for coordination of services and writes that team work of the student services personnel is necessary to be effective. He notes that coordinating efforts, being put forth within student services, must be incorporated into the entire experience of the community college student, creating a collaborative relationship rather than segmenting student affairs and academic instruction. Student services exist to assist students academically as well as provide an environment which motivates and stimulates them towards the direction of their institutional objective (Whitt, 1996). Lenington (1996) underscored this need stating, “Nonacademic activities and services provided to students are not only important to the marketing program of the institution but also to the happiness and well-being of students” (p. 72-73).

To meet the needs of the wide variety of students attending community colleges, it was compulsory for administrators to evaluate their institutions and create an organizational structure tailored to the effective management of the college. Peterson and Mets (1987) defined this endeavor as a creation of both structure and process: decision making relating to the governance and execution of the decisions being carried out by management. As the complexity of community colleges evolved and the need to delegate specific responsibilities and functions grew, a hierarchical organizational structure was found to be most applicable and efficient.

This hierarchical organizational structure is guided by job specialization, narrow spans of control, functionality, and a centralized authority. Most commonly, the college organizational structure is composed of two interrelated administrative divisions: one responsible for academic affairs and the other tasked with management of the institution. Figure 1 represents the traditional hierarchal community college organizational model or chart. It is hierarchical in

structure with the College Board and president at the top level, a number of vice presidents at the level below, with associate vice presidents followed by several layers of management, and finally the majority of employees at the bottom level of the pyramid. The number and structure of management layers depends largely on the size of the institution.

Figure 1 *Traditional Organization Chart for a Large Community College*

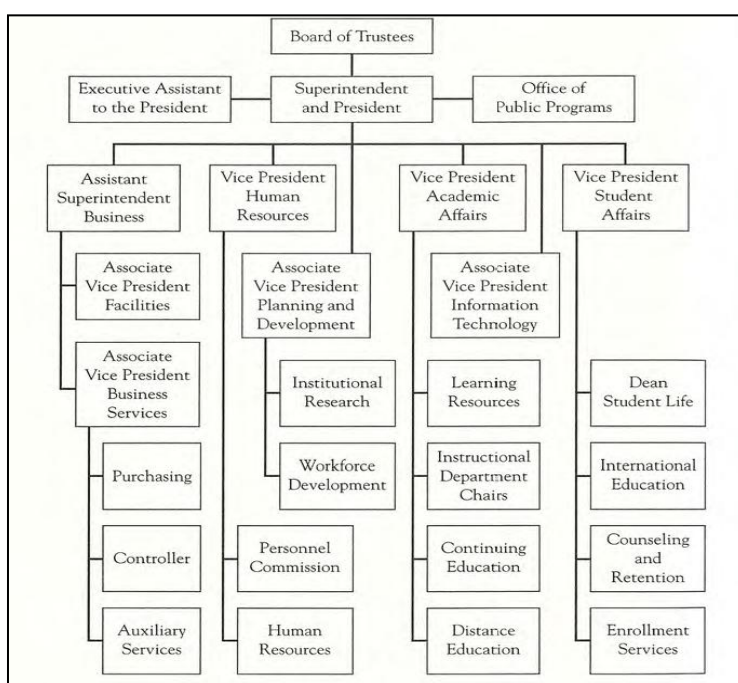


Figure 1 Cohen & Brawer, *The American Community College*, p.118. Copyright 2008 by John Wiley & Sons, Inc.

Today, it is rather easy to understand the need for and general function of a community college student affairs department. “Once considered the supplemental administrative services needed to assist students as they made their way through college, student services now play an important role in the total student experience” (Cohen and Brawer, 2008, p.222). To adequately accomplish the many institutional operations, functions, and responsibilities allocated within the

student affairs department, an effective managerial structure is essential to a student services department. To minimize confusion and improve efficiency, each unit or department is assigned a specific task which ultimately, either directly or indirectly, assists students enrolled at the institution. Several of these units, commonly combined and known as auxiliary services, ancillary or non-academic support services, are often located within student affairs directly and indirectly serving students' needs.

Auxiliary service units and/or departments in community colleges are strikingly similar but have some minor variations. If auxiliary services are managed well, students and employees are not often aware of their contributions to the institution; however, inefficient and ineffective auxiliary services are quickly noticed by them. Little is known about the problems, issues and concerns of these vital departments. The goal of this study is to shed light on issues and challenges facing auxiliary service departments and provide insight which is relevant for their leaders.

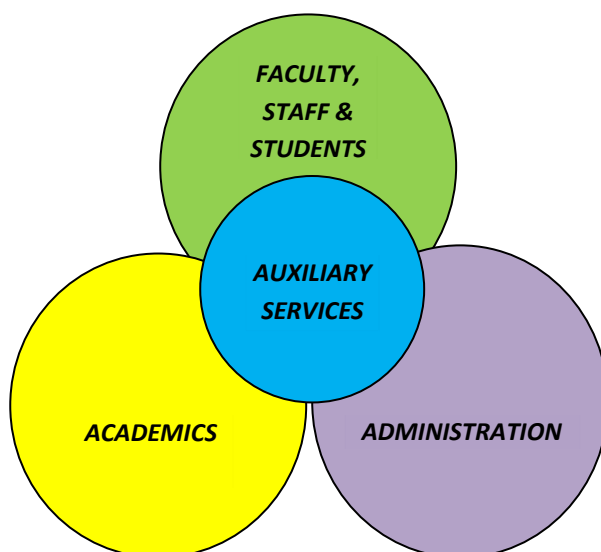
Auxiliary Services

Predicated on institutional needs, discussions progressed amongst community college administrators and led to decisions concerning organizational placement for auxiliary services, business administration and student affairs. Initially, auxiliary support services were structurally placed in the college's business administration unit since "business affairs' staff concentrated on facilities, budgets and management issues" (Sherwood and Pittman, 2009, p. 26). As a result, auxiliary services were managed simply as cost centers that were expected to produce a profit margin. However, since the 1980s, as auxiliary services assumed additional responsibilities that directly involved student relevant activities, selected college administrative structures re-organized and moved auxiliary support services to the student affairs division, making this area

the one in control. Although the reporting structure and placement may differ among institutions, it is clear that skilled administrators are essential in leading these multi-faceted and diverse departments whose purpose is to serve the entire institution.

In general, auxiliary services have advanced and currently deliver essential operational services which support academic departments, faculty, staff and students, and administration. Figure 2 exemplifies the integrated and overlapping support function of auxiliary departments in community colleges.

Figure 2 *Interrelationships of Non-academic Campus Support Services*



However, literature regarding auxiliary services, the changing tasks required of these departments, and the duties and responsibility of its administrators is almost nonexistent. Thus, there is a significant gap in the literature.

Auxiliary administrators, and those to whom they report at the senior administrative level, recognize that skillful decision making and leadership are requirements fundamental for

the effective daily operations of auxiliary departments. Auxiliary service administrators routinely manage multiple units or departments, each requiring diverse levels of leadership skills and expertise. The services provided by these units are complex and multi-faceted, requiring leadership skill-sets specific and relevant to each area of responsibility.

Due to the auxiliary administrator's span of control, which is relevant to specific community colleges and services, each auxiliary department can and does house radically different units. Within these various units are employees with a great diversity in age, gender, ethnicity, experience, knowledge, and education. These individuals have very specific skills which are directly related to the services in which they provide for the college. Therefore, personnel management is one of the primary responsibilities of the auxiliary administrators.

Within the purview of this responsibility, it is essential for the auxiliary administrator to hire appropriate staff, be involved in personnel annual performance reviews and to be involved with professional development activities in which they train and cross-train personnel, with the purpose of retaining qualified employees. This ultimately gives the leadership and managerial staff a focus that will lead to improvements in the efficiency and productivity of units within the department. The importance of hiring and directing appropriate staff is to support the college mission and the performance of faculty and staff by providing students with a quality educational experience while promoting efficient institutional operations.

Community colleges, like many higher education institutions, are facing a plethora of dilemmas, nearly all reflective of the critical economic difficulties: (a) a decrease in state appropriations, local tax base, and federal grants, (b) an increase in the costs for durable and non-durable goods, (c) rising building and maintenance costs; aging infrastructures, and (d) costs associated with maintaining and upgrading technology needed throughout the institution. Each

of these challenges are occurring simultaneously while the number of community college enrollees is increasing, student demographics are shifting and students' needs and requirements are mounting. As a result, of the escalating demand for direct and indirect student support services, it is essential for administration to pay considerable attention to students' satisfaction while maintaining the parameters established by the institutional budget to meet the community college mission.

Like all vigilant fiscal managers, community college administrators are facing their most complex challenge, promoting the value equation throughout the institution. These administrators, one of whom is the auxiliary services administrator, must master the dichotomy of the precarious balance between business excellence and value satisfaction for their students and other stakeholders. Robert Lenington (1996), retired vice-president of business and finance, Bentley College, and author of *Managing Higher Education as a Business*, writes of the dichotomy of purpose for higher education administrators. He suggests:

there is a purpose for higher education's not-for-profit status and exemption from taxes, but there is also a responsibility that higher education be operated by business managers who can live within the definition of what non-for-profit, maximize cost-efficiency opportunities, maximize revenue enhancement opportunities, strive for quality in administration and instruction, and, in the process, satisfy a societal need at a price the American public can afford (p. 88).

According to the American Association of Community Colleges (AACC), 1,167 community colleges across the country today are serving students (AACC, 2011). Auxiliary services, also known as ancillary or non-academic support services, play a significant and essential supportive role in today's community colleges. Undoubtedly, community colleges are expecting and counting on auxiliary departments to assist with meeting the student's needs while working within economic and fiscal constraints. In some severe instances, auxiliary departments

are crucial in simply keeping the college afloat and in making access available to students.

While working in collaboration with the college chief financial officer, auxiliary service administrators play a primary role in maintaining the institutional budget and fiscal solvency.

Available to serve the auxiliary service administrators, in higher education institutions across the country, is the National Association of College Auxiliary Services (NACAS). Of the 1,167 community colleges, 175 are members of the National Association of College Auxiliary Services (NACAS, 2010). NACAS, established in 1969, is a nonprofit higher education association which serves auxiliary and student support services professionals in the United States, Canada, United Kingdom, Ireland, and Australia. NACAS delivers extensive support to administrators who focus on operational quality and service, in addition to providing recommendations for innovation and value in a competitive environment. Assisting to garner an understanding of what are considered auxiliary services, NACAS (2010) acknowledges more than 23 (auxiliary) non-academic campus support services as listed below:

- Bookstore
- Card Systems
- Child Care
- Communications
- Concessions
- Conferences
- E-Commerce
- Facility Management
- Food Service
- Housing
- Laundry
- Mail Services
- Parking
- Physical Plant
- Printing Services
- Purchasing
- Retail

- Recreation Services
- Security
- Student Union
- Technology
- Transportation, and
- Vending.

These widely diverse and complex areas generate both revenue streams and expenses which collectively are an integral part of the college operating budget.

At the October 2010 national NACAS conference in Colorado Springs, CO, sessions were well attended concerning topics involving college funding challenges and the dilemmas facing auxiliary service departments and administrators. Four functional areas resonated from several days of presentations: (a) fiscal efficiencies, (b) retail operations and staffing, (c) facilities; building maintenance and green initiatives, and (d) procurement and legal considerations. A brief overview of these areas is provided to contextualize the general functions within auxiliary support service departments or units.

Focus on fiscal efficiency. A primary responsibility of auxiliary service administrators is their fiscal obligation and accountability to the institution. College chief financial and business officers recognize the need to cover their costs (labor, and direct and indirect expenses) with revenues. It is apparent overhead costs such as building and grounds maintenance, depreciation, administration, insurance, and other general support services are not directly tied to the number of students enrolled. Because of the persistent rise of higher education costs, competently managing expectations for achieving revenues and limiting expenses offers benefits to the institution. There is little doubt the college is viewed as a business by the Board of Trustees, the college President, and senior administration. Lenington (1996) believes management is strengthened by the realization that higher education conducts its affairs like a

business; thus financial performance matriculates to meet mandated accreditation requirements and improved graduation rates.

Today, while student enrollment continues to escalate, the ability to sustain stable operating funds remains in flux. Severe fiscal fluctuations cause financial apprehension and can neutralize President Obama's planned community college goal of producing five million additional community college graduates by 2020. The American Association of State Colleges and Universities (AASCU) State Relations and Policy Analysis Research Team reported in the January 2011 issue of the *Higher Education Policy Brief*, that although the United States Recession was said to have ended in June 2009, the states' financial support and the recovery in economic growth has been particularly slow. The *Policy Brief* continues to express the return to pre-recession status for state revenue and spending will be unlikely to occur during the next two to three years.

Supporting this report are the findings from a survey of the national council of state directors for community colleges conducted by Katsinas and Friedel (2010). Their predictions for state operating budgets, tuition, and state-funded student aid were reported as follows:

1. state operating support for all education sectors is predicted to decline next year;
2. tuition is predicted to rise at five times the inflation rate in all postsecondary sectors;
3. many states reported tuition increases well above 10%; and
4. most states predict flat-funding for state-funded direct grant student aid for FY 2010-2011(Katsinas & Friedel, 2010, p. VII).

Conversely, decreasing revenue sources remain at the core of college affordability, academic quality in public higher education, and enrollment capacity (AASCU, 2011). Predicated by diminishing state contributions, financial aid disbursements also affect the revenue generated by

auxiliary departments such as the early childhood center, bookstore and food service operations, thereby creating additional constraints on these operational departments. Therefore, community colleges across the country, more than ever, are forced to identify alternative revenue sources, inclusive of auxiliary services, thereby increasing accessibility for struggling students.

The Institute of Education Sciences (IES) National Center for Education Statistics (2011) reports revenues from community college auxiliary services in FY 2009 at approximately \$1.7 billion, or 5% of total revenues to all institutions (Figure 3). Consequently, a vital responsibility of auxiliary service administrators is to ensure fiscal responsibility throughout their departments. This is done by developing an effective budget which can maintain fiscal control and oversight.

Figure 3 *Community College Revenue Sources by Division*

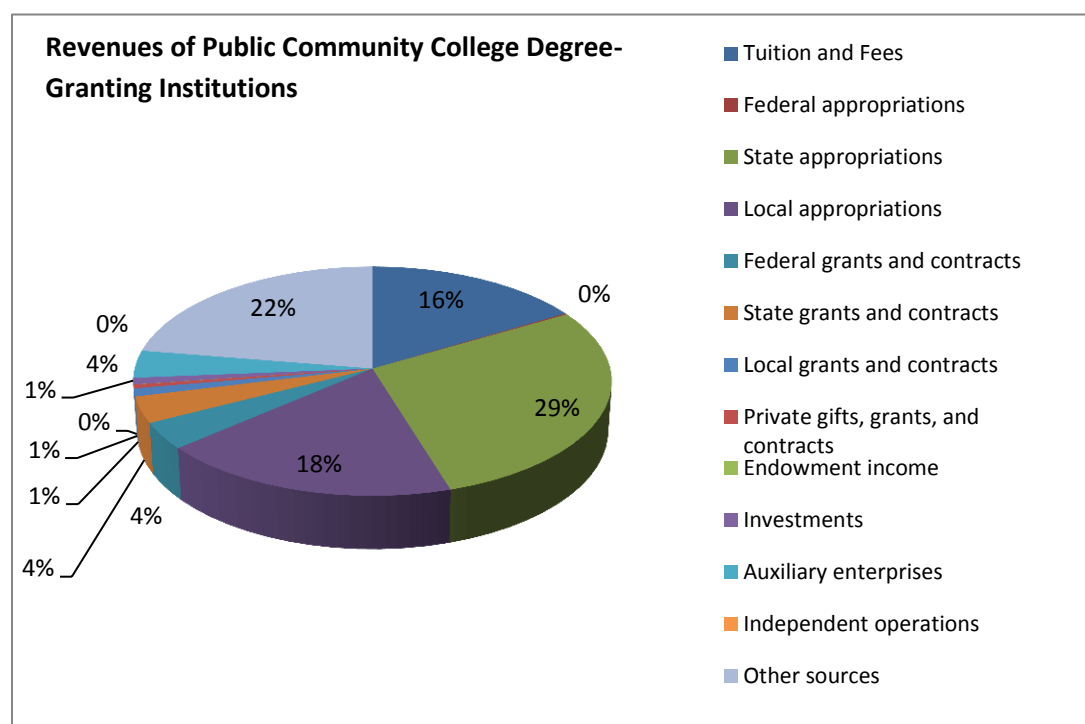


Figure 3 2008 - 2009 Public Community College Revenue Sources, IES, 2011

Recognizing the unique and vital role to community college, auxiliary service administrators will continue to evaluate their business plans and “stand as a resource for other departments particularly in the areas of financial planning/execution and human resource management” (Sherwood & Pittman, 2009, p. 29). While primarily fee-funded and self-supporting, auxiliaries have a greater potential to manage flexibility and autonomy within the community college, thereby generating revenues and leveraging available funds.

Retail operations and staffing. Throughout history, students’ higher education needs have increased and have evolved into demands for “convenience, quality, service, and cost” (Levine and Cureton, 1998, p. 50). Meeting student needs today, coupled with the current economic conditions, has heightened the responsibilities and visibility of auxiliary services administrators oversight of the college retail operations.

Retail operations are situated within a competitive market in any environment. On a community college campus, bookstore and food service operations are the most common and crucial venues offering convenient services for faculty, staff and students. They provide the essential necessities vital to commuter students. However, in many urban and suburban districts, challenges exist with the external market. In these environments, often students leave the campus to purchase textbooks and food. As a result, the college experiences a loss of potential revenue. It is essential for auxiliary service administrators to recognize the shifting demographics and translate the change into new opportunities to meet the needs of our students and heighten the success for our community colleges.

Another challenge for the auxiliary service administrator is staffing of the college’s retail operations. Part-time staff dominate these departments. Consequently, this typically equates to high staff turnover which is due to low wages, lack of benefits, insufficient work hours, and

wavering employee commitment and morale. Predicated by consumer demands and hours of operation, staffing challenges can occupy endless hours of an administrator's time thereby adding to the complexity of this position. Auxiliary service administrators in the retail environment must continually be attune to staffing issues as well as their competition, and they must acquire appropriate data to make important decisions in the best interest of the community college.

Community college bookstores provide inventory for students which include books and class materials as well as a large selection of college clothing and apparel, supplies, gift and novelty items, candy and other snack items. In addition, today many bookstores provide online services for ordering textbooks and supplies, plus they coordinate textbook buyback options. Auxiliary service administrators must continually monitor consumer spending from a retailer's perspective. The bookstore's direct competition originates from numerous retailers including: online bookstores, e-textbooks and rental programs, many which provide significant cost savings for college students. For those college bookstores who fail to sustain a profit margin, other alternatives are often implemented. Based on the profit/loss structure, outsourcing and co-sourcing with textbook partners have become strategic options for community colleges. To maintain a self-supporting operation, successful administrators know innovation and cost saving structures are key to retaining students.

It is well known that wholesome food plays an important role in student learning. On community college campuses, students are not the only ones in need of available healthy food. Campus cafeterias present challenges for auxiliary service administrators. For these "place-bound" consumers, it is all about the quality of the food and the cost. These individuals expect "wallet friendly" food which tastes good and is readily available. Complicating the task of

providing a healthy wallet friendly menu is the escalating price of food and operating costs. Simply increasing menu prices may not be a viable option since students and staff can and often do find less expensive menus at local fast food restaurants. Also compounding the pricing structure issue is the decision-making process to incorporate sustainability efforts in the cafeteria. Many community colleges throughout the United States are encouraging the reduction of waste and landfill. Similar to the bookstores, community colleges who struggle to make profits in their food services are outsourcing or co-sourcing with an external vendor, thereby attempting to increase institutional revenues through a third party.

Facilities. Most community colleges were built in the 1960s - 1970s and are thereby in need of modernization to attract and retain students. Facilities maintenance, renovations, and sustainability efforts are critical challenges facing many auxiliary service administrators. “Many colleges face large needs due to deferred maintenance or lack of the modern facilities and equipment needed to train students in technical and other growing fields” (AACC, 2011). While the renovation of existing buildings can offer significant cost savings, auxiliary service administrators are asked to identify potential funding options to also address preventative maintenance issues and deferred capital renewal projects, all while reducing overhead in the operational budget.

Green initiatives. Green initiatives, being implemented at many community colleges, also present challenges and opportunities for auxiliary service administrators. To date, 677 community college presidents have signed the American College & University President’s Climate Commitment (ACUPCC, 2011). Their commitment presents administrators of facility services with leadership opportunities to demonstrate, to their communities, ways to abolish global warming emissions and to provide the educated graduates with the knowledge to

accomplish climate neutrality. Auxiliary service administrators are challenged with green initiatives practices, which typically have higher up front costs. This complicates the decision-making process since evaluations must be calculated to illustrate long term savings to the college. Auxiliary service administrators and facilities administrators are encouraged to work collaboratively with staff to identify effective strategies to minimize waste and increase recycling thereby reducing the institution's carbon footprint. The outcomes of implementing these strategies will again assist in reducing operational costs, which remains the goal for all auxiliary service administrators.

Procurement and legal considerations. Procurement and legal issues are now within the purview of auxiliary service administrators presenting marked challenges. The responsibilities of the procurement function are significantly expanding the financial and business obligations of the auxiliary service administrator profession. Many administrators are charged with not only creating procurement documents to meet the demands, requirements and specifications of the college but are also supervising large and small college projects. These activities range in magnitude from procuring office supplies for faculty and staff to the management of capital improvement and building projects. Regardless of the dollar amount, the auxiliary service administrator is responsible for ensuring legal compliance and quality. Procurement offices, overseen by the auxiliary service administrator, are also mandated to comply with internal and external audits to ensure legal, ethical and effective procurement principles and business practices are being adhered to for the acquisition of all college goods and services.

Equally challenging is the procurement of computer technology hardware and software which are critical for the functioning of all community colleges. While trying to minimize

institutional expenses, the auxiliary service administrator must work closely with the information technology division to meet ever changing technology requirements of academic, student, and auxiliary services. New types of computers, smart phones, and equipment virtualization add to the complexity of institutional technology prioritization. The challenge exists to maintain cost efficient processes while taking into account the frequency of replacement and upgrades for equipment.

Contract negotiations have likewise found their way into the scope of duties for many auxiliary service administrators. Professional service contracts, contracts for goods and services, and construction contracts require successful negotiations and vigilant oversight to protect the financial stability and integrity of the community college. Business contracts add to the long list of auxiliary service administrators' responsibilities which are essential to providing financial stability for the institution.

Since the economic crisis in 2009, community college administrators have been struggling to identify opportunities for operational streamlining in order to survive on diminishing Federal and state funds. In times of economic uncertainty, it is critical for auxiliary service administrators to examine their responsibilities and respond with creative ideas, resourceful solutions and innovative strategies which will be beneficial to the institution. To do this effectively and assist in positioning the college well for the future, it is essential for auxiliary service administrators to have insights into those critical emerging issues that will be prominent over the next three to five years. This study strives to identify emerging trends and issues auxiliary service administrators are currently facing in order to prepare them for the uncertainty of the future.

Conceptual Framework

To reflect the challenging and very diverse context within which auxiliary service administrators function, theories and concepts from many disciplines could be applicable. Many leadership theories were reviewed, but no single approach has been recognized as the best method for all situations. The underlying concept of leadership can be understood as the social influence in which one person can motivate and direct others to accomplish a common task. Due to innate flexibility, situational leadership theory was selected as the most appropriate for this research as it reflects the auxiliary services administrator's role in managing both the operations and personnel of the departments for which they have oversight responsibilities.

Also appropriate to this study is the concept of data-driven decision making (DDDM) and its applications regarding administrator's daily functions and management of their departments. Finally, reflecting on the broad scope and effect that both the department and the administrator of auxiliary services has on the college as a "whole", open systems theory was deemed most suitable. The perspective of open systems theory lends itself well to demonstrating the continuous relationships and reciprocal influences of the auxiliary service administrator's decisions and actions with the college's internal and external environment.

Together these theories and concepts form the conceptual framework of this research. Figure 4 illustrates the interconnection of the study's conceptual framework and serves as the basis for the research data analysis leading to the study findings.

Figure 4

Conceptual Framework for the Study

To say that the span of control for these administrators has grown exponentially over the last five years is an understatement. They must be detail-oriented yet possess an analytical ability to effectively understand and adjust to extrinsic and intrinsic pressures. They are held accountable for solid managerial skills and decision making abilities which (1) drive outcomes in auxiliary departments, (2) affect college faculty, staff, and students, and (3) generate revenues for, or reduce, expenditures throughout the institution. The decisions and actions of auxiliary service administrators affect the entire institution. Not only does this study seek to assist current auxiliary service administrators by identifying contemporary challenging issues, but also to increase the awareness of the skills auxiliary service administrators need to effectively and efficiently address these issues in the future.

Situational Leadership

Leadership is the art and science of empowering others to accomplish shared goals. To be a successful community college leader, auxiliary service administrators must possess a variety of skill sets in order to properly manage business operations of their departments. Auxiliary service administrators must also be resilient leaders who effectively guide and direct employees within each of the diverse departments in which they have supervisory responsibility. These administrators serve all constituencies within the college, a responsibility which requires them to assume many roles while dealing with the multiplicity of higher education challenges and advancing the welfare of the institution. Leadership is highly contextual. It addresses both the myriad of skills needed to effectively lead employees with diverse abilities while proficiently managing challenging, and often complex, situations in order to move toward achieving operational goals.

Understandably, administrative leaders of higher education institutions function within a particular organizational context. Predicated by the specific community college organizational structure, the formal authority and span of control of the auxiliary service administrator is therefore large and extremely diverse. In addition to managing the business operations of these varied units, these leaders must effectively guide and coach not only their immediate direct reports, but often those relationships within the various groups of subordinates. Successful and efficient leadership of these two disparate components, business operations and personnel, is influenced by the external and internal challenges and must continually be balanced.

Throughout the 1900s, a number of leadership theories were developed that focused on the distinguishable qualities of leaders and followers. How, and in what ways, auxiliary service administrators function as a college leader was of great relevancy to this study. As a result, four

leadership theories were considered as significant components of the conceptual framework for this research.

During the first period, 1920 through the 1940s, the study of leadership traits began with American psychologist Gordon Allport. Allport's (1937) personality study and descriptions survey was conducted with a class of 55 men through the Harvard Psychological Laboratory. The results of the study were based upon a personality rating scale inclusive of intelligence, temperament, self-expression (strength) and sociality. The conclusion identified potential qualities standing for fundamental and dynamic forces underlying behavior. Aptly known as trait theory, this theory presumed individuals inherited specific qualities and traits making them better suited to lead other individuals. However, because fifty percent of the responsibility of the auxiliary service administrator's position involves effective operations management, this theory was not seen as a broad enough scope for this study.

The next period, 1950 through 1960, identified leadership characteristics specifically associated with interactive behavioral patterns which excluded capabilities or inborn traits. Rather, these concepts of leadership characteristics examined what leaders actually *do*. This perspective originated with work conducted by Joan Woodward (1965), a British professor who conducted an analysis of 100 manufacturing firms in England with the purpose of systematically exploring the relationships between the variations in organizational structure. Woodward maintained that technologies impacted differences in organizational attributes: centralization of authority, formalization of rules and patterns, and span of control. After a review of this study, the researcher believed it did not effectively take into account the changing situations that auxiliary service administrator's deal with on a daily basis.

During the 1960s and 1970s, the contingency theory (Fiedler, 1967), the 3-D management style theory (Reddin, 1970), and situational leadership theory (Hersey and Blanchard, 1969) became prominent. Fiedler's (1967) research involved the quantification of the variance in relationships between performance and leadership style, suggesting three situational factors: leader-member relations, position power, and task structure. The 3-D management style theory (Reddin, 1970) focused on concepts and relationships rather than descriptors; it was designed as a practical tool for team leaders and managers to show effectiveness as a common value. Hersey and Blanchard (1969) developed their life cycle theory of leadership which was founded on the 3-D model; however their focus was on task and relationship building. After a review of the research presented by these theorists, an emphasis was placed on specific environmental variables which could identify the style of leadership best suited for the circumstances. Situational theories, in general, suggested that leaders decide the most appropriate course of action based on situational variables apparent in each circumstance. It also addressed how, and in what ways, leadership works with all types of personnel, particularly those found in the units overseen by auxiliary service administrators.

Lastly, transformational theory, evolved from the 1970s through the 1990s. Grounded in the descriptive research of presidential biographer James MacGregor Burns (1978), transformational leadership was based on leadership characteristics of strong historical leaders who attempted to transform their worlds. Transformational theory originated with the belief that leaders could create constructive changes in their followers by supporting the individual's interest, thereby creating a positive change and supporting their transition. In the 1980s, researcher Bernard Bass expanded upon Burns theory to develop what is known today as Bass' transformational leadership theory (1988). According to Bass, transformational leadership is

based on the impact that leaders have on their followers. However, after a review of this theory, the researcher thought it did not effectively take into account the changing situations that auxiliary service administrators deal with on a daily basis.

Therefore, attributable to the diverse roles required by auxiliary service departments and the various duties and responsibilities germane to their administrators, situational leadership theory (SLT) is most appropriate to this study. It is an adaptive leadership theory which is necessary in today's complex and ambiguous community college field. Its foundation is one which proposes leaders are not limited to one leadership style, but that they must adjust their style to specific situations as well as to the people they are leading.

Hersey and Blanchard developed their approach in 1969. A rather new theory, Paul Hersey and Kenneth Blanchard (1969) published the life-cycle theory of leadership which later was renamed the situational leadership theory (SLT). Situational leadership is based on interplay among the following:

- the amount of guidance and direction (task behavior) a leader gives,
- the amount of socio emotional support (relationship behavior) a leader provides, and
- the readiness level that followers exhibit in performing a specific task, function, or objective (Hersey, Blanchard, and Johnson, 1996, p. 189).

Hersey and Blanchard (1969) claimed that no single leadership style was completely effective in the leader-follower relationship. Collaboratively, they developed a more practical approach, whereby leaders would exhibit an autocratic, directive- orientated approach (democratic), or adaptive-oriented leadership style. Hersey and Blanchard applied the term “adaptive” leadership (Hersey et al., 2004, p. 11), adding the necessity of including

“adaptability”, to leaders who recognized the changing needs of an organization as well as the changing needs of its followers.

Adaptability, intrinsic to the role of an auxiliary service administrator, involves adapting to the internal and external environment, pressures, or situations as well as fostering the engagement of employees and their skills, expertise, and behaviors in a way that assists in arriving at the needed and expected outcome. Aligning with the premise of adaptability is the effectiveness of the administrator and the processes they use to achieve institutional goals. Hersey, Blanchard, and Johnson (1996) discuss the distinction between management and leadership effectiveness. They believe management effectiveness is reflective of a leadership type in which achieving the operational goals are paramount. However, they deem leadership effectiveness as the attempt to influence groups or individuals to meet stated or desired goals.

Due to the diversity amongst auxiliary service departments, an auxiliary service administrator must be able to recognize and value the differences between employees and adapt their leadership style to the situation and the employees’ strengths and skills. A successful administrator nurtures and encourages their employees while assisting them to take part in appropriate professional development opportunities. While employees are held accountable for their performance, auxiliary service administrators strive to create a positive work environment within their units and encourage their employees to enhance their growth and learning, which in turn enhances productivity.

The primary distinctions of situational leadership theory (SLT) are represented by the classification of four basic leadership styles. These classifications are constructed from principal roles in which a leader can engage in order to initiate structure while supporting employees with professional growth. The four quadrants that illustrate the SLT functions of the leader, as they

interact with their employees (followers), are: (a) telling; (b) selling; (c) participating; and, (d) delegating. These four elements are aligned with the identification of relationship and task behaviors required in a leadership role. Hersey et al. (2004) discusses the maturing process leaders must develop with their employees; this process is based upon the four elements of leadership (Hersey & Blanchard, 1969) and rated from the highest to the lowest level of maturity, or readiness.

Even in the theory's early development, William H. Haney (1967), author of *Communication and Organizational Behavior: Text and Cases*, validated SLT, affirming that in order for an individual to develop to their fullest potential, the leader must be aware of their employees' level of maturity or expertise.

The managerial practice, therefore, should be geared to the subordinate's current level of maturity with the overall goal of helping him to develop, to require progressively less external control, and to gain more and more self-control. And why would a man want this? Because under these conditions he achieves satisfaction on the job at the levels, primarily the ego and self-fulfillment levels, at which he is the most motivatable (p. 20).

Behavioral patterns and employee's readiness to learn and work is based upon the level of motivation and the level of capability needed to accomplish the given task; it is possible to have each readiness and leadership style in an assortment of combinations. The most effective leadership style of auxiliary service administrators is situational leadership, a style of leadership that corresponds to the readiness level of employees. Together the leadership behavior and developmental level of the follower should align with one another. Hersey et. al (1996) states, "Implicit in situational leadership is the idea that a leader should help followers grow in readiness as far as they are able and willing to go" (p. 208-209). Figure 5 depicts the four quadrants of leadership behavior and decision making styles that are most appropriate to the

corresponding level of employee's (followers) readiness or maturity; (a) R1; low, (b) R2; low to moderate, (c) R3; moderate to high, and (d) R4; high.

Figure 5 *Situational Leadership Model – Hersey and Blanchard*

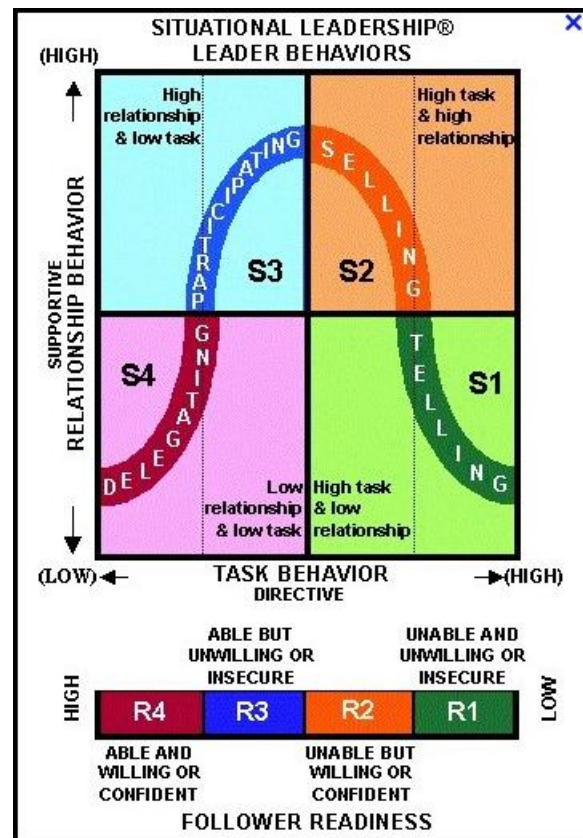


Figure 5 Adapted from “Situational Leadership”, Leadership and Practical Management. Copyright 2011 by Finntrack. Retrieved from: http://finntrack.co.uk/learners/contingency_theory.htm

The first quadrant, *telling*, reflects a leadership style in which employees need direction (Hersey et al., 2004). Use of this leadership style is generally found in employees with little or no knowledge about their job requirements. Auxiliary service administrators routinely deal with staff turnover, particularly in lower level positions. Part-time positions in retail areas, such as food service or the bookstore, are notorious for high turnover for a variety of reasons. Leading

staff at this level requires a greater amount of an administrator's time due to the continual supervision that is required to run daily operations. In essence, the communication and directives found in this quadrant are largely one-way, as the leader defines tasks for employees and supervises them closely.

The second quadrant, *selling*, reflects a leadership style in which employees begin to master job duties and have extensive dialogue with the leader. While the employee increases their knowledge and on the job experience, they continue to seek guidance from the leader in order to develop individual capabilities (Hersey et al., 2004). This *coaching* leadership style is typically aligned with full-time staff who work in a non-supervisory role in areas such as retail operations, support services (shipping and receiving), maintenance (custodial), and very often with clerical support, within each auxiliary service division. The leader continues to define the roles and tasks of employees and is very interested in communications, feedback and ideas from their employees.

The third quadrant, *participating*, reflects a leadership style which is applicable to employees who have proven they are technically capable and have an understanding of the expectations that are required of them. However, these individuals require intense coaching from their administrator in order to support their daily thought processes and to ensure that their task fulfillment is aligned with the vision of the institution (Hersey et al., 2004). *Supporting* leadership styles are aligned with staff in a lower-level supervisory role that is similar to the "lead" or "supervisor" over the mail center, receiving, or print services. Basically, these leaders will facilitate the decision-making process while supporting and motivating employees, leaving most of the control with the employee.

The fourth and final quadrant, *delegating*, reflects a leadership style which is low in maintaining relationships and low in supervision of tasks. Employees are completely developed, invested, motivated, and require minimal input from the administrator. These employees, also known as followers, reflect the highest level of maturity (Hersey et al., 2004). Managers who report directly to auxiliary service administrators fulfill this category as they are commonly the managers of highly visible departments within the institution such as the bookstore, food service operation, or early childhood center. The leader is continuously involved with the decision making and the problem solving process, but control of the decision making is in the hands of these employees; they decide when to involve the leader.

Administrators of auxiliary services must guide and direct employees as they are confronted with a plethora of diverse issues and challenges which are unique to each unit. An effective administrator must understand the institutional goals and respond with an appropriate adaptive leadership style which meets the needs of specific leader-followers' obligations. Therefore, each of the four quadrants of the situational leadership theory (SLT) correlates with two primary roles of leadership: tasks and relationships. A community college auxiliary service administrator needs to infuse both the "art" and the "science" of leadership into their daily activities in order to assist with effectively and efficiently moving the college forward in its mission.

According to Johns and Moser (1989), authors of *From Trait to Transformation: The Evolution of Leadership Theories*, the success of the SLT approach is only effective if respective leaders are willing to adapt their leadership style to the perpetual occurrence of change and the continual need to address the professional developmental requirements of their employees. There remains the distinct need for community college leaders to recognize the importance of

perpetual change and a continual need for professional development as they attempt to attain and sustain their educational mission. Though the fundamentals of leadership, including motivating and directing individuals and groups to achieve a common goal, have changed very little over time, it is the leadership which serves as the foundation of an organization's strength and ability while assisting to configure its culture.

In the late 1970s and early 1980s, authors Hersey and Blanchard re-examined their approaches to situational leadership and their research. Hersey sustained his view of the situational leadership model, whereas Blanchard joined together with organizational researchers, Zigarmi and Nelson (1993), to conduct further research based on the original model. Interesting to note, in a 2008 article, Hershey et al. stress that situational leadership is not a theory; it does not explain why this leadership style and follower readiness work together. This relationship is now described as a model.

Blanchard et al. (1993) adapted situational leadership, emphasizing the basic differences as the flexibility in the leadership approach was grounded on varying situations that required different leadership styles and tactics. This updated model morphed into situational leadership II (SLII) and enhanced the attributions of leadership behavior by adding a means of *commitment* and *competency* to the levels used to identify particular abilities of staff. While the behaviors of some leaders direct their followers' activities and accomplishments, others concentrate on providing socio-emotional support and building personal or supportive relationships between themselves and their employees (followers).

The appropriateness of situational leadership theory has been recognized by varying disciplines in various settings such as business, the military, and education for over four decades. Situational leadership implies that effective leadership possesses both the actions of "leadership"

as well as “management”, so as to develop “the competence and commitment of their people so they’re self-motivated rather than dependent on others for direction and guidance” (Hersey, 1985, p. 91).

For auxiliary service divisions to be successful it is critical to employ the “right” leader(s) who possess the traits and skill sets necessary to lead these diverse departments, thereby supporting the goals and culture of the community college. In order to play an integral role in facilitating and leading non-academic support services within the community college, it is critical for these administrators to be aware of the needs of the employees in each department they lead. A leader must be committed to the goals and mission of the community college as well as those participating in reaching these goals. Situational leadership calls for the leader to adapt or modify their leadership style to fit the ever changing and challenging situations facing community colleges today.

Data-Driven Decision Making

Institutions of higher education are striving to meet their specific missions while facing limited resources, changing student demographics, and increased competition. Originally applied to industry, management principles have since been applied to theories and practices in education management (Sergiovanni and Starratt, 2007; Hoy and Miskel, 1991; Kimbrough and Nunnery, 1976; Sallis, 2002). Over time these principles and theories were carefully modified to fit in an educational setting due to the scholarly endeavor of educational administration.

In recent years, higher education has been engaged in a significant paradigm shift regarding the operation of organizations. This shift centers on the importance of having accurate and accessible data in order to guide and support the decisions made by the institutions’ leaders. Data-driven decision making, in education, refers to “systematically collecting and analyzing

various types of data, including input, process, outcome and satisfaction data, to guide a range of decisions to improve the success of students and schools” (Marsh, Pane, Hamilton, 2006, p. 1).

Community colleges are no exception to this paradigm shift and are employing Data-Driven Decision Making (DDDM) to support academic and student service decisions as well as guide day-to-day operations and long term strategic plans. Relative to higher education, the literature on DDDM reveals two distinct paradigms: first, there is a focus on student learning and/or achievement; and second, there is a focus on the “big picture” or the more holistic enterprise which is used for decisions relevant to the institution as a whole. Auxiliary service administrators understand the critical need for the DDDM process and understand they will gain benefits for their divisions by using this process. These individuals recognize data and information must be accurate, credible, and reliable as well as easily accessible in order to formulate optimal operational and personnel-related decisions. “Data-driven decision making is seen as a continuum in which data must be transformed into information, and ultimately, actionable knowledge through a set of cognitive skills and processes” (Mandinach, et al., 2008), thereby supporting operational advances and ultimately, academic excellence. Fulfilling the role of an auxiliary service administrator can be daunting, but by incorporating DDDM and employing the concept of total quality management (TQM) it is attainable.

Auxiliary service administrators of community colleges lead and direct staff on a daily basis and make numerous operational decisions, both complex and simple. To consistently make decisions, which invariably have a major or minor consequence somewhere within the institution, an effective auxiliary service leader must understand the people working in their departments as well as have access to accurate data and information in order to facilitate operational activities that are under their supervision. As a result, a collection of decision

making concepts and theories were considered to support the conceptual framework of this study. These included traditional models of decision making: intuition-based decision making and the mixed scanning model of decision making. Because of its relevancy to large and small decisions made by auxiliary service administrators, the integration of data-driven decision making, in the conceptual framework, serves as an important function which encompasses the responsibilities of the auxiliary service administrator; therefore, it was believed by the researcher to be most appropriate for this study.

The concept of DDDM is not new. It was felt that “President Lincoln began the modern practice of collecting education data at the national level 150 years ago” (Doyle, 2003, p.3). Data-driven decision making has been practiced to some degree in business and industry for literally decades. During and after World War II, W. Edwards Deming, renowned American statistician, wrote of sampling techniques, statistical methods, and quality control which were applicable to business. He is known for his contribution to innovation in Japanese manufacturing and business. He removed variability and waste from industrial processes and later received widespread recognition in the U.S. One of his best known books, *Out of Crisis* (1986) describes his 14 points for total quality management (Table 1) which can be used to ensure continuous quality improvement in a company. The Total Quality Management movement (TQM), based on Deming’s teachings and philosophy, embraces the continual improvement process and provides consistent mechanisms which can be used to assist organizations in attaining their missions and visions.

Table 1

Deming's 14 Points for Total Quality Management

Deming's Total Quality Management	
<hr/>	
1.	<i>Create constancy of purpose toward improvement of product and service</i> , with the aim to become competitive and to stay in business, and to provide jobs.
2.	<i>Adopt the new philosophy.</i> We are in a new economic age. Western management must awaken to the challenge, must learn their responsibilities, and take on leadership for change.
3.	<i>Cease dependence on inspection to achieve quality.</i> Eliminate the need for inspection on a mass basis by building quality into the product in the first place.
4.	<i>End the practice of awarding business on the basis of price tag.</i> Instead, minimize total cost. Move toward a single supplier for any one item, built on a long-term relationship of loyalty and trust.
5.	<i>Improve constantly and forever the system of production and service</i> , to improve quality and productivity, and thus constantly decrease costs.
6.	<i>Institute training on the job.</i>
7.	<i>Institute leadership.</i> The aim of supervision should be to help people, machines and gadgets to do a better job. Supervision of management is in need of an overhaul as well as supervision of production workers.
8.	<i>Drive out fear</i> , so that everyone may work effectively for the company.
9.	<i>Break down barriers between departments.</i> People in research, design, sales, and production must work as a team, to foresee problems of production that may be encountered with the product or service.
10.	<i>Eliminate slogans, exhortations, and targets for the workforce</i> asking for zero defects and new levels of productivity. Such exhortations only create adversarial relationships, as the bulk of the causes of low quality and low productivity belong to the system and thus lie beyond the power of the work force.
11.	(a) <i>Eliminate work standards (quotas) on the factory floor.</i> Substitute leadership. (b) <i>Eliminate management by objective.</i> Eliminate management by numbers, numerical goals. Substitute leadership.
12.	(a) <i>Remove barriers that rob the hourly paid worker of his right to pride in workmanship.</i> The responsibility of supervisors must be changed from sheer numbers to quality. (b) <i>Remove barriers that rob people in management and engineering of their right to pride in workmanship.</i> This implies abolishment of the annual or merit rating and management by objective.
13.	<i>Institute a vigorous program of education and self-improvement.</i>
14.	<i>Put everybody in the company to work to accomplish the transformation.</i> The transformation is everybody's job.

Note. "The 14 points are the basis for transformation in American industry" (p. 23). Adapted from "Out of the Crisis" by W. E. Deming, 2000. Copyright 2000 by MIT, Center for Advanced Educational Services.

Supportive to the DDDM process, the essential philosophy of Total Quality Management (TQM), based on Deming's initial research, is "to improve quality, serve the customer, satisfy customer requirements, encourage employee innovation, provide for the free flow of information, instill pride and teamwork, and create an atmosphere of innovation and continuous improvement" (Luo, Childress, 2009, p. 1). It is a concept embraced by business and industry in order to establish standards, strategies, and techniques that ensure the quality of products and services through continuous assessment and required readjustments. Edward Sallis (2002) concurs and believes "the importance of TQM to survival is that it is a customer-driven process, focusing on the needs of clients and providing mechanisms to respond to their needs and wants" (p. 4). The philosophy of TQM provides support to leaders of community colleges; it will better enhance their efficiencies and effectiveness to serve the needs of their customers, who are their stakeholders and constituents.

Total Quality Management is also viewed by many as a management strategy and a journey of continuous reassessment which is aimed at organizational improvement. Clearly the continuous quality improvement milieu of TQM relies on the integrated expertise and commitment of all the organization's members. Only since the 1980s has DDDM gained emphasis in the venue of postsecondary education (Wright, 2010). With proven success, DDDM in higher education is now being modeled after TQM practices from business and industry in order to improve the quality and efficiency of these institutions.

The concept of TQM has been a useful pragmatic means for educational leadership to foster accountability as well as improve educational and institutional quality by providing a common vision for improvement and commitment to purpose. The need for increased transparency and accountability of organizational decisions and outcomes has advanced this

commitment to quality management, making it instrumental in guiding the development of criteria to demonstrate performance excellence. The demand for improved student learning outcomes is measured by meeting and surpassing programmatic outcomes and key performance indicators (KPI). To meet guidelines set forth by the Higher Learning Commission (HLC) and state and federal entities, educational institutions are required to assess and document student performance and learning outcomes while demonstrating transparency in the operational decision making and implementation process that moves the institution forward.

Higher education institutional efficiencies and effectiveness, as well as the commitment to quality management, are assessed by the quality of the decisions made. Quality decisions can only be undertaken with any validity through the use of accurate and timely information and data. Peter F. Drucker (1967), professor at New York University and management expert, understood the values of education, business accountability to society, and personal responsibility. Drucker built his legacy on business management and the concept of perseverance, a value system which affects business, individual lives, and society. He describes an effective decision as one “based on the highest level of conceptual understanding” and of business management taking into consideration that “the action commitment should be as close as possible to the capacities of the people who carry them out” (p. 92). As data and information is linked to the performance and quality of higher education, the decisions of an auxiliary service administrator must be timely and correct. The auxiliary service administrator’s skills and abilities to manage people and effectively direct the daily operations of their units, using data-driven decision making, provides both the method and tool for generating appropriate solutions to college issues.

Accordingly, Edward Sallis (2002), Principal of Highlands College in the UK and pioneer of the work on TQM, references total quality in education as a more recent origin; very few articles and books were written on total quality management prior to the late 1980s. Sallis (2005), author of *Total Quality Management in Education*, validates that quality improvement is intrinsic to higher education and should be used as a set of tools when assisting faculty and educational leaders. He recognizes that TQM is used to assist educational institutions, in managing change and setting individual agendas, when they are dealing with tremendous amounts of external pressures. A well-known educationalist, with 30 years' experience in management in higher education, Sallis, has taken part in many international and national educational initiatives in the fields of lifelong learning, organizational development, knowledge management and quality assurance.

Research conducted by Sallis' (2005) led to the conclusion that educational institutions pursue quality improvement linked to professional responsibility, competition from educational marketplaces, and managing processes and people, all which equate to a need to demonstrate quality. It is the subsequent results of this demonstration of quality which illustrates the accountability of those involved and their decision-making process. Within community colleges, quality improvement and fiscal accountability are the significant outcomes of comprehensive business management decisions, which are made on a daily basis by auxiliary service administrators.

Theoretically, TQM is both a methodology and philosophy whereby it is viewed as a set of tools that can be used to aid educational managers in the decision making process. Accordingly, an effective auxiliary service administrator must identify the most effective resources for decision making in order to respond to the needs and demands of the students, the

stakeholders, and the college. “TQM supports the accountability imperative by promoting objective and measurable outcomes of the educational process and provides mechanisms for quality improvement” (Sallis, 2002, p.4). Effective decision-making and continuous quality improvement has become increasingly embedded in the community college culture.

Consequently, data-driven decision making is of significance to auxiliary service administrators, as their focus is to assist the college in meeting its mission in a political and consumer-driven environment.

The conversion of data into useful information is highlighted by Marsh, Pane, and Hamilton (2006), authors of occasional paper *Making Sense of Data-Driven Decision Making in Education*. Together they recognize that “decisions may be informed by multiple types of data” including input data, process data, outcome data, and satisfaction data (p. 2). Figure 6 illustrates how different levels of data are utilized by auxiliary service administrators in their decision-making process and in what manner the outcome affects the college.

Figure 6 *Conceptual Framework of Data-Driven Decision Making in Education*

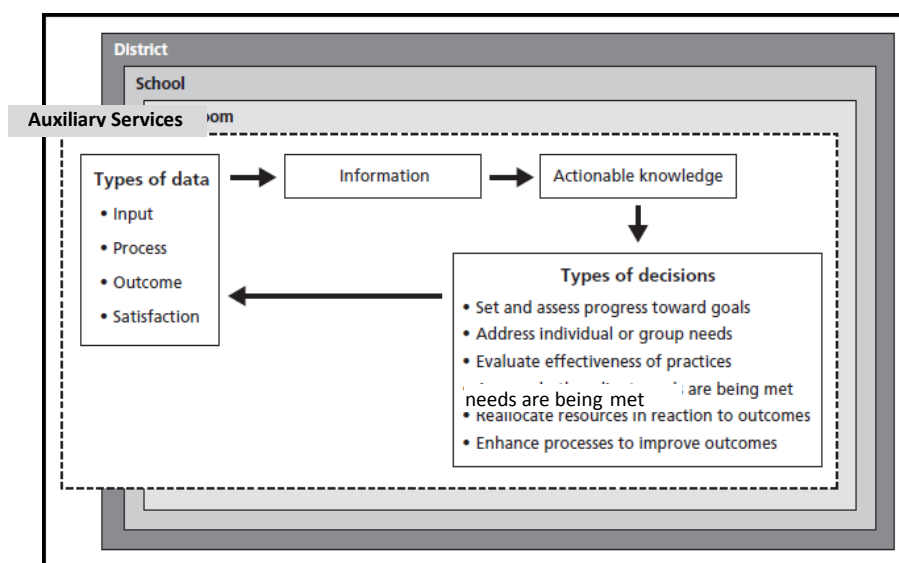


Figure 6. Adapted from “Making Sense of Data-Driven Decision Making in Education” by J. A. Marsh, J. F. Pane, and L. S. Hamilton, 2006, *Rand Education Occasional Paper*, p. 1. Copyright 2006 by Rand Corporation

Once data is collected by an auxiliary service administrator, it must be combined and organized in such a way that leads to an understanding of the data to yield the required usable data and information. Information in turn makes available meaning for actionable knowledge which provides options for the various types of decisions. These decisions ultimately affect the daily operations and the short and long range planning process for administrators of auxiliary services as they perform their job responsibilities, reallocate resources, or reduce expenditures. All result in improving the operations of the college. As new data is collected, a continuous cycle occurs, thus providing support for the data-driven decision making process (DDDM).

With the expanded focus on DDDM and quality improvement, American leaders recognized the need to expand their emphasis on quality in order to compete in a demanding global environment. Secretary of Commerce, Malcolm Baldrige, was an important advocate of quality management and a significant contributor to U. S. sustainability and prosperity (National Institute of Standards and Technology (NIST), 2011). In 1987, the Malcolm Baldrige National Improvement Act was established by Congress. By 1999 it expanded to include educational organizations. United States' organizations and academic institutions may apply for the Malcolm Baldrige Award by meeting requirements set forth by the National Institute of Standards and Technology; the award formally recognizes performance excellence. The criterion for understanding performance management reflects on leading-edge management practices and a model for performance excellence; both are vital to the success of the decision-making process of administrators of auxiliary services.

About the same time that the Baldrige Award was established by Congress, the Higher Learning Commission also launched the Academic Quality Improvement Program (AQIP) in order to infuse the benefits and principles of continuous improvement into colleges and

universities which were already accredited (Higher Learning Commission, 2011). Founded on philosophies which are common to high performing organizations, AQIP pulls information from various programs and initiatives, including TQM continuous improvement (CI), ISO 9000 registration, Six Sigma, and state and national quality awards, including the Baldrige Award. To meet the criteria, a sequence of events is followed by each academic institution. These events include continuous improvement activities that align with the institution's performance goals. The attributes of TQM, the HLC, and the Baldrige Award core concepts, practices, and requirements are depicted in Table 2. The applicability and functionality of DDDM alignment with TQM and the assessment qualities within the paradigm of decision making for auxiliary service administrators, is significant to daily operations and personnel management, thereby resulting in quality and performance excellence.

Table 2 *Correlation Between Criteria for Excellence*

Total Quality Management (TQM)	The Higher Learning Commission (AQIP)	Baldrige Education Criteria for Performance Excellence
<i>Deming's 14 Points</i>	<i>Nine Categories for Framework</i>	
Create constancy for purpose of improvement	Help students learn	Leadership
Adopt the new philosophy	Accomplish distinctive objectives	Strategic planning
Cease dependence to achieve quality	Understand students' and stakeholders' needs	Customer focus
End practice of awarding business on price alone	Value people	Operations focus
Improve processes for planning, production and services	Lead and communicate	Measurement, analysis, and knowledge management
Institute training on the job	Support institutional	Workforce focus

	operations	
Adopt and institute leadership	Measure effectiveness	Results
Drive out fear	Plan continuous improvement	
Break down barriers between staff	Build collaborate relationships	
Eliminate slogans for the workforce		
Eliminate numerical quotas and goals		
Remove barriers and eliminate annual rating or merit system		
Institute a vigorous program of education and self-improvement		
Everyone must work to accomplish the transformation		

Note. Adapted from “Total Quality Management, Deming’s 14 points” Retrieved from: <http://asq.org/learn-about-quality/total-quality-management/overview/overview.html>; “Using the AQIP Categories” Retrieved from: <http://www.hlcommission.org/aqip-categories/aqip-categories.html>; and, “Education Criteria for Performance Excellence” Retrieved from: http://www.nist.gov/baldrige/publications/education_criteria.cfm.

Therefore, to more effectively run daily operations and personnel management, the criterion for excellence in many of the core concepts presented, are relevant to auxiliary service administrators’ decision making. Three significant themes are represented in the areas of continuous improvement: leadership and communication, collaborative relationships, and analysis and process management; each which align with the effective decision making processes of auxiliary service administrators. Each criterion for excellence is a refinement of vast research, resulting in optimal outcomes to achieve operational and academic success. The driving force behind the applicability, in addition to the need for valuable and relevant information, is

accountability. Auxiliary service administrators are held accountable for operational and personnel decision making, which is relative to the employees they supervise.

Frankie Santos Laanan (2004), faculty member in the Department of Educational Leadership and Policy Studies, Iowa State University, states, “In the early 1980s, the concern for measuring educational effectiveness surfaced as a major new focus for all higher education including community colleges” (p. 58). Education Secretary, Arne Duncan (2009a, 2009b), also pronounced the need for educators to utilize data-driven decision making as a national education priority to gain knowledge and skills that could be used to inform their practice. Reinforced by John Easton (2009), Director of the Institute of Education Sciences (IES), data use and analysis are fundamental elements for school and district improvements and are to be used for continuous quality improvement. Collectively, their communications stress the consistency and continuity of decision-making skills required by auxiliary service administrators.

Literature reflects the use of data to improve academic institutions as an acceptable model for quality improvement; therefore, the applicability of DDDM, within the paradigm of decision making, is indisputable. Because the concepts of data collection and data analysis are critical to “identifying strategies that have the potential to generate additional revenue or reduce current expenditures” (Rouche and Jones, 2005, p. 137), decisions made by an auxiliary service administrator can have a long lasting effect on the community college. Therefore, to be an effective auxiliary service administrator, it is imperative to align the decision-making process of operational units with the community college mission in order to achieve or maintain academic quality and service excellence. The knowledge gathered from this study, about the effective use of DDDM, will provide insight to current and future auxiliary service administrators and will assist them in preparing for the future.

Open System Theory

At the most basic level, an organization is recognized as an entity with synergy, interdependence and interconnections within its sub-parts and between itself and the environment. An early use for most fundamental systems theory was for the formulation of a basic classification system of the world. It is a simple scholarly method favored by the sciences for the categorization of things, situations, and events. Essentially, in general system thinking, there are two types of systems: an open system and a closed system. A closed system is defined as one where interactions occur only between the system's components. The interactions do not occur with the environment, thereby being isolated. Whereas, an open system gives as well as receives input from the environment. Relative to organizations, dynamic interactions, including input from the environment and providing feedback to the environment, allow for growth and sustainability of the organism.

Systems theory allows for the understanding and study of the structures and properties of “systems”, in terms of relationships from which new elements, components and properties emerge that are relevant to the whole. It was established as a science by Ludwig von Bertalanffy, Anatol Repoport, Kenneth E. Boulding, William Ross Ashby, Margaret Mead, Gregory Bateson and others in the 1950's (Mitchell, 2011).

It was the theoretical biologist, Ludwig von Bertalanffy, who proposed the assumptions underlying the general systems theory, also often referred to as the open system theory. In 1937, Bertalanffy presented his opinions on general system theory at the University of Chicago, but his first article supporting this theory did not appear until the late 1940s. Bertalanffy's (1969) general systems theory defined the concept of a system; a “system may be defined as a set of elements standing in interrelation among themselves and with [the] environment” (p. 252). This

essentially offered a more comprehensive and holistic view of the dynamic actions of an entity. Its application across the disciplines was recognized immediately. The interdisciplinary nature of general systems theory relates to physical or formal communalities conceptualizing from the “nature of elements and forces in the system” and within the environment where it exists (Bertalanffy, 1975, p. 159).

The laws which govern biological open systems can be applied to a system of any form or of any phenomenon. It is understandable how open system theory can easily be applied to disciplines found in both the natural and social sciences. Derek R. Lane, faculty member at the University of Kentucky in Business and Industrial Communication, describes the principles behind the open system theory as follows:

- an interrelationship of the parts within the system must exist;
- a subsystem must function in order to maintain the health of the overall system;
- materials, or information, must import and export to the environment;
- boundaries must be permeable, and
- a system must remain relatively open (Lane, 2002).

Since organizations are fundamentally systems and because living organisms interact with their environment, they are therefore essentially open systems (Bertalanffy, 1969). Systems such as institutions of higher education can be viewed similarly, as a dynamic system with relationships and integrations which form the whole. Therefore, a community college can be seen as an open system, dynamic in function, not static.

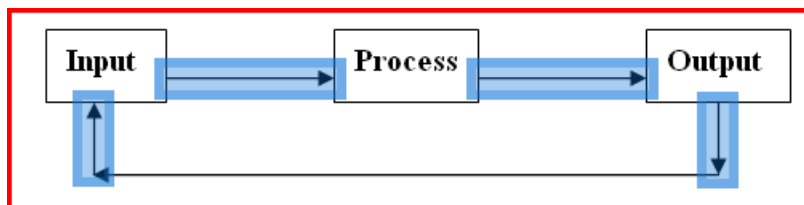
The relationship of open system theory, and that of multifaceted organizations, provides information on the workings of organizations and explains how this organizational model suits the field of education (Bertalanffy, 1969; Katz and Kahn, 1978; Boulding, 1950; Senge, 1990).

Therefore, the principles which govern open systems can be applied to the dynamics of a community college environment. Developed after World War II, open system theory was quickly adapted to use in the evaluation and assessment of the functioning of organizations. During the 1950s, Kenneth Boulding (1950), systems scientist and faculty member at University of Michigan, was among the first people to emphasize that organizations are open systems. His general systems view of the world stressed that “value-laden” decision making and ethical decision making were also part of interactions and thus fundamental constructs that crossed all disciplines. In 1956, Boulding presented an addition to systems theory that classified systems into hierarchies in order to better explain how general systems work. He called this *hierarchy of levels* and felt that systems are composed of a collection of sub-systems that operate in a hierarchical manner. In this light, and within the undeniable hierarchical organizational structure of the community college, auxiliary service administrators are involved in and make all types of decisions, each with some type of intrinsic and extrinsic value (value-laden) as they assume their role and responsibilities.

Chester Barnard (1936) and Philip Selznick (1948) advanced the view of organizations as adaptive in nature, struggling for survival within their environment; they had vast similarities toward the scientific view of any organism. The concept of adaptability has great application to the field of business and organizational management. They viewed organizations as being situated in a larger holistic environment and believed that organizations were not simply technical systems but were complicated systems, including social and political systems. Barnard and Selznick collectively believed the goal of management was to sustain equilibrium within this larger holistic and intricate environment.

Daniel Katz and Robert L. Kahn (1978), University of Michigan, also explored past approaches to the study of organizations and organizational management. They were pioneers in viewing organizations as open social systems with specialized and interdependent subsystems as well as methods for communication and feedback, enabling the linking of all subsystems. Katz and Kahn (1978) note that “Thinking of the organization as a closed system...results in a failure to develop the intelligence or feedback function of obtaining adequate information about the changes in environmental forces” (p. 27). They believed there was a lack of adequate conceptual tools appropriate for the study of organizational management theories. This limitation thereby lead to the development of a framework by Katz and Kahn (1978), applicable to open system theory, which can be adapted to any organization and the decisions made by those employed, such as those in the community college setting. Their simple framework encompasses four components: (1) inputs into the organization, (2) the transformation of those inputs within the system, (3) outputs, and (4) recycling (feedback), as depicted in Figure 7. Therefore, what can be seen is that organizations, cyclical and dynamic in nature, can transform the inputs via data processing to enhance or create the appropriate outputs, which are then recycled back into the institution. This simple framework illustrates how decisions are made by those employed in the organization (auxiliary service administrators) and how it affects the entire institution (the community college). Figure 7 illustrates a representation of an open system.

Figure 7

Representation of Open System Framework

Schematic drawing depicting “an energetic input-output system in which the energetic return from the output reactivates the system (p. 20)”. Adapted from “*The social psychology of organizations* by D. Katz and R. L. Kahn, 1978. Copyright 1978 by John Wiley and Sons.

This candid framework, developed by Katz and Kahn (1978), reflects three organizational characteristics that are intrinsic to a community college environment, and thus the administrators of auxiliary services. First and foundational to their framework, Katz and Kahn recognize the universal law of entropy, contending that organizations move toward disorganization. However, they believe that if an organization operates within an open system, it can regenerate and re-adjust its self by bringing in more resources (data and information) from the environment than it expends. Similar to the operations of auxiliary service departments, these administrators must frequently examine indicators and data from internal and external environments to ensure environmental demands are met. Consequently, auxiliary service administrators’ decisions, actions, and communication influence and affect organizational and cultural conditions which are significant to successfully addressing the community college mission.

Second, Katz and Kahn (1978) acknowledge organizations as being situated in a dynamic homeostasis, inferring that in order to be successful there must be a balance between the subsystems. This homeostatic characteristic is illustrative of community colleges and their need to exist as an integrative and collaborative “whole” which is made up of various divisions, systems and subsystems. Auxiliary services are a subsystem of the community college

environment, supporting the mission and vision of the institution. An administrator's correct interpretation of their community college as a whole as well as its inherent organizational culture can provide critical insight to the decision-making process, ultimately improving the performance of their organization and departmental units. Understanding each division within the community college helps auxiliary service administrators in identifying and resolving potential conflicts as well as more effectively and efficiently managing change and decision making.

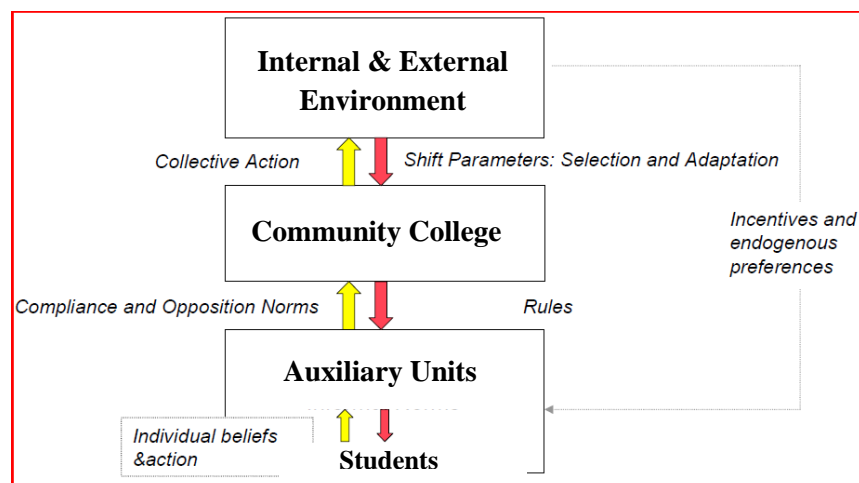
Lastly, Katz and Kahn (1978) characterize open systems by *equifinality*. This concept proposes that several paths can be utilized to reach the same final state. An equifinal process is attained when an open system is approaching its steady state subsequent to a disturbance. Not only can multiple approaches or decisions lead to similar paths or outcomes, but also significant is that data and information is required for each of them. The auxiliary service administrator must work to ensure required data is obtained regardless of the path taken. With the current uncertainty of financial support, it is critical for each administrator to craft decisions based on the most accurate available data, keeping the interest of the community college in mind; thereby, facilitating a homeostasis environment for the community college. Consequently, auxiliary service administrators engage in discretionary decision making which affects all areas of the community college.

In recent years, Peter M. Senge studied how firms and organizations develop adaptive capabilities through the Massachusetts Institute of Technology (MIT). As a result of his study, in 1990, he wrote a book entitled *The Fifth Discipline*. His study popularized the concept of the "learning organization" and the relationship to "systems thinking". Senge (1990) recognizes the systems theory as having the ability to comprehend and address a system as a whole, examining

the interrelationship between the parts and then providing the reason and the resources to integrate the disciplines. Through his research, he identifies a potential problem when organizations “tend to focus on the parts rather than seeing the whole and to fail to see organizations as a dynamic process” (Senge, 1990, p.4). Due to the continual exchange of information between a community college and its internal and external environment, it is necessary for auxiliary service administrators to recognize and acknowledge as many data sources as possible when making decisions vital to the community college mission. This relationship is characterized by a two-way flow of energy and information, and, if unrecognized or acknowledged, can result in long-term costs to the institution.

The concept of systems thinking, as it relates to higher education, applies to auxiliary service administrators’ daily decisions and their incalculable ramifications throughout the community college organization (system). Community college culture, climate, and decisions are shaped and sustained through contextually-constructed mechanisms as depicted in Figure 8. This figure represents the reciprocal interactions and influence between individuals and groups (auxiliary units overseen by auxiliary service administrators), the organization (community college), and the internal and external environment.

Figure 8 *Auxiliary Service Administrator Interactions with the Community College and the Internal and External Environment.*



Note. Adapted from *The New Institutionalism in Sociology*, by Mary C. Brinton and Victor Nee, 1998, p. 31. Copyright 1998 Russell Sage Foundation.

The demands and influences of the internal and external environment, as well as constituents and stakeholders, challenge the abilities of auxiliary service administrators. They are inundated with never-ending requests for data and information which affect administration, academics, operational interest, and organizational research and planning. Therefore, customized analytical capabilities and a dynamic treatment data and information are essential for them to proficiently perform their jobs. The information provided by auxiliary service administrators facilitates and influences the decision making of others in the college.

Jones (2007), researcher at the University of Illinois, similarly describes this broad spectrum of internal and external forces influencing organizations. These forces include: (a) competitive, (b) economic, (c) political, (d) global, (e) demographic, (f) social, and (g) ethical. Jones' general forces have great application to the community college environment. As community colleges are continually challenged by this array of forces, every advantage must be enlisted to regularize resource flows and strategically plan for the future. Auxiliary service

administrators make daily decisions relevant to the efficient and effective operations of the institution. Working within an open systems environment of the community college, these administrators need to be strategic, diligent, and innovative in their decision making processes.

Community colleges continually interact with their environment, student population, and stakeholders. They are also in the midst of financial instability. Auxiliary service administrators need to understand as much as possible about their institution and the environment in order to make sound decisions which are consistent with the community college mission. In these times of economic uncertainty, increased student enrollment, and increased demands from business and industry, it is critical for auxiliary services administrators to have a role on the team in order to ensure the college's sustainability.

The purpose of the study was to explore significant emerging non-academic support issues as identified by auxiliary service administrators in community colleges. This study seeks to understand, from auxiliary service administrators' perspectives, what future issues community colleges must be aware of in order to be better prepared to meet these challenges.

CHAPTER 3

RESEARCH DESIGN

This chapter provides the design and criteria used to guide the research process. To facilitate the research it was critical to establish the credibility and transparency of the study by articulating, in a logical and systematic manner, the research methodology and strategies that were utilized. This research attempted to identify issues and emerging challenges that community college auxiliary service administrators must effectively address in order to facilitate the functions in these support areas. Chapter three presents the rationale for the following: (a) the selection of the qualitative paradigm; (b) the case study methodology; (c) site and participant selection protocol; (d) instrumentation and data collection process; (e) data analysis procedures; (f) trustworthiness, validity, and rigor of the research; (g) limitations of the study; and (h) the researcher as the instrument.

The Qualitative Paradigm

The predilection of quantitative or qualitative research is said to be founded on a set of collective assumptions, concepts, values, and practices which are held by the researcher (Johnson & Christensen, 2008). When conducting research the purpose and guiding questions assist in the selection of the appropriate paradigm in which to situate the study. A review of both quantitative and qualitative paradigms was conducted. It was believed by the researcher that qualitative inquiry, with a case study methodology situated in the interpretive paradigm, would be the most appropriate research design to facilitate the identification of auxiliary service support emerging issues, thereby proving invaluable insights for community college strategic planning. Throughout their research, Johnson and Christensen (2008) formulate various distinctions between quantitative and qualitative paradigms.

Qualitative research is identified as naturalistic with no manipulation of experimental variables or constructs by the researcher. As noted by Merriam (1998) “In contrast to quantitative research, which takes apart a phenomenon to examine component parts (which become the variables of the study), qualitative research can reveal how all the parts work together to form a whole” (p. 6).

Quantitative research focuses on the numerical collection of data. The scientific method describes this approach as “top-down”, in which the researcher collects data to conduct an investigation of hypothetical and theoretical testing of the study; the emphasis is on data collection which focuses on numerical data. The findings are meant to establish causal, relational and/or inferential predictions through the use of statistical methods.

Qualitative research follows the approach of an exploratory and descriptive scientific method, with data collection relying on non-numerical data. This approach is viewed as a “bottom-up” process where findings are meant to be transferable to similar situations; it provides insight and information that is founded upon the perspectives of those involved or affected by the phenomena under study. The primary concern in a qualitative study pertains to the credibility of the research process and the findings. “Qualitative researchers are interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences” (Merriam, 2009, p. 5). Creswell (2007) concurs with Merriam by placing an emphasis on qualitative research. He states that qualitative research is “the process of research as flowing from philosophical assumptions, to worldviews and through a theoretical lens, and on to the procedures involved in studying social or human problems” (p.37). It is important in the decision making process, and imperative to the success of community colleges, for community college auxiliary service administrators to explore and understand the socially

constructed meanings of current data. A focus on participants' perspectives and meaning is obtained by gathering rich, thick data from the study participants. This assists with the identification of significant emerging trends and issues. Situating this study in the qualitative paradigm allows for the exploration of emerging trends through the use of a wide-angle lens in order to capture a more in-depth understanding of what the future holds for non-academic service administrators.

Data analysis in qualitative research can be approached with a multitude of holistic and contextual strategies. Systematic and transparent approaches are highly recommended to support the rigor and strength of the study. Qualitative research is an approach in which the researcher aims to gather an in-depth understanding of the behavior studied, explore the how and why of decision making, understand complex issues, and obtains people's perspectives. According to Creswell (2007), it is appropriate to employ a qualitative research approach: (a) because a problem, issue or concern needs to be explored, (b) when there is a need for a complex and detailed understanding of an issue, and (c) when understanding the contexts or settings in which a problem or issue is found can shed critical and useful information. When evaluating the purpose of this study, using Creswell's significant factors, the qualitative paradigm is most appropriate because it can address: (a) the exploration of emerging trends in auxiliary service support services, (b) the need to understand the decision-making process of auxiliary service administrators as important to the improvement of community college services, and (c) the need for non-academic administrators to be aware of those emerging trends relevant to their departments (the contextual setting).

Creswell (2007) defines interpretive research as an approach that has become interwoven with the core characteristics of qualitative research, and recognizes the self-reflective nature of

the researcher as the interpreter of the data. Merriam (2009) explains that qualitative research, as located within interpretive research, considers reality as socially constructed. There is no single discernible reality, but rather a multitude of realities or interpretations that are created by each individual. Information and data gathering is socially constructed through the researcher's interactions with participants throughout the research process. Therefore, the study findings are constructed through multiple realities and subjective meanings, and it is developed through both the participant's and the researcher's lenses.

Creswell (2007) states, "Qualitative research today involves closer attention to the interpretive nature of inquiry and situating the study within the political, social, and cultural context of the researchers, the participants, and the readers of a study" (p.7). To understand the importance of the participants' subjective worlds, the onus falls upon the researcher to interpret the data while separating the subject's individual background or understanding of the study. Additionally, it is the responsibility of the researcher to present ample data in order for readers to determine whether the outcomes are transferable to their community college. Identification of emerging auxiliary service support issues is critical to the success of institutional planning within each community college. It is for these reasons that an interpretive qualitative paradigm has been selected to conduct this study.

Case Study Methodology

When conducting qualitative research, it is important to consider the variations in research methodologies. Case studies are often employed when an in-depth understanding of a phenomena or bounded case is desired. Merriam (1988) provides a distinctive characterization of a case study stating, "A qualitative case study is an intensive, holistic description and analysis of a single instance, phenomenon, or social unit" (p. 21). In addition, Merriam (1998) describes

case studies as single units around which there are boundaries, and she defines characteristics of qualitative case studies as being particularistic, descriptive, and heuristic. For the purpose of this research, a particularistic focus will take precedence by concentrating on arising issues as identified by auxiliary service administrators.

Stake (2005) defines a case study as less of a methodological choice than “a choice of what is to be studied” (p. 435), defining the “what” as a bounded system. Case studies conducted within a bounded system can be inclusive of historical or qualitative data seeking to understand the meaning of the research topic.

Case studies are distinguishable by the size of the bounded case as well as by the intent of the case analysis. Creswell (2007) describes the three variations pertaining to the intent of the case study as: (a) the single instrumental case study; a bounded case illustrating the issue, (b) a collective or multiple case study; a single issue as viewed through multiple case studies, and (c) the intrinsic case study; in which the focus is on the case itself. This study is an instrumental case study; it will provide information regarding the issues that auxiliary service administrators will face in the immediate future and how those issues will affect academic and student affairs, the strategic planning and budgeting process of the institution, and the community.

Yin (2003) defines a case study as a research method that “comprises an all-encompassing method-covering the logic of design, data collection techniques, and specific approaches to data analysis” (p. 14). Additionally, he describes three conditions to aid in the selection process of the appropriate research methodology. The three conditions consist of the following: “(a) the type of research question posed, (b) the extent of control an investigator has over actual behavior events, and (c) the degree of focus on contemporary as opposed to historical events” (Yin, 2003, p. 5). The application of Yin’s (2003) three conditions corroborates the

selection of a single instrumental case study approach for this research. This study will employ a case study methodology to explore and identify the non-academic support issues auxiliary service administrators will be facing over the next five years. This case study is bounded by the research purpose and the selection of participants located within the United States and the state of Illinois.

Stake (1981) claims that knowledge learned through case studies is unlike other research in four important ways. He believes a case study is: “(a) more concrete, as the knowledge resonates from experience; (b) more contextual, experiences are rooted in the context; (c) more developed by researcher interpretation, readers bring their own experiences; and (d) based on reference populations as determined by the reader, readers have a pre-determined population in mind” (Stake, 1981, pp. 35 – 36).

In summary, this study will provide newfound knowledge in non-academic support areas for auxiliary service administrators in community colleges. The selection of an instrumental case study methodology is appropriate for this study as identified by three experts in case study research:

- Merriam (1988) and Stake (1995) – The study will be conducted within a bounded system.
- Yin (2003) – The study meets the three conditions for case study selection.
- Stake (1981) – The study will identify newfound knowledge critical to auxiliary service administrators in the community college setting.

Case Selection

Participant community colleges were identified through a process of purposeful sampling based on the criteria of geographical locations, membership in the National Association of

College Auxiliary Services (NACAS), and those administrators of auxiliary service support services within the State of Illinois. Creswell (2007) describes purposeful sampling as the selection process used to identify individuals and sites that purposely facilitate an understanding of the research problem and/or phenomena of the study. The sampling technique of maximum variation (also known as maximum diversity sampling) was also applied in the selection process for participants who would be interviewed. The use of this sampling technique provided an opportunity to maximize the gathering of dissimilar perspectives; this can be reflective of institution size and location. Merriam (2009) defines maximum variation as “purposefully seeking variation or diversity in sample selection to allow for a greater range of application of the findings by consumers of the research” (p. 229). Patton (2002) broadens this definition to incorporate the analysis of data defining maximum variation as, “Any common patterns that emerge from the great variation are of particular interest and value in capturing the core experiences and central, shared dimensions of a setting or phenomenon” (p. 234). For this study, maximum variation criterion was applied to those who responded to the request for an interview from the pool of 37 single campus Illinois community colleges. Offering the opportunity to participate in the study to a variety of institutions based on their peer group representation by the Illinois Community College Board (ICCB) was essential in order to reveal commonalities and differences among various institutions.

Site Selection Protocol

In order to select appropriate study sites, the site selection criterion was based on four characteristics: geographical boundaries, organizational membership, regional boundaries, and degree of urbanization. The first characteristic, geographical boundaries, was represented by all community colleges located within the United States. The second criterion, organizational

membership, was met by identifying community colleges that were members of the National Association of College Auxiliary Services (NACAS). The third characteristic, regional boundaries, was met by inclusion of the 37 single campus community colleges located within the State of Illinois. The fourth characteristic, degree of urbanization, was met by applying the maximum variation selection criteria to the face-to-face Illinois participants in order to identify potential interviewees from six single campus colleges from six different ICCB peer groups. These characteristics were identified sequentially as illustrated in Table 3.

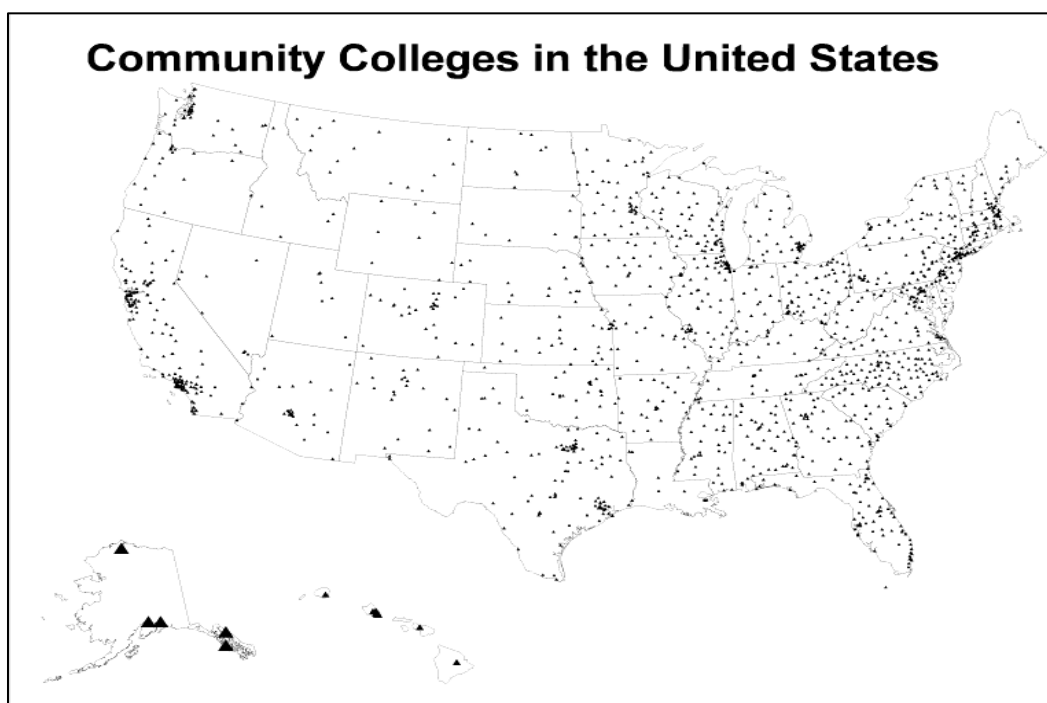
Table 3 *Characteristics Identified for Purposeful Sampling and Maximum Variation*

Sequential Identification	Characteristic	Organizational Membership	Purposeful Sampling / Maximum Variation	Rationale
I	Geographical Boundary	United States / AACC Data	Purposeful Sampling	Creates the national representation
II	Organizational Membership	NACAS Membership	Purposeful Sampling	Identifies members of auxiliary service support services
III	Regional Boundary	Single Campus / ICCB Data	Purposeful Sampling / Maximum Variation	Identifies campuses with single management system
IV	Degree of Urbanization	IPEDS Data	Maximum Variation	Creates variation in identification / decision-making processes

The geographical boundary encompassed all community colleges within the United States. The American Association of Community Colleges (AACC) is recognized as the

organization representing the nation's 1,173 community colleges. Figure 9 shows the distribution of the community colleges throughout the United States.

Figure 9 *AACC Representation of 1,173 Community Colleges Nationwide*



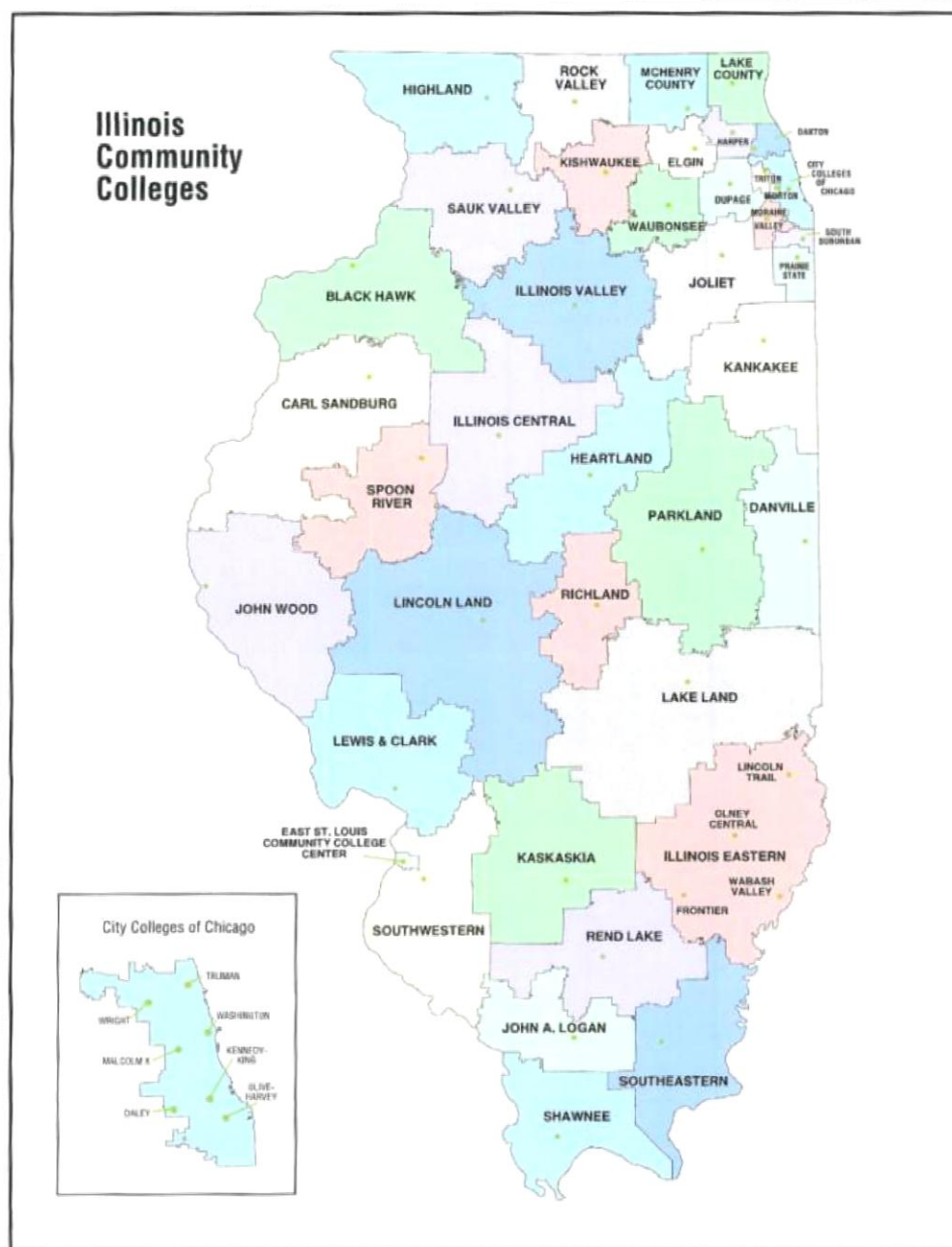
Note. Adapted from “Community College Map” by the American Association of Community Colleges. Copyright 2010 by the American Association of Community Colleges.

The National Association of College Auxiliary Services (NACAS) is the largest organization supporting auxiliary service professionals in the United States. Created in 1969, it is a one stop connection for information relevant to auxiliary service support services. Of the 796 registered members in U.S. institutions, 175 are identified as community college/two-year institutions.

Maximum variation was implemented in the third and fourth characteristic of the purposeful sampling identification process. Regional boundaries of Illinois community colleges

are specified by the Illinois Community College Board (ICCB) as shown in Figure 10. Lastly, the degree of urbanization (size and location) was identified using the ICCB *Fiscal Year 2010 Peer Institution Groups Report*.

Figure 10

Illinois Community College Districts

Note. Adapted from “District Boundaries” by the Illinois Community College Board, Copyright 2010 by the Illinois Community College Board.

Participant Contact Protocol

The focus of this research is to explore emerging auxiliary service support issues as identified by auxiliary service administrators in community colleges. Surveys were conducted, both nationally and regionally, in Illinois. Face-to-face interviews of six Illinois auxiliary service support administrators were completed to further explore in-depth the complexity of identified emergent issues and trends.

An established protocol ensured uniformity of the contact procedures as well as the consistency of the sequential data collection process. Yin (2003) defines protocol as (a) containing the instrument, procedures and general rules to be followed, (b) being different from that of an instrument, and (c) having a case study protocol under all circumstances. He expounds on the use of protocols as a way of increasing the reliability of a case study.

The sequential contact protocol was follows:

1. National Survey. All community college members of the National Association of College Auxiliary Services (NACAS), except those located in Illinois, were contacted via email requesting their response to an extensive survey (Appendix A). The survey asked administrators to identify what they felt were the emerging issues in auxiliary service areas of their respective institutions.
2. Illinois Survey. The 37 single campus community colleges were contacted via the Illinois Community College Chief Financial Officers (ICCFO) listserv. Each vice president in administrative or business affairs was asked to forward the survey to their respective administrator of auxiliary services or respond if the position did not exist. This survey, found in Appendix B, was more extensive than the national survey, asking administrators to: (a) identify emerging trends in their

institution, (b) to identify their areas of responsibility, and (c) to identify their educational and demographic background. In addition, it requested participants to send a copy of their community college organizational chart and asked them if they would be willing to participate in a face-to-face interview at a later date.

3. Confirmation of Interviews. Six Illinois participants who indicated on the survey their agreement to participate in an interview were contacted via telephone to confirm their agreement and schedule a convenient time to meet. Participants were contacted two weeks prior to the interview to discuss the process and to provide them with the interview questions.
4. Face-to-Face Interviews. Six auxiliary service administrators were interviewed, with representation from six different peer groups across the State of Illinois.

Instrumentation and Data Collection

Data collection for this study included a variety of methods such as surveys, interviews, and documents and field notes. This study employed a simple multimethod qualitative data collection design in order to enhance the breadth and depth of the information and insights obtained from participants. Teddlie and Tashakkori (2003b) define a more extensive typology of mixed methods regarding their “degree of mixedness”. They describe a multimethod qualitative study as a Multiple Method Design where more than one method is used at various stages within the research process. “Enabling researchers to simultaneously answer exploratory and confirmatory questions and thereby verifying and generating theory about complex social phenomena in the same study is emphasized as the major advantage of the mixed methods” (Teddlie & Tashakkori, 2003, p. 62).

Merriam (2009) depicts qualitative data collection as data collected through interviews, information recorded in observations, and data extracted from various types of documents.

Table 4 lists each data source, the method or methods utilized, and the data-collection technique.

Table 4 *Four Data Sources Utilized for the Study*

Data Source	Method	Data Collection Technique
NACAS community college administrators	National survey	Online survey using Survey Monkey, yields national emerging trends in auxiliary service support areas
ICCB 38 community college auxiliary service support administrators	State survey	Online survey using Survey Monkey, yields Illinois emerging trends in auxiliary service support areas; pre-requisite for face-to-face interview pool selection
Illinois community college auxiliary service support administrators	Face-to-face interviews	Face-to-face interviews lasting approximately 60 minutes in length, recorded, transcribed; field notes
Illinois community college organizational charts	Documents	Gathered from all participants who completed the survey conducted in Illinois

Surveys

Survey research relies upon self-reported data from participants. When determining the appropriate type(s) of survey for this research, consideration was given to the scope and purpose of the study, how best to communicate with the participants, length and complexity of the instrument, sample size, and scheduling. Surveys were chosen to acquire pertinent information from those directing the daily operations of community college auxiliary services.

The initiation of a survey for gathering this type of information among specific organized groups in higher education is not new. EDUCAUSE, a nonprofit organization which promotes the intelligent use of information technology in higher education, has utilized a similar constituent survey. This organization, formerly known as the College and University Systems Exchange (CAUSE), was founded in 1962 by data processing directors in order to share information regarding the new administrative systems being developed to process administrative data. Over the next several decades the organization grew and began to collaborate with similar organizations. By 1996 CAUSE's reputation continued to grow in the delivery of high-quality conferences and professional development programming for technology support services. In 1998, CAUSE merged with Educom, a well-recognized computer literacy organization, to become EDUCAUSE. In 2000, EDUCAUSE began to survey its membership in order to gain insight regarding issues that information technology (IT) leaders identified as most important for their institutions to resolve in order to achieve strategic success.

The foundation for the Illinois and national surveys were modeled after the current EDUCAUSE survey which was released to identify the emerging technology issues in each of four areas (Table 5). These four generic areas were used as the primary questions to elicit information regarding the emerging issues in community college auxiliary service support services. EDUCAUSE was contacted to seek approval to utilize the formatting of these generic questions; permission was readily granted by Nancy Hays from the copyright office (personal communication, September 7, 2010).

Table 5 *EDUCASE Survey Identifying the Five Most Important IT Issues in Four Areas*

-
1. Issues which are critical for strategic success.
-

-
2. Issues that are expected to increase in significance.
 3. Issues that demand the greatest amount of the campus IT leader's time.
 4. Issues that require the largest expenditures of human and fiscal resources.
-

Note: Adapted from EDUCAUSE Review Magazine, Volume 44, Number 4, July/August 2009

The EDUCAUSE survey listed 31 issues in each of these four areas, asking Chief Information Security Officers from their membership institutions to rank the top five in each of the four areas. For purpose of this research, issues listed under each generic question were identified from the National Association of College Auxiliary Services (NACAS) website, E-Group discussions. Modeling this study's survey based upon on the EDUCAUSE survey, was central to the design because of the significant success in gathering pertinent information by the EDUCAUSE survey over the past 10 years. Therefore, it was believed by the researcher that a similar type of survey and distribution technique would also be successful in gathering pertinent data from the community college auxiliary services support administrators.

For this national survey, community college participants were contacted via email by the National Association of College Auxiliary Services (NACAS) from their constituent membership roster. This survey included four specific questions regarding issues of auxiliary services administrators and it slightly modified the language to indicate auxiliary services rather than information technology (Appendix A).

The state survey utilized the Illinois Community College Chief Financial Officer (ICCCFO) listserv to provide contact information for participants from the 37 Illinois single campus community colleges. This more extensive survey incorporated supplementary questions to aid in the gathering of additional information such as gender, age group, position title, reporting structures, functional duties, professional affiliations, FTE, the request for

organizational charts, and finally whether or not they would be willing to participate in a face-to-face interview (Appendix B). This additional demographic information will contextually situate the research and aids with a deeper understanding of the findings.

Each survey was administered using Survey Monkey (www.surveymonkey.com). Survey Monkey was developed in 1999 and is an online user-friendly software program which was created to design, distribute, track and assist with data analysis. Surveys were distributed and responses were collected over a two-week time period to allow for adequate response time.

Semi-structured Interviews

Semi-structured face-to-face interviews were the second element in the multimethod qualitative data collection design. The interview questions were crafted to explore emerging trends and issues more in depth as identified by Illinois auxiliary service support service administrators. A semi-structured interview “allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to the new ideas on the topic” (Merriam, 1998, p. 74). Additionally, Merriam (1998) contends, “In qualitative research, interviewing is often the major source of the qualitative data needed for understanding the phenomenon under study” (p. 91).

To ensure consistency and to gather relevant information, an interview schedule was used when conducting each semi-structured face-to-face interview. Two weeks prior to the interviews, participants were sent a confirmation of the meeting date and time as well as the interview questions via email (Appendices C and D). Each of the interview questions were mapped to one of the four driving questions in order to obtain the necessary information required for the study.

On the day of the interview, each participant was greeted by the researcher who gave a brief introduction that was followed by a short explanation of the study. The interview process, as well as the time frame, was also made clear; permission to record each session was re-confirmed prior to commencing. Throughout the interview, probing questions were also employed to elaborate or clarify responses given by participants.

Document Collection

Documents provide a wide range of materials inclusive of written, visual, and physical. They are significant to the research and data collection processes. Yin (2003) recognizes the strengths of documentation as that of being (a) stable; can be reviewed repeatedly, (b) unobtrusive; not created as a result of research (case study), (c) exact; contains exact names, references, and details of an event, and (d) broad coverage; long span of time, many events, and many settings (p. 86).

Data found in documents supports information obtained in interviews and observation and “can furnish descriptive information, verify emerging hypotheses, advance new categories and hypotheses, offer historical understanding, track change and development” (Merriam, 1998, p. 126). Though simple in design, organizational charts powerfully display the governance structure within the community college hierarchical structure. An organizational chart depicts the structure of an organization in terms of relationships among employees or departments and represents lines of authority, responsibility, and reporting structures within an institution. Therefore, to understand the situational context, placement and importance of auxiliary services in each college, organizational charts were requested from the 37 single campus Illinois community colleges.

Field Notes

In qualitative research, field notes are both observational and reflective. To be helpful to the researcher, field notes must be highly descriptive and inclusive of details or relevant elements. Merriam (2009) describes field notes as those which include the participants, the setting, and the activities or behaviors occurring prior, during and after the interview process. Regarding field notes, Merriam (2009) suggests, “enough detail should be given that the readers feel as if they are there, seeing what the observer sees” (p. 130).

Patton (2002) gives further details of four important elements that should be found in field notes. First, field notes must be descriptive, allowing the observer to return mentally to the setting at a later date. Second, field notes need to contain what participants say, noting formal and informal direct quotations. Third, field notes should contain the researcher’s individual feelings, reactions to the process, and reflections pertaining to the meaning and significance of the interview. Finally, field notes must include the researcher’s insights, interpretations, beginning analyses, and hypotheses about what took place in the interview process.

In qualitative research, the researcher is the primary tool in the data collection and analysis process; therefore field notes play an important part in keeping the researcher grounded. Care must be taken to ensure accuracy as well as the incorporation of a format which allows information to be retrieved easily when conducting the data analysis process. During each of the interviews conducted, field notes were taken inclusive of the participant’s name, location of the interview, date and time the interview occurred, and the schematic drawing of the environmental setting. Field notes included a diagram or picture of the physical setting to allow for better recollection of the situation for the researcher. All notes were reviewed and coded following the interview, and correlated to the applicable transcriptions.

Ethical Considerations

Prior to data collection, approval from the National Louis University Institutional Research Review Board (IRRB) was received. In this approval process the initial step is to ensure the ethical commitment of the researcher. Researchers must consciously consider ethical issues such as “seeking consent, avoiding the conundrum of deception, maintaining confidentiality, and protecting the anonymity of individuals with whom we speak” (Creswell, 2007, p. 44). Merriam (2009) and Patton (2002) discuss the credibility of the researcher during the process and explain that ethical practices can be dependent on the appropriate training, experience, status, and presentation of the researcher. It is critical for the researcher to understand his/her obligation to protect not only the anonymity of the participants, but the confidential information which is shared during the process as well. Protecting the participants was completed by means of consent forms and transparency in every practice. Merriam (1998) explains that, “While policies, guidelines, and recommendations for dealing with the ethical dimensions of qualitative research are available to researchers, actual ethical practice comes down to the individual researcher’s own values and ethics” (p. 218).

The researcher was explicit in all documentation by including a participants consent agreement in both the national and state surveys (Appendices A and B), in addition to the consent forms (Appendix C) which were secured prior to the face-to-face interviews. A signed confidentiality agreement was also obtained from the transcriptionist who transcribed each of the interviews (Appendix E). Finally, all data forms collected for this research: surveys, tapes, field notes, transcripts, documents, and the analysis were kept confidential. All documentation will be held for a period of seven years in a locked secure place that only the researcher has access to, and then destroyed.

Data Collection Pilot

To identify problems or irregularities associated with the research protocol, a pilot survey was conducted for both online surveys and face-to-face interviews. Three content experts were selected to evaluate the national and state surveys to ensure the functionality of the electronic survey. Two content experts were also asked to participate in pilot face-to-face interviews. All content experts were community college auxiliary service support services administrators.

The purpose of each pilot was to assess the questions, process, and timing of each method to ensure consistency and accuracy throughout the actual data collection process. During the pilot interviews two types of recorders and a timer were tested to ensure all equipment was functioning and that the allotted time for each question was sufficient. The pilot participants suggested no wording changes in the surveys or the interview questions. All data collected and recorded, during each of the processes, was erased or destroyed immediately following each session and none of the data was used as data for this study.

Data Analysis

Qualitative research typically obtains a vast amount of data over a substantive period of time from a multitude of sources; it is contextually weighted and contains an abundance of rich, thick details. Stake (1995) describes the extent of the qualitative data analysis cycle quite eloquently: “There is no particular moment when data analysis begins. Analysis is a matter of giving meaning to first impression as well as final compilations” (p. 71). Likewise, Creswell (2007) poses, “It is a process of pulling the data apart and putting them back together in more meaningful ways” (p. 163).

Case study data is commonly obtained from surveys, interviews, field notes, and documents. Due to the vast amount of data and the multiplicity of sources, data analysis and

interpretation can be complex and challenging. Therefore, it is essential to organize all forms of data into a manageable database in order to facilitate careful examination of data which leads to the discovery of themes, patterns, and concepts. The investigative process of data analysis provides a pathway for meaningful and useful information to be extracted from the volumes of raw data.

The organization and preparation for data gathering and analysis requires a logical approach. Yin (2003) believes the researcher must have “an overall analytic strategy” (p. 110) which allows for “an investigator’s own style of rigorous thinking, along with the sufficient presentation of evidence and careful consideration of alternative interpretations” (p. 110). Creswell (2007) describes this systematic process as a spiral image creating structure and meaning as data and information is collected. As such, he describes the procedural stages as: (a) data managing; (b) reading and memoing; (c) describing, classifying, and interpreting; and (d) representing and visualizing. The research conducted for this study followed Creswell’s data analysis spiral throughout the analysis phase.

Data Managing Stage

The managing, or organizational stage, was created at the inception of the data collection process. Manila folders and storage units were created to hold all physical documents collected. They were sorted by the type of data, participant’s name, and community college affiliation. Equally as important, a computer database was created and digital flash drives were identified and kept in a secure location.

Reading and Memoing Stage

Johnson and Christensen (2008) describe memoing as a tool for recording ideas that are generated throughout the data analysis process. Additionally, they believe memos are “reflective

notes that researchers write to themselves about what they are learning from their data” (p. 532). These memos can be short phrases or key concepts to aid the researcher in the recollection of their observation and enhance the accuracy and reliability of the research which was conducted.

The face-to-face interview tapes were transcribed and then reviewed by the researcher who compared them against the tapes for accuracy. Following this, the transcriptions were sent to each participant for member checks. After verification and agreement, the transcripts were continually reviewed to enable data segmentation, coding, and identification of themes and patterns. Notations and memoing made after reviewing the transcripts were then combined with those prepared from the documents and the researcher’s field notes. The creation of memoing and reflective notes was continual, therefore increasing the accuracy, reliability, and transparency of the data analysis process.

Describing, Classifying, and Interpreting Stage

After each stage of data collection, the researcher began to establish themes and patterns utilizing *categorical aggregation* (Creswell, 2007). These categories, or codes, helped to expose insights, relationships or connections emerging from the raw data. Creswell (2007) believes that researchers should begin with a short list of potential codes that “match text segments” (p. 152). Coding was developed through use of *a priori* themes that were gathered from the study’s theoretical lenses. However, great care was taken to capture all emergent themes to ensure that no data was lost.

Representing and Visualizing Stage

The final phase of Creswell’s (2007) spiral depicts the data collection as a figure form, tabular, or text. Johnson and Christensen (2008) also suggest that diagrams can be helpful in making sense of the data. Following the categorization and coding of the data, emerging themes

and patterns were identified. This allowed the researcher to create a typology classification system that organized the qualitative data into tables and figures, to further connect the data and themes. Findings from the data analysis provided useful insights into the emerging trends in auxiliary service support service departments, the purpose of the study.

Trustworthiness: Reliability, Validation, and Rigor

The goal of trustworthiness in qualitative research is to support the findings of the research and prove that the findings are “worth paying attention to” (Lincoln & Guba, 1985, p. 290). The trustworthiness of the research and its findings is essential regardless of the epistemological approach to the research. Lincoln and Guba (1985) note that positivist inquiry has developed a set of criteria for addressing the rigor of the research which fit with its ontological and epistemological assumptions. These criteria are: internal validity, external validity, reliability, and objectivity. However, they believe these criteria did not suit the tenets of qualitative inquiry.

Trustworthiness, in a qualitative naturalistic interpretive inquiry, is described by Lincoln and Guba (1985) as a rigorous process which requires four alternative criteria to be met. They proposed alternative criteria with which to judge the soundness or the trustworthiness of qualitative research: credibility, transferability, dependability, and confirmability. By addressing similar issues, these criteria correspond to the criteria employed in a positivist inquiry: (a) credibility (in preference to internal validity); (b) transferability (in preference to external validity/generalizability); (c) dependability (in preference to reliability); and (d) confirmability (in preference to objectivity).

Credibility in qualitative research pertains to the findings as being believable and plausible. Credibility requires demonstrating that the research design maximizes the accuracy of

identifying and describing the phenomenon being studied and that the findings are consistent with the data. This was enhanced in this study by a consistent use of various strategies. Surveys were conducted and data was retrieved utilizing an external source, SurveyMonkey.com, which increased the accuracy of the data collection process. All participants who were interviewed provided a member check of their transcript by reviewing it for accuracy. Field notes assisted with a reflective commentary enhancing the researchers' interpretive processes. Rich, thick data, with the inclusion of participant quotes and triangulation of multiple data sources supported and led to the findings.

Transferability, within the naturalistic interpretive paradigm, is met by answering the question of *applicability* (how the findings of the study are applied to other settings, circumstances, populations, or situations). Merriam (2009) provides two strategies to enhance the transferring of study findings. First, it is the researcher's responsibility to ensure sufficient contextual information such as rich, thick descriptions and details regarding the situation, settings, and participants; this enables a transfer of findings. Second, is the care taken in selection of the study sample. Maximum variation sampling adds strength to the data collection process and provides a greater range of application and/or relevance of the findings. The sample selection for this study was purposeful with incorporation of a maximum variation strategy as well as use of a multimethod data collection approach. Throughout the research, protocols were maintained providing a detailed and descriptive audit trail of the settings, participants and data that was obtained. Coded and categorized data gleaned from documents, interviews, and field notes were combined and placed in tabular formats and displays, enabling the reader to visualize and easily review the findings.

Dependability, within the naturalistic approach, is met by maintaining *consistency* throughout the research process. This can be enhanced by the use of overlapping methods of data collection and analysis, use of protocols, and provision of details pertinent to each step of the process. Within this research, detailed explanations provided decision transparency relevant to the design, data collection methods and analysis strategies and processes. Not only did these details enhance the understanding of the study, but it allowed the study, or parts of this study, to be replicated. Moreover, the theoretical lens from which this study was based was explained in great detail, giving further credibility to the research methodology.

The naturalistic approach to *confirmability* consists of a full disclosure of the data upon which all interpretations are based, or at least the data that is available to readers for inspection. This disclosure allows the reader to examine the data and confirm the researcher's interpretations of the findings. Confirmability is enhanced by using audit trails which can establish both dependability and confirmability concurrently. It is also crucial for the researcher to acknowledge their own bias and recognize the limitations of the study. Confirmability in this study was established through several techniques including triangulation of the data, use of an audit trail, acknowledgement of both the study limitations and the researchers' bias as well as the continuous use of critical reflective field notes. Critical reflection was significant due to the fact that the researcher has been an administrator of auxiliary service support services in the community college environment for more than six years.

Adhering to a similar attitude concerning the rigor of qualitative research, Merriam (2009) believes validity and reliability are equally significant. She believes that these are "concerns that can be approached through careful attention to a study's conceptualization and the way in which the data are collected, analyzed, and interpreted, and the way in which the findings

are presented” (p. 210). Merriam summarizes the strategies for enhancing the rigor and trustworthiness of a study by promoting validity and reliability.

Yin (2003) concurs with Merriam (2009), Lincoln and Guba (1985) with his articulation of the essential criteria for judging the quality of trustworthiness and research design in a case study. Yin’s four design tests, as shown in table 6, are recommended with case study methodologies and cross-reference each phase of the research in which the tactic should be applied. For this study, Yin’s four design test was utilized to provide essential guidelines for constructing this research as well as supporting the rigor and transferability of the findings.

Table 6 *Yin’s Case Study Tactics for Four Design Tests*

Tests	Case Study Tactic	Phase of research in which tactic occurs in this study
Construct validity	• Use multiple sources of evidence	Data collection / Chapter 4
	• Establish chain of evidence	Data collection / Chapter 4
	• Have key informants review draft case study report	Composition / Chapter 4
Internal validity	• Do pattern-matching	Data analysis / Chapter 5
	• Do explanation-building	Data analysis / Chapter 5
	• Address rival explanations	Data analysis / Chapter 5
	• Use logic models	Data analysis / Chapter 5
External validity	• Use theory in single-case studies	Research design / Chapter 2
	• Use replication logic in multiple-case studies	Research design / Chapter 2
Reliability	• Use case study protocol	Data collection / Chapter 4
	• Develop case study database	Data collection / Chapter 4

Note: Adapted from Case Study Tactics for Four Design Tests, by R. K. Yin, 2003, Case Study Research: Design and Methods, p. 34. Copyright 2003 by Sage Publications

Throughout the data collection process, multiple data sources were employed to attain and maintain *construct validity* and create the framework for the research conducted. The use of

multiple data sources was completed through the collection of data from surveys, face-to-face interviews, field notes, and documents. As each method was conducted, information was entered into the database in order to build the foundation for the data analysis process. Within the database, explicit links were created connecting the driving questions, data collection, and conclusions to the theoretical lens for which the research was situated.

Several components were integrated throughout the data analysis process to ensure the *internal validity* of the research. Once the recorded interviews were transcribed, each participant was asked to review their transcription for accuracy and completeness, providing participant member checks. Coding of the data, pattern-matching, and theming occurred as data was entered into the Access database. Tracking the data, as each of the data collection methods were conducted, assisted in the identification of emerging trends as they became evident.

External validity is concerned with how and in what ways the research findings can be applied to other situations. Purposeful sampling was conducted through defined populations as identified by the National Association of College Auxiliary Services (NACAS) and the Illinois Community College Chief Financial Officers (ICCCFO) for both the national and state surveys. Responses from the surveys were representative of auxiliary service administrators in the community college environment. Additionally, face-to-face interviews were conducted with Illinois auxiliary service administrators representing six of the seven peer groups identified by the ICCB. The seventh group was omitted due to the multi-campus setting of the community college. Peer groups are categorized based on a combination of enrollment, geographic location, financial data, and single campus community colleges. The selection criteria created the strategy for having maximum variation within the qualitative multimethod data collection and analysis process.

As the case study method was conceptualized, the appropriate protocol was considered to enhance the *reliability* of this research. For qualitative research, reliability is concerned with whether the results or findings are consistent with the data collected. Therefore, the researcher provided a detailed audit trail throughout the data collection and analysis process. This allowed for explanations regarding the design and how decisions were made as well as the details of the protocols and processes. Coding was strategically planned and inclusive of all theories selected for this study: situational leadership, data-driven decision making, and open system theory. In the final analysis and conclusion chapters, a transparent and detailed explanation of the findings is given to enhance the trustworthiness of this research.

Limitations

Contained within every study are weaknesses within the design that can affect the findings. Ormrod (2005) explains that “no research study can be perfect, and its imperfections inevitably cast at least a hint of doubt on its findings. Good researchers know--and they also report--the weaknesses along with the strengths of their research” (p. 276). Each study is different and can contain various limitations and biases at any phase in the study. Creswell (2008) explains that limitations “often relate to inadequate measures of variables, loss or lack of participants, small sample sizes, errors in measurement, and other factors typically related to data collection or analysis” (p. 207). The identified limitations within this study are two: the comprehensiveness of information from participants and the participant’s experience as a community college auxiliary service support service administrator.

Comprehensiveness of information. The comprehensiveness of the information obtained from participants can be less than optimal due to a variety of reasons. Often it is due to the interview process. Creswell (2007) describes these potential challenges as a result of: (a)

unexpected behaviors of the participants, (b) the incorrect phrasing of questions by the researcher, (c) questions asked pertaining to sensitive issues, or (d) interviews which are poorly transcribed. Two pilot face-to-face interviews were conducted to ascertain whether the questions asked addressed Creswell's challenges. The face-to-face interviews were conducted using a common interview schedule and probing questions to acquire pertinent information. In order to foster complete answers to the interview questions, they were sent to participants two weeks prior to the scheduled interview, providing participants time to prepare if they so desired.

Participant's experience in the position. The survey asked participants the number of years they served as an auxiliary service administrator. A person's knowledge of the trends, problems and issues, significant to those areas for which they have responsibility, positively correlates with the length of time they have served in that administrative position. This is particularly relevant, as the participant selection process did not include any criteria involving the length of time the person served as the community college administrator of auxiliary services. It was expected that study participants would vary in the length of time they served as an auxiliary service administrator thus insights they shared would reflect both new and seasoned administrators' experience. The qualitative multimethod data collection design was employed and incorporated surveys and face-to-face interviews to gather data regardless of their levels of experience.

Researcher bias. Within an interpretive paradigm, critical self-reflection, or reflexivity, provides a significant component in mitigating the subjectivity and bias. Merriam (2002a) defines reflexivity as "critical self-reflection by the researcher regarding assumptions, worldview, biases, theoretical orientation, and relationship to the study that may affect the investigation" (p. 31). A plethora of reflective field notes and memoing were completed by the

researcher to decrease the inadvertent instilling of personal ideas and perceptions of the research topic. In addition, the researcher noted important self-reflections, analytical dialogue, and the identification of themes and interpretations as they evolved throughout the research.

Researcher as Research Instrument

The researcher is the primary instrument through which information is collected, presented, analyzed, and situated. Merriam (1998) states that throughout the data collection and analysis process the researcher should have a high tolerance for ambiguity, be highly sensitive to the research being conducted, and must be a good communicator. Creswell (2007) would agree, stating, “The final written report or presentation includes the voices of participants, the reflexivity of the researcher, and a complex description and interpretation of the problem, and it extends the literature of signals a call for action” (p. 27). Therefore, it is important for the reader to be aware of the background of the researcher, their experience in the field, and their expertise.

The researcher began her career in the community college in 1996. Beginning in the academic area of the institution she worked in the Computer Information and Office Systems Department where she supported the department chair and faculty members. Responsibilities included the support for classroom needs, submittals of course curriculums, maintenance of departmental databases, and website responsibilities. While employed in this position the researcher completed two Associate in Applied Science degrees, Microcomputer for Business and Computer Programming, from Joliet Junior College, as well as a Bachelor of Arts degree in Business and Technology from Governors State University.

She later advanced to program manager for the Division of Adult and Family Services where she demonstrated leadership skills by accepting responsibilities for compilation and submittal of data to local and state agencies to support the grants of the program. She developed

techniques to monitor and compile updates for financial resources as well as ensuring the accuracy of curriculum and course data files. She was also responsible for maintaining a complex system for project and program management of her respective areas within the department.

In 2002, she accepted a new position supporting the director of administrative services. She excelled in this role by developing new programs to ease the operations of this position. She had the responsibility of the purchasing agent, working with all external companies on contract awards, conflict resolution, and communications. Additional primary responsibilities included administration of the college procurement card, supervision of part-time and student worker employees, conducting college-wide training classes, and being the administrator for extended campuses financials. While in this position, the researcher completed her Master of Business Administration in 2004, also from Governors State University. Her success in this position allowed her to advance to the interim director of administrative services.

In February of 2005, the researcher was promoted to the director of business and auxiliary services, a complex and critical position within the institution. She is currently responsible for compliance with governmental laws and regulations, confidentiality of all procurement processes, payroll, and technical review for all contracts on campus. Budget management and fiscal responsibility are crucial to the success of the daily operations. Her responsibilities include direction of eight diverse departments within the division which include administrative oversight of the college's bookstore, food service and the banquet facility, as well as direct supervision over procurement, early childhood, shipping and receiving, mail services, and switchboard, all of which have an effect on the success of the college. As the director, she provides financial projections, cash flow, and standard accounting reports for business and

auxiliary services departments. She also plays a vital role in all facets of the college master plan, inclusive of programming committees, procurement, budgeting, planning, and construction management meetings.

The researcher's heart and soul is in the community college field. She has received continual support and encouragement throughout her employment in the community college environment, and she now shares that passion by giving back to the community. With a diverse background in auxiliary service support services within a community college environment, it became apparent that research was needed for auxiliary service support services within the community college environment. Her direct involvement with support services brings a strong focus to the purpose of this research.

Summary

This case study is situated within an interpretive qualitative paradigm in order to explore the emerging issues in auxiliary service support services as identified by auxiliary service administrators employed in community colleges. Purposeful sampling was achieved utilizing selection criteria which included national community college auxiliary service support administrators as identified by the National Association of Auxiliary Services (NACAS) as well as the 37 single campus community colleges in Illinois. In addition, enhancing transferability of the findings, maximum variation criteria was employed with the Illinois participant selection process being used for those involved in the face-to-face interviews, providing greater diversity of geographic location and urbanization.

The data collection strategy incorporated a qualitative multimethod design. A national qualitative survey was conducted as well as a state survey which was followed by six face-to-face interviews. Data analysis techniques such as categorizing, coding and theming of

information, gathered from multiple data sources, followed Creswell's (2007) data analysis spiral which consists of (a) data managing; (b) reading and memoing; (c) describing; (d) classifying; (e) interpreting; and (f) representing and visualization. All data was compiled utilizing the functions within Microsoft Excel.

In order to address the issues of research soundness, rigor, and trustworthiness, methods and strategies were integrated into the design to meet and address the qualitative criteria purported by Lincoln and Guba (1985): credibility, transferability, dependability, and confirmability. The limitations of the study were two: the comprehensiveness of information from participants and the participant's experience as a community college auxiliary service administrator. Researcher bias was also addressed through the process of self-reflection and through maintaining an audit trail which documented the processes of methodology development, implementation, and data analysis. Finally, systematic consistency within the study design, data collection and analysis processes were maintained throughout the research process enhancing the transparency, trustworthiness and rigor of the study.

CHAPTER 4

DATA COLLECTION AND STRATEGIES FOR ANALYSIS

Qualitative data is typically found in the form of words rather than numbers and is a source of well-grounded, rich descriptions which offer an explanation of processes (Miles and Huberman, 1994). It begins with actual data and moves to the collective, with thematic rudiments worthy of transposition to other environments, what Lincoln and Guba (1985) describe as naturalistic generalization. This chapter will display the data collected from study participants, in order to facilitate the understanding of the overall data collection. Moreover, tables and figures have been used to summarize participant responses and categorize emergent themes in order to understand the context of participants' responses as well as provide a visual communication of the data, making it more easily interpreted.

The purpose of this study is to explore significant emerging non-academic support issues as identified by auxiliary service administrators in community colleges. Guiding questions explored the roles and responsibilities of administrators of auxiliary services, the significant issues facing community colleges, the demand on auxiliary units, and the fiscal resources required to function within the community college. The data collection process shadowed the framework of a multimethod qualitative case study.

Data Collection and Contact Protocol

Comprised of several research methods, the multimethod design was conducted to ensure trustworthiness and validity of the study findings. The findings were triangulated, providing insights and perspective which is relevant to this research. The qualitative data is displayed in a visual format, allowing the researcher the opportunity to more easily review, analyze, and draw conclusions relative to the information that was obtained.

Data collection began with two surveys that were conducted with administrators of auxiliary services within the community college environment. The first survey was conducted with national community college administrators who are currently administrators of auxiliary services and active members of the National Association of College Auxiliary Services (NACAS). The second parallel survey was conducted with all single campus Illinois administrators who have the same responsibilities within the state of Illinois. Illinois community college participants were identified by the Chief Financial Officer of each institution and deemed most appropriate to participate based on their current responsibilities. The two parallel surveys depict the constructed reality of administrators of auxiliary services selected for this study.

The national survey was distributed via email to community college members of the National Association of College Auxiliary Services (NACAS), by NACAS, on behalf of the researcher. Potential numbers of survey participants from NACAS were 175 community college members which were comprised of urban, suburban, and rural colleges in all states. However, as this survey did not include members of Illinois community colleges, only 166 participants were sent the email and invited to participate in the survey. On October 13, 2010, the survey was distributed via email to national community college members; the response was 22 participants or 13.3%. In an effort to increase the response rate, a reminder email was sent October 22, 2010 to all remaining potential participants. As a result, 39 community colleges across the country completed the survey resulting in a response rate of 22.3%. A comparable timeline was followed for the state of Illinois survey in order to ensure the validity and consistency of the data collection process. On November 5, 2010, the survey was distributed via email to 37 single campus Illinois administrators of auxiliary services; the response was 18 participants or 47.4%. Likewise, in an effort to increase the response rate and to ensure trustworthiness and consistency,

a reminder email was sent November 14, 2010, to all remaining potential participants. As a result, 28 responses were returned resulting in a response rate of 73.7%. Table 7 represents the timeline and response rates for both surveys.

Table 7 *National and Illinois Survey Timeline - Total Participation*

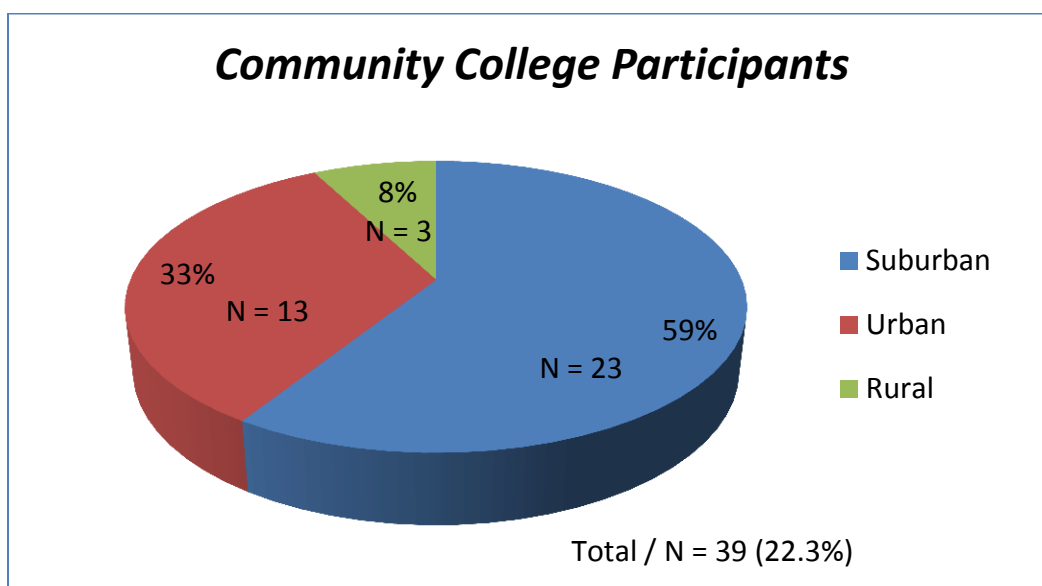
Survey Group	First Email	Participants	Response Rate	Second Email	Participants	Response Rate
National	October 13, 2010	22 participants	13.3%	October 22, 2010	39 participants	22.3%
Illinois	November 5, 2010	18 participants	47.4%	November 14, 2010	28 participants	73.7%

The purpose of the survey was to garner insights from administrators of auxiliary services in order to provide community colleges with a guide for reflection of current trends and issues facing these leaders. According to a recent study by the University of Texas (2010) Instructional Assessment Resources (IAR) researchers, the average response rate for email surveys is 40%; however, the study also found that responses tend to be lower if the purpose of the survey is to gain personal insight. Two meta-analyses of response rates in web surveys versus other survey modes (e.g., mail, email, and postcard) revealed web survey median response rates are typically higher (Moradi, 2010). However, they did not find web survey response rates as high as the IAR study's response rate of 40%. Shih, Fan, and Manfreda, et al. (2008) reported the median response rate for web surveys was 27% (across 39 web surveys) and 29% (across 30 web surveys). Whereas Kaplowitz, Hadlock, and Levine (2004) stated that in a comparison of response rates for various survey methods, web surveys yielded response rates of 21% to 32%, outweighing the email-only mode which resulted in a response rate of 21%. Therefore, this

study's web survey yielded a good response rate for the national participants (22.3%) and an exceptional response rate (73.7%) for the Illinois participants.

NACAS community college auxiliary administrators are from urban, suburban and rural colleges and represent 19.1% of the organization's total membership. At this time, NACAS does not gather data according to the geographic designation of urban, suburban and rural. For this research, the self-reported geographic distribution of NACAS community college responses was: 13 (33%) urban; 23 (59%) suburban; and 3 (8%) rural. Although NACAS does have members in various locations throughout the country, of the 39 participants responding, the highest number was suburban community college auxiliary administrators (Figure 11).

Figure 11 *National Participants Completing Survey – Institution Classification*



The second survey consisted of single campus community colleges in the state of Illinois. However, in addition to the four questions ranking trends and issues, the Illinois survey included questions that would help the researcher gain a more in-depth picture of auxiliary service

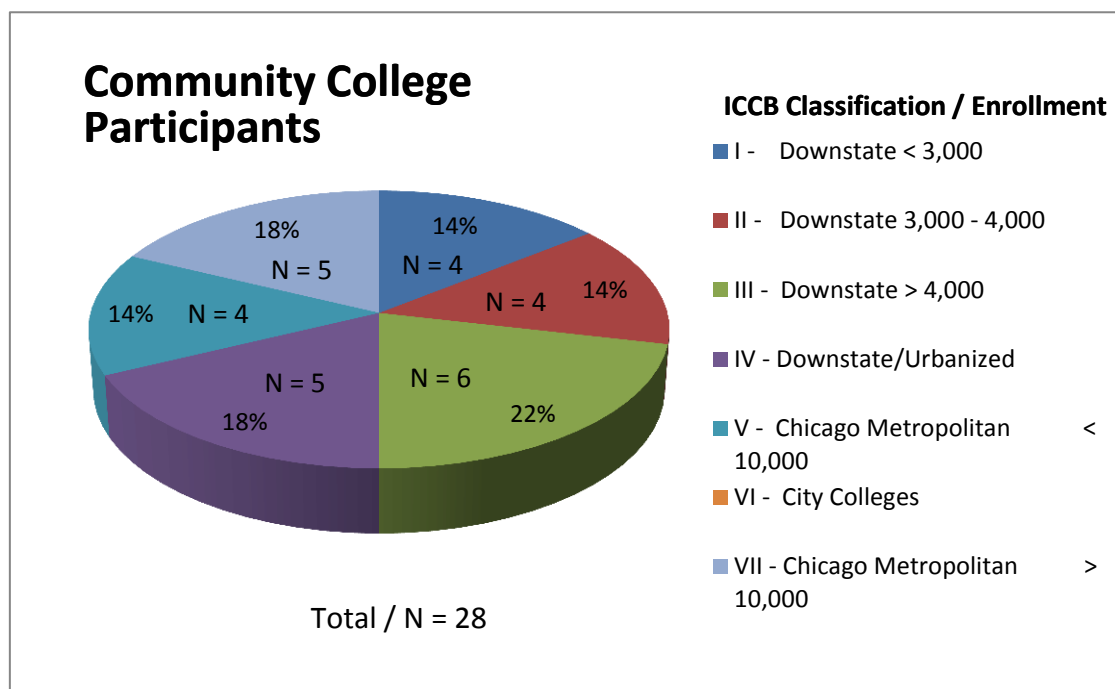
administrators. It was also used to invite six respondents to volunteer to participate in a face-to-face interview that would be held on a later date. Providing a more discriminating institution classification (urban, suburban, rural) for the Illinois institutions was the peer groups (Table 8) as identified by the Illinois Community College Board (ICCB).

Table 8 *Peer Group Designation by Illinois Community College Board*

GROUPS	Peer Institution Groups - Criteria
Group I	Enrollment less than 3,000 – Downstate – Located in or near communities of less than 50,000 people
Group II	Enrollment approximately 3,000 to 4,000 – Downstate – Located in or near communities of less than 50,000 population
Group III	Enrollment greater than 4,000 – Downstate – Located in or near communities of less than 50,000 population
Group IV	Located downstate and in urbanized areas
Group V	Enrollment less than 10,000– Located in Chicago Metropolitan area
Group VI	City College of Chicago
Group VII	Enrollment greater than 10,000 – Located in Chicago metropolitan area

The rationale for utilization of the Illinois peer groups was to ensure maximum variation of the respondents, with the purpose of capturing the perspectives and views of auxiliary administrators employed in colleges of various sizes from different geographic areas of the state. As peer group VI consisted only of city colleges of Chicago's multi-college system, this group was omitted. In addition, the four colleges which comprise the Illinois Eastern community colleges' multi-campus system were also removed from Group III and omitted from the sample. The response rate for the survey conducted with Illinois single campus community colleges is represented in Figure 12.

Figure 12

Illinois Participants - Institution Classification**National and Illinois Survey Responses**

The four primary questions were asked in both the national and Illinois survey which aligned with the driving questions of the study. Only the Illinois survey contained additional questions to gather information and data pertinent to auxiliary administrators in the areas of demographics, professional affiliations, position and reporting structures.

Using a simple one to ten rank order scale, the four primary questions requested participants to rank the importance of identified auxiliary services. One indicated that it was most important and ten indicated that it was least important. To obtain additional information, participants were provided space to include additional comments with their responses.

In order to facilitate the understanding of the top five issues identified by the respondents, the data obtained from both the national and Illinois surveys is aggregated and only the top five issues are presented. Therefore, ranking of the top five issues for each of the four primary

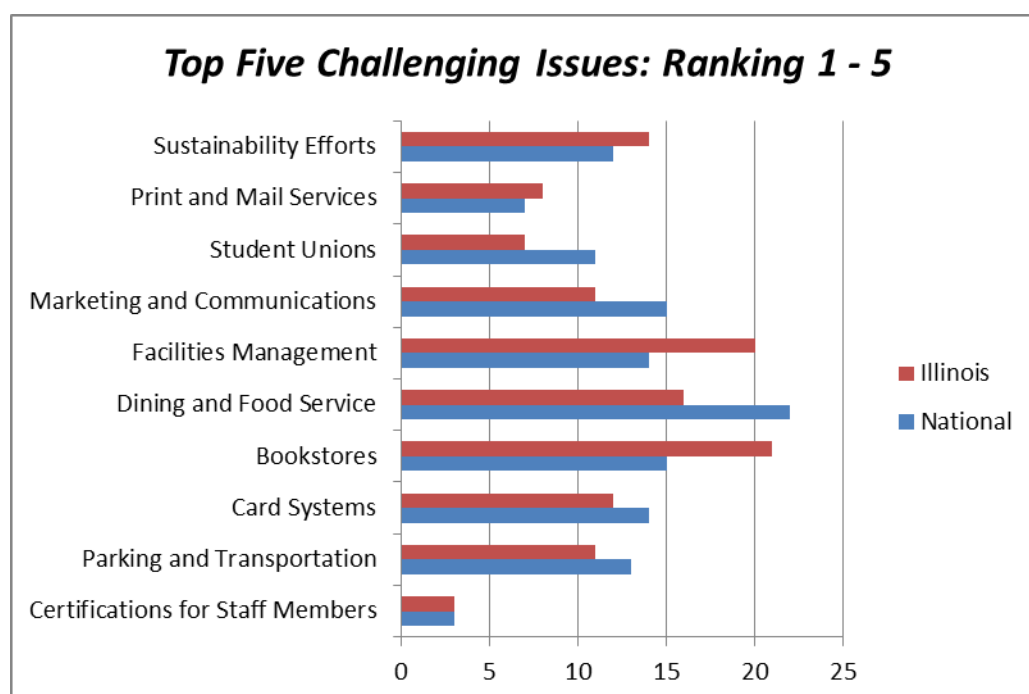
survey questions is subsequently presented in relevant tables. However, non-aggregate data regarding the four questions for the national and Illinois participants who were surveyed is found in appendices F thru M.

Survey Question One

What Are the Auxiliary Service Issues Most Challenging to Your Community College?

The results of the rank order scale of both surveys revealed that four of five areas were consistently perceived as most important to the respondents: dining and food service, bookstores, card systems, and facilities management. However, the national survey participants identified marketing and communications in their top five, whereas Illinois ranked sustainability in their top five. Figure 13 displays the top five ranked responses.

Figure 13 *What are the Auxiliary Service Issues Most Challenging to Your Community College? (Question #1)*



Only one participant wrote a comment for question one, indicating or addressing their challenges for dining, space, facilities, bookstore and parking (Table 9).

Table 9 *Written Comment Pertaining to Survey Question One*

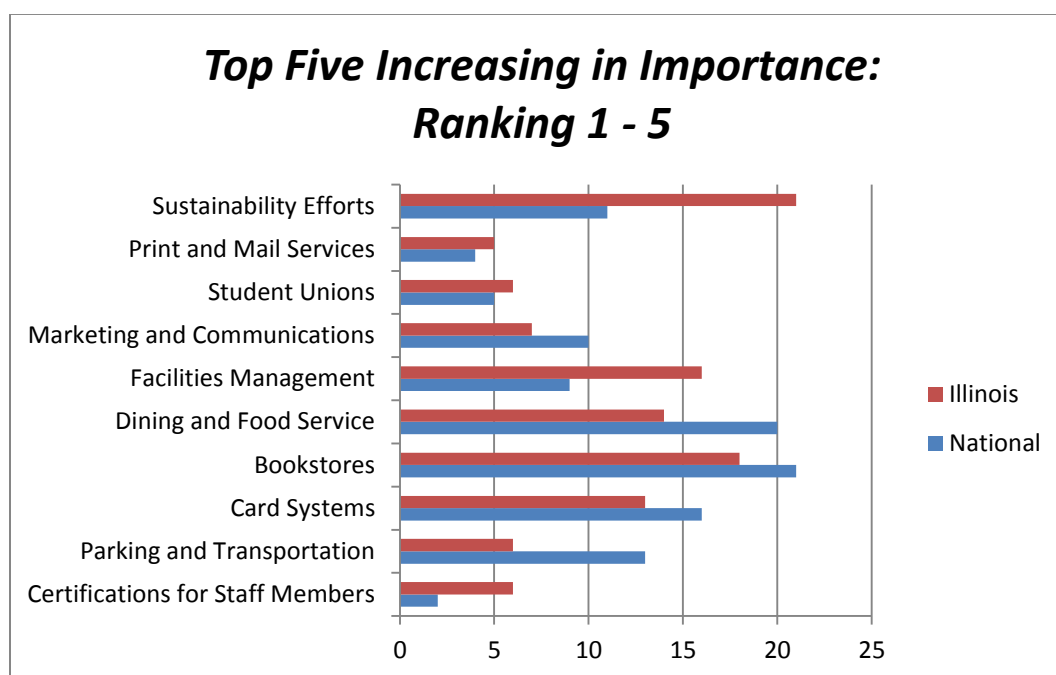
Participant	Quote
National Survey Suburban	Dining services and student unions are difficult. Our institution is challenged for space for all facilities, but particularly for student life spaces. Since our students are mobile, dining services must compete with all community food outlets and is a huge financial drain. Bookstores would be even more successful with more space for logo wear, technology and sundries. Lack of parking is a continual challenge.

Survey Question Two

What Identified Issues/Challenges Are Expected to Increase in Importance Over the Next Five Years?

The results of the rank order scale of both surveys revealed that four of the five areas were perceived by the respondents to increase in importance: bookstores, dining and food services, card systems, and sustainability efforts. The national survey participants ranked parking and transportation in their top five, whereas the Illinois survey participants identified facilities management in their top five. Figure 14 displays the top five ranked responses.

Figure 14 *What Identified Issues/Challenges Are Expected to Increase in Importance Over the Next Five Years? (Question #2)*



Three participants wrote a comment for question two (Table 10) indicating or addressing their challenges for textbooks, facility space, sustainability, and campus security.

Table 10 *Written Comments Pertaining to Survey Question Two*

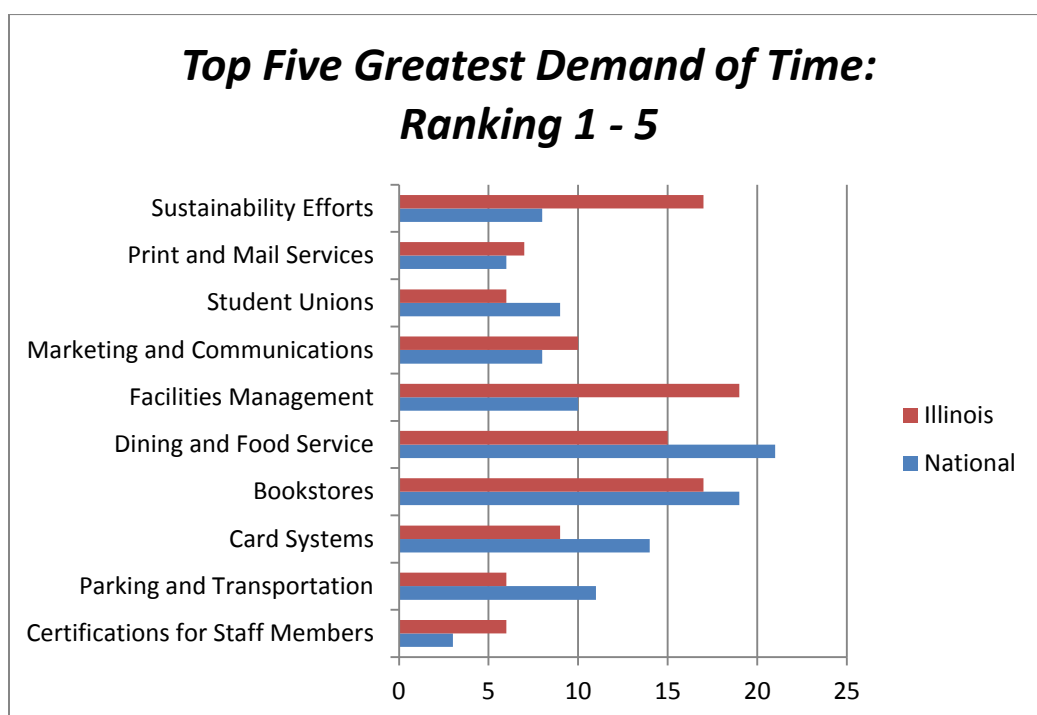
Respondent	Quote
National Survey Suburban	Changing textbook marketplace will become a financial challenge for the institution. Parking and Facilities will continue to be a challenge with increasing enrollments and dwindling state resources. Sustainability will become more than just a buzzword creating additional procedural and policy changes.
National Survey Suburban	All above except, certifications of staff.
Illinois Survey Group V	Campus security.

Survey Question Three

What Identified Issues/Challenges Demand the Greatest Amount of the Auxiliary Service Leader's Time?

The results of the rank order scale of both surveys which identified challenges demanding the most time, shared three similar responses: bookstores, dining and food service, and facilities management. The national survey participants ranked parking, transportation, and card systems as being in the top five, whereas Illinois survey participants identified marketing, communications, and sustainability efforts in their top five. Figure 15 displays the top five ranked responses.

Figure 15 *What Identified Issues/Challenges Demand the Greatest Amount of the Auxiliary Service Leader's Time? (Question #3)*



Five participants wrote a comment for question three indicating or addressing their challenges for bookstore and textbooks, student unions, facilities management, and campus security (Table 11).

Table 11 *Written Comments Pertaining to Survey Question Three*

Respondent	Quote
National Survey Suburban	Bookstores issues area related to affordability of instructional materials; MD legislative mandates and HEOA legislative mandates; revenue is shrinking due to competition and the digital market place and mandated efforts to make instructional materials more affordable to our students through e-texts and implementation of a rental program.
National Survey Suburban	We are soon to be opening a Student Union.
National Survey Urban	Facilities management = Residence.
National Survey Suburban	Food Services/Student Unions, parking and bookstores are my three biggest time demands.
Illinois Survey Group V	Campus Security.

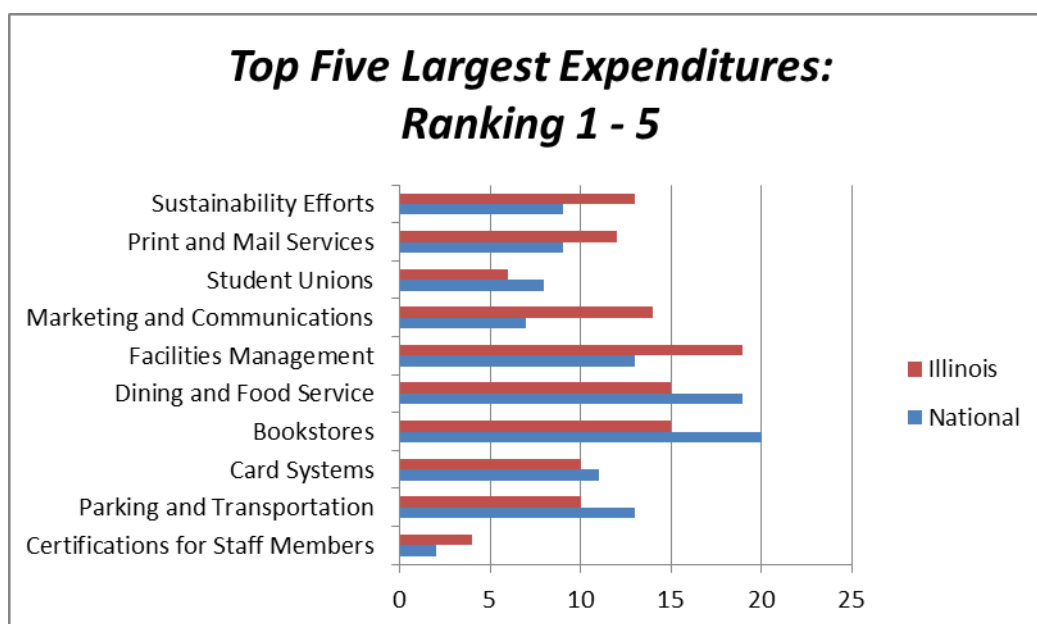
Survey Question Four

What Identified Issues/Challenges Currently Require the Largest Expenditures in Terms of Human, Operational and Fiscal Resources in Community College Auxiliary Departments?

The fourth and final question, ranked by the national and Illinois participants, revealed the top three areas of largest expenditures in terms of human, operational and fiscal resources. They were identified as bookstores, dining and food services, and facilities management. The

national survey participants ranked parking, transportation, and card services in their top five, whereas Illinois survey participants identified marketing, communications, and sustainability as their top five. Figure 16 displays the top five ranked responses.

Figure 16 *What Identified Issues/Challenges Currently Require the Largest Expenditures in Terms of Human, Operational and Fiscal Resources in Community College Auxiliary Departments? (Question #4)*



Four participants wrote comments for question four (Table 12), indicating or addressing their challenges of child care, facilities management, and operational management.

Table 12 *Written Comments Pertaining to Survey Question Four*

Respondent	Quote
National Survey Suburban	Child care services; to sustain an accredited campus child care system for three campuses is extremely expensive, especially as an auxiliary service receiving no operating funds

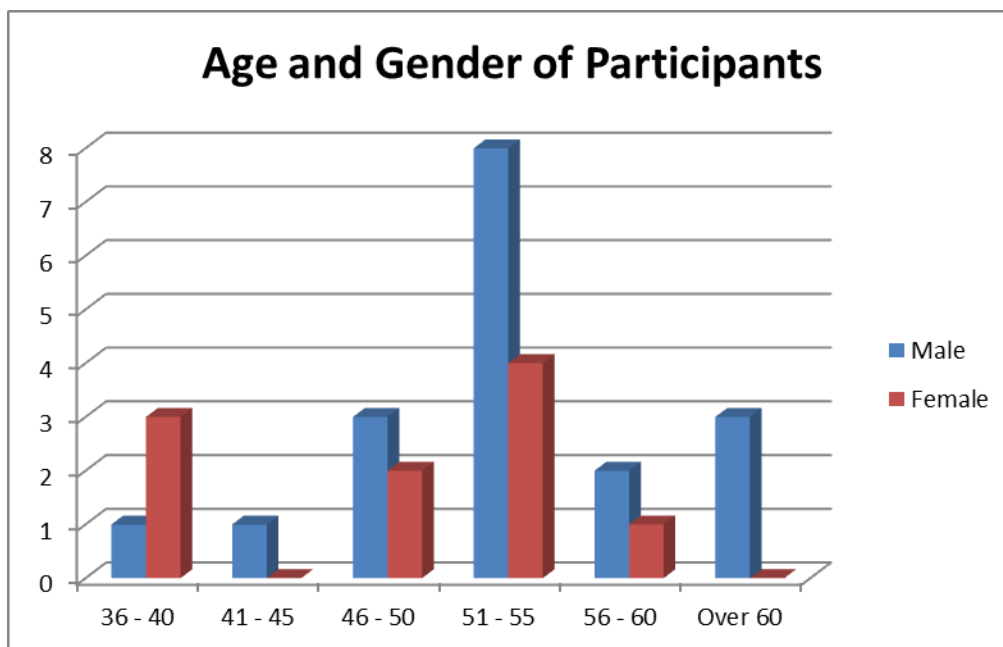
National Survey Urban	Child Care Services would rank no.2.
National Survey Urban	Facilities management = Residence.
Illinois Survey Group IV	Managing the operations noted above requires considerable time and money.

Demographics of the Illinois Survey Participants

To further understand the complexities of auxiliary service administrators' functions of leadership, decision making, and their college environment, the Illinois survey examined the characteristics of these same administrators more in depth. The Illinois survey asked respondents additional questions and gathered demographic information regarding gender, age, current title, number of years in position, educational background, and years of experience. Participants were also asked to identify their reporting relationships and include an organizational chart in order to improve an understanding of the diversity of the organizational structures within Illinois community colleges. In addition, the survey requested respondents to self-identify their interest in participating in a follow-up face-to-face interview.

Of the 28 auxiliary service administrators responding, well over half (64%) are men. Although participants varied between the ages of 36 and over 60, the largest group of administrators fell within the age group of 51 to 55, or 42.8% (Figure 17).

Figure 17

Illinois Participants' Age and Gender

Survey participants' responses regarding the number of years in their current position, educational background, and years of experience required for their position varied greatly among the peer groups (Table 13).

Table 13 *Illinois Participants' Expanded Demographics by Category (* Illustrates downstate community college)*

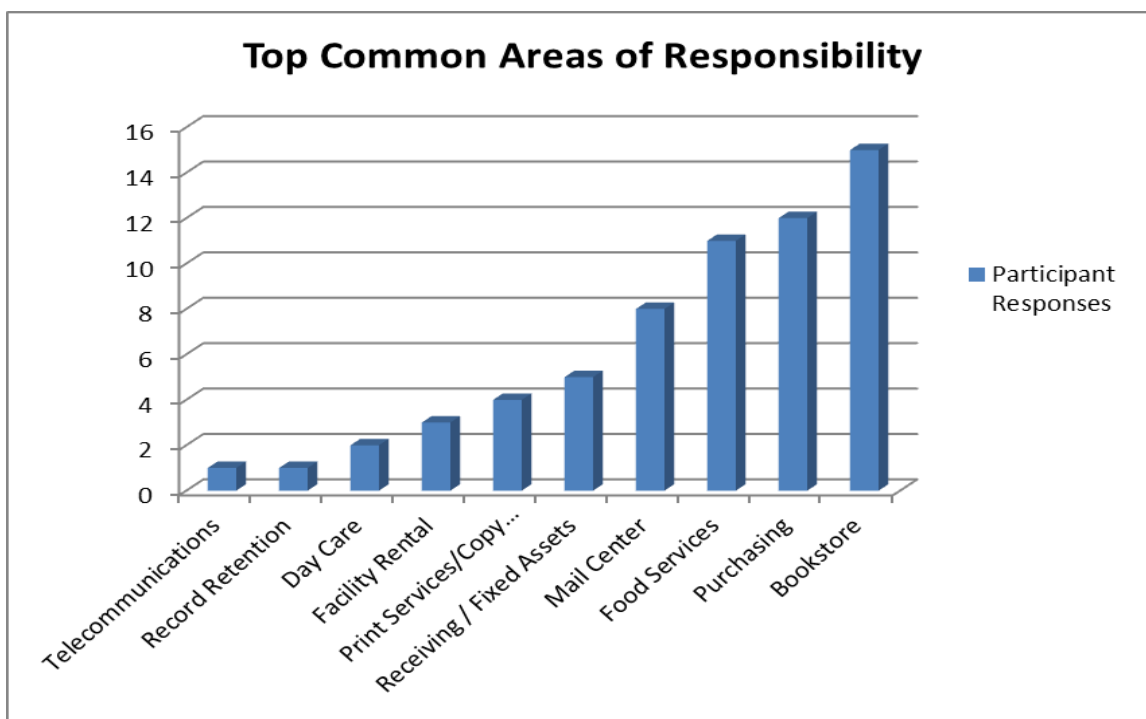
	ICCB Group I *	ICCB Group II *	ICCB Group III *	ICCB Group IV *	ICCB Group V	ICCB Group VII	Total Response
	< 3,000	3,000 – 4,000	> 4,000	Urbanized	< 10,000	> 10,000	
Job Title							
Vice President	2	1	3	2	3	5	16
Director			2	2	1		5
Chief Financial Officer	2	1	1	1			5
Dean		1					1
Business Manager		1					1
Years in Current Position							
2 or less		1	1	1	1	4	8
3 - 5	2	3	2		3		10
6 - 10	1		1	1			3
10+	1		2	3		1	7
Educational Requirements							
Master's Degree	3	4	3	2	4	3	19
Bachelor's Degree	1		3	3		2	9
Years' Experience Required For Position							
3 - 5	4	3	5	5	1	2	20
7 - 10	1		1		1	2	5
11 - 15		1			1	1	3

The diversity of position titles showed greater variance based on the size of the institution and geographic location (urban, suburban and rural). Nevertheless, all respondents, who were not at the vice president level, reported directly to a vice president. In this survey, 16 of 28

(57.1%) participants were vice presidents, whereas 12 of 28 (42.9%) were middle management who reported to a vice president.

Auxiliary service units are characteristically established or crafted in direct relationship to institutional needs. Throughout all community colleges the configuration or operational reporting structures conform to the desires of the current college president. To categorize the auxiliary service units reporting structure, the survey asked participants to identify the functions and/or departments that reported directly to them. Responses were tallied to identify the common auxiliary service units managed by each administrator. The top five most common units of the Illinois participants included bookstore, purchasing, food services, mail center, and receiving/fixed assets as represented in Figure 18.

Figure 18 *Illinois Participants – Auxiliary Service Areas of Responsibility*



Interviews of Six Illinois Survey Participants

In gathering data for qualitative research, a face-to-face interview is an established method. Seidman (2006) trusts that “at the root of in-depth interviewing is an interest in understanding the lived experience of other people and the meaning they make of that experience” (p. 9). The final question in the Illinois survey asked participants if they would volunteer to be interviewed in support of the research being conducted. Twelve of the 37 institutions expressed their willingness to participate in a face-to-face semi-structured interview. To aid in the identification process and provide a maximum variation sample, selection was based upon three criteria:

- 1) ICCB peer group representation (groups I – V, and VII);
- 2) single campus setting; and
- 3) geographic distribution throughout the state.

To ensure a cross representation of the state of Illinois, it was necessary for six auxiliary administrators to be interviewed. Therefore, six of the seven peer institution groups are represented: groups I, II, III, IV, V, and VII; group VI (City Colleges of Chicago) and Illinois Eastern Community Colleges were omitted due to their multi-campus settings.

The semi-structured interview process was then used to gather additional comprehensive and holistic information from each participant. Patton (2002) poses that the semi-structured interview format allows the researcher to “explore, probe, and ask questions that will elucidate and illuminate that particular subject” (p. 343), thereby allowing a researcher to modify an interview in order to capitalize on the information gathered from each participant. All data collection methods were rigorously conducted and data were triangulated to document the entirety of the participant’s responses.

Each interview was held at the participant's respective campus and took approximately one hour to complete. The interview questions were mapped to the driving questions of the research found in appendix D. Those agreeing to be interviewed were sent the interview questions one week prior to their meeting in order to give them an opportunity to prepare, if they so desired. During the course of the interview participants were asked a series of questions which were followed by probing questions in order to seek further clarification and understanding. Each of the six participants were exceptionally accommodating, giving freely of their time and answering each question thoroughly.

The reality described by the interview participants articulates their experience with auxiliary service units as well as the challenges they encounter on a daily basis and that they believe will be most important or influential in the near future. Survey and interview data collected depicts the constructed reality of those administrators of auxiliary services.

Other Data Sources

Documents

Organizational charts were obtained through the Illinois survey in order to identify reporting structures of auxiliary service administrators. All organizational charts for each of the 28 Illinois survey participants were provided. Documentary materials are objective sources of data and offer a great benefit to the stability of data collection and research. Merriam (2009) suggests the use of existing documents, believing they provide an independent picture relevant to the phenomenon under study, which are unaffected by the research process and nonreactive. The organizational charts that were collected from participants were used to compare and contrast reporting structures within the Illinois community college system as well as to validate responses.

Field Notes

Bogdan and Biklen (2007) defined field notes as “the written account of what the researcher hears, sees, experiences, and thinks in the course of the collecting and reflecting on the data in a qualitative study” (pp. 118-119). Field notes were recorded after each interview to assist the researcher in recollection and further reflection during the analysis process. Field notes are said to be reflective or descriptive in nature, and for purpose of this research both types were utilized to confirm the validity and reliability of the data. Patton (2002) defines reflective field notes as those which are used to elaborate and reflect on the interview and “is a time of quality control to guarantee that the data obtained will be useful, reliable, and authentic (p. 384). Likewise, reflective field notes are those which account for the researchers’ personal account of thoughts, ideas, and concerns, and they are shared with the readers. This separation of thoughts is important for this research as the researcher is an administrator of auxiliary services and must validate data which uniquely originates from the participants.

Strategy for Data Analysis

The analytical approach known as data triangulation incorporates information and data obtained from multiple data sources, providing insight and perspective relative to this research. Data is displayed in a visual format allowing the researcher the opportunity to reduce and condense the data, categorize and code the data leading to conclusions relative to the information obtained. This process begins with the categorization of data collected from surveys, documents, interviews, and field notes thereby creating smaller “bits of data” (Merriam, 2009).

In general, qualitative research generates excessive data. This research was no exception and data collected from multiple sources resulted in a wealth of information. This vast amount of data required many hours to clean, categorize and code in order to create meaning from the

compiled information. Because the categories appear vast, they were continually collapsed and refined, leading to patterns and finally evolving into themes. Coding involves the differentiation and combination of data to create relevant patterns and themes (Miles and Huberman, 1994) resulting in a cohesive, logical and concise presentation. “Data analysis in qualitative research consists of preparing and organizing data for analysis, then reducing the data into themes through a process of coding and condensing the codes, and finally representing the data in futures, tables, or a discussion” (Creswell, 2007, p. 148). These themes then create the meaningful knowledge used to develop the findings of the study.

Because data was obtained from a variety of sources, data analysis and interpretation can be both challenging and complex. Therefore, the analysis for this qualitative research will be approached through a multitude of holistic and contextual strategies. Miles and Huberman (1994) define analysis as “consisting of three con-current flows of activity: data reduction, data display, and conclusion drawing / verification” (p. 10). Similarly, Creswell (2007) refers to data analysis as being “custom-built” and revised, thereby creating a data analysis spiral.

This research employs Creswell’s (2007) four step approach represented by Creswell’s (2007) data analysis spiral. Creswell’s representation expands further by identifying a four step process of data analysis: (1) data managing; (2) reading and memoing; (3) describing, classifying, interpreting; and (4) representing, visualizing. Data managing was accomplished during the data collection process through the organization of files; both electronic and paper to ensure data redundancy and validation. Reading and memoing were also conducted throughout the survey and interview process in order to ensure that all actions and reactions to each process were documented and readily available during the analysis process. Describing, classifying, and

interpreting began in this chapter through the display of categories and comparisons within the National and Illinois surveys.

Summary

It is evident that the participants of this study were committed to the research. Detailed information was presented by a series of tables and figures in order to represent the data collected throughout the survey process. Moreover, documents were provided to serve as an audit in order to establish confirmability, credibility, dependability, and transparency to the research process.

Data presentation and analysis will continue in chapter five with an in-depth display of themes that were developed from the responses of participants during the face-to-face interviews. The themes will be analyzed within the framework of three theoretical lenses: situational leadership theory, data-driven decision making, and open systems theory in order to provide a contextual format for understanding the collection of data.

Situational leadership will be used in the analysis of data as the interview participants describe the day-to-day actions and their interactions with the staff they oversee. The concept of data-driven decision making (DDDM) will be used to analyze the data to note how and in what ways study participants believe they use DDDM in their job functions and in making operational decisions. Finally, open systems theory will be used to analyze the data regarding how and in what ways study participants perceive that their decisions affect the institution as a whole as well as how the external environment impacts their auxiliary units. These theories and concept mutually serve as the analytical lens for all information and data which was collected to address the purpose of this study.

CHAPTER 5

DATA ANALYSIS

In order to provide a more holistic perspective of the various study participants, multiple data sources served as tools in gathering information from participants' insights and life experiences. Data derived from this exploratory qualitative case study was used to identify significant emerging non-academic support issues that were recognized by community college auxiliary service administrators. Triangulation of data and information obtained from a national survey, a state survey, and participant interviews increases the trustworthiness and validity of the findings. It is the rich, thick in-depth information, from the six participant's interviews, which provides a more robust understanding of what auxiliary service administrators perceive as current and future emerging challenges and their job-related responsibilities and duties.

Qualitative research is conducted to explore, discover or uncover meaningful aspects, from participants' perspectives, of a phenomenon under study. To enhance transparency as well as an audit path throughout data collection and analysis, this research employed Creswell's (2007) four step approach, or framework, for data analysis. Data managing, reading and memoing began in chapter four with a presentation of data which was gathered from the participants taking part in the national and state surveys. The data collected from the six interviews was coded using content analysis and the three a priori lenses which comprised the study conceptual framework. Data presentation and analysis continues in chapter five with categorical aggregation of themes and patterns which were discovered from the data.

The conceptual framework for the study provides the specific lens through which factual and meaning-based aspects of the phenomena under study are uncovered. Therefore, the use of

situational leadership theory, the concept of data-driven decision making, and open systems theory are the lenses serving to analyze the data.

Hersey and Blanchard's (1969) situational leadership theory consists of two distinct components: leadership style and maturity level of personnel. Through this lens, data is analyzed regarding how auxiliary leaders effectively adapt their leadership style based upon the experience and task readiness of their staff.

The concept of data-driven decision making consists of a three step process: data input, process of data, and outcome data, thereby resulting in actionable knowledge (Marsh, Pane, and Hamilton, 2006). Also through this lens, data is analyzed to identify how and in what ways the available information and data is used to make decisions by these specific community college administrators. This is a crucial element in a time of increasing accountability and economic uncertainty; not having accurate and available data to assist with institutional decisions has the potential to place community colleges at risk.

Finally, Katz and Kahn's (1978) adaptation of organizations operating as an open system focuses on how decisions influence and impact each other and the surrounding environment. Through this lens, there is an emphasis on how auxiliary leaders must be integrative and collaborative in decision-making (as a whole) since this affects all areas of the organization (college). Figure 19 illustrates the relationship between the interview questions and the *a priori* lenses derived from the conceptual framework.

Figure 19 *Interview Questions and Corresponding A Priori Lens*

Interview Questions	<i>A priori</i> Lens
Question 1: Do auxiliary services affect your college's strategic planning process?	Data-driven Decision Making
Question 2: How do auxiliary services affect your college's budget planning process concerning revenues and expenses?	Data-driven Decision Making
Question 3: Do societal changes and technology advancements affect auxiliary services?	Open System
Question 4: What measurement tools are used, if any, to monitor the success of auxiliary services?	Data-driven Decision Making
Question 5: What issues are significant for the administrator/director?	Situational Leadership
Question 6: What issues are significant for the staff in those areas?	Situational Leadership
Question 7: What are the fiscal challenges associated with each area?	Open System
Question 8: How is the success of each department measured and reported to top-level administrators?	Data-driven Decision Making
Question 9: How do top-level administrators view the importance of auxiliary services?	Situational Leadership

Data Analysis Using the Conceptual Framework

Data analysis will be presented in two phases. Phase one is comprised of the individual participants' responses and quotations correlated to primary themes as elicited by the interview questions. The interview and probing questions sought to explore, more in depth, the insights and perceptions of how auxiliary administrators accomplish their job roles and responsibilities.

Phase two is an analysis of the aggregated data and information by the three *a priori* lenses: leadership, decision making, and open systems. This two phase analysis helps to enhance the validity and rigor of this research by providing a clear understanding of the competencies which are essential to performing the functions of an auxiliary service administrator.

Interview Question One

Do Auxiliary Services Affect Your College's Strategic Planning Process?

Participants seemed to be divided as to whether or not auxiliary services were involved in their college's strategic planning process. Four of the participants viewed auxiliary service involvement in strategic planning in regard to student and operational support. However, two participants felt auxiliary units had little effect on the planning process itself, with the exception of their facilities master plan and technology replacement plan; those areas were significant elements in the strategic planning process. One of the six stated auxiliary services were only included in the strategic planning process as part of the campus wide sustainability initiative. Remarkably, one participant felt information regarding auxiliary services was not considered in their college's strategic planning process. The data presented in Table 14 illustrates the participants' response regarding the role of auxiliary services in the strategic planning process of their community college.

Table 14 *Interview Question One: Auxiliary Unit Support in Strategic Planning Process*

Primary Themes	Participant's Responses					
	P1	P2	P3	P4	P5	P6
Sustainability Initiatives				X		
Facilities & Infrastructure Planning	X				X	
Support Academic & Operational		X	X	X	X	
Not Involved in Strategic Planning Process						X

In order to determine the strategic direction of the community college, it is essential for the senior leaders to make decisions regarding all resource allocations (operational and personnel expenses). These decisions are significant for auxiliary units contingent upon the form of support they provide to the institution. For example, when interview participants discussed facility services or information technology, the conversation typically evolved around the high costs associated with each initiative. Since both areas support the physical and academic well-being of students, staff, and faculty, these units were seen as possessing more college-wide importance and therefore were considered vital elements and critical to the strategic planning process for all community colleges.

When participants discussed the bookstore and food service operations they identified key components as revenue generating, self-supporting, and institutional support; however, these operations were not specifically connected to the strategic planning process.

The majority of auxiliary service administrators who were interviewed did not see the auxiliary services departments as having primary roles in the strategic planning process. They believe their suggestions and professional advice is not wanted in the crucial college strategic planning process. These professionals are front-line administrators, with specific expertise and knowledge of specific departments not available to senior leadership in the college. Table 15 highlights pertinent quotes relevant to the consideration of auxiliary units in the strategic planning process.

Table 15 *Participant Quotes Aligning Auxiliary Services and Strategic Planning*

College	Salient Points
P 2	First of all, the auxiliary services provide education and training opportunities for a lot of our students...The second way that it affects the strategic planning process; a lot of these services actually support the operation of the college.
P3	Because all of these are support services to a large degree, I would say that there is not a strong effect on the college's strategic planning process for auxiliary services.
P 4	They do in a couple of ways. One is just emerging that's going to affect it, which would be sustainability. A big piece of that in particular is food service and the waste stream that comes out of there...The other side is when you look at the bookstore piece, in the strategic planning I don't know that we've identified anything specifically, but a lot of things start to hit that when you talk about affordability.
P 5	A lot of the strategic plan is built around having infrastructure in place. Auxiliary services are the infrastructure pieces.
P6	Well, to be honest with you if you did look at our strategic plan you would not see auxiliary services mentioned at all.

Even though participants noted auxiliary services as being involved in support services, sustainability efforts, affordability, and infrastructure at the college, there remains a prominent disconnect between senior leadership and auxiliary service administrators as it involves the strategic planning process. It is understandable that senior administrators, by not involving these auxiliary administrators in the strategic planning process, may be losing indispensable data vital to the success of meeting the needs of students and the strategic planning goals. However, it is needed information and data is gathered regarding the units overseen by auxiliary administrators for the strategic plan. The issue that is not yet fully understood is why greater than 25% of auxiliary service administrators still do not view themselves and their expertise as serving an integral part of the strategic planning process?

Interview Question Two

How do Auxiliary Services Affect Your College's Budget Planning Process Concerning Revenues and Expenses?

Not surprisingly, all participants were cognizant of the financial implications that each of their auxiliary units had on the college planning process and annual operating budget. Profit/loss, revenue generating, commission-based, and contracts or sub-contractors with outside vendors was consistent vocabulary among all six participants. It is critical for each administrator to continually analyze data and information in order to maintain expenditure controls and increase revenues.

There was no doubt that these administrators viewed their units as “business centers” where data was compiled based on project budget revenue and expense expectations, similar with all businesses. However, there was a good degree of apprehension and trepidation which was common among managers of these operation “business centers”, especially in regard to an

increase in competitors for similar services during this time of economic recession and uncertainty. Although these “business centers” support the student experience at the community college, it is the personnel expense associated with these units which is costly, due to the high number of staff required to run the operation. In particular, early childhood centers (ECC), operational at four community colleges, were singled out by participants as having exceptionally high operational costs. However, a high personnel expense in this unit is not uncommon since the staff to child ratio as well as the maximum group size is mandated by the Department of Children and Family Services for licensed ECC facilities. Additionally, these ECC sites often serve as learning labs in support of their academic programming.

Emphasis was also placed on the bookstore and food service operations by all six study participants. The bookstore and food service operations were viewed by all participants as an important revenue source for their college. The revenue generated by these operations supports the college general operation budget, the purchase of equipment, and capital improvement projects. Most participants felt these revenues were taken into account when building the annual budget and a few felt college leadership was expecting these units to produce an additional amount of supplemental funds which could be used to pay for special college projects.

Facility services and information technology were stressed by all interview participants as important elements in the budget process because of their significant institutional expense due to the high costs of preventative maintenance and replacement plans. Since these two units do not create revenue streams, but are rather expenses in support of student learning, it is challenging for auxiliary service administrators to gather relevant data and information to assist in effective and timely decisions relative to these units. The data primarily focuses on expense

data and costing out replacement expenses. Table 16 highlights relevant participant quotes regarding the role of auxiliary services in the budget planning process.

Table 16 *Participant Quotes Supporting Auxiliary Services and Budget Planning*

College	Salient Points
P 2	We view them [auxiliary services] as part of the revenue to the college...Those that provide positive cash flow in ways that we can make them more efficient and more effective, so that we can either reduce the cost of providing that service or increase the revenues from the services that we provide...To look at treating them like a business we can look at the revenue or the profit and loss, and minimize the loss and increase the profit, so that we provide more funds to offset others costs or to provide other services at the college.
P 3	What we've done with the equity that the bookstore builds is used it for major purchases, so we have drained it twice for facility projects as I recollect.
P 4	We do rely on the revenue that we get out of the bookstore. Certainly it's a big piece of that. It helps us cover some of our operating costs. We just plug it back into that. Food services is the same way, we plug it back into the regular operating budget.
P 6	They affect it a great deal because for the most part, it depends on how much subsidy we're going to give the auxiliary services. While our bookstore does cover most of our operations, our auxiliary accounts don't cover for example, benefits.

Each of the six participants reflected on the revenues and expenses for auxiliary units and felt comfortable offering information and data which was important to the institutional budget planning process. As a result of the responses received from this interview question, it was

apparent that these auxiliary administrators were more thought of for their expertise in budgeting rather than strategic planning.

Interview Question Three

Do Societal Changes and Technology Advancements Affect Auxiliary Services?

This question generated a broad perspective of how the external environment impacts auxiliary services at community colleges. Historically, community colleges always have endeavored to meet the needs and demands of a changing society. For almost 100 years, these institutions have provided a rich variety of academic programs and support services which are necessary to meet student's needs. In order to meet ever-changing student needs and demands, administrators must take into account not only the community in which the institution resides, but also the current economic, social and political environment. Therefore, administrators of auxiliary services must continually stay abreast of the larger environment and its reciprocal changes in order to support the mission of the community college and assist in maintaining the fiscal integrity of the institution.

Four participants explicitly mentioned the impact that technology advancements make on the college's Information Technology Department. Not only is this reflected with the rapid growth of online classes and thus the requirements for hosting services, but also in the expansion of software for the classroom and administrative services, as well as continuous needs for hardware upgrades throughout the institution. Obviously, these administrators are extremely interested in these facts as they are responsible for all the intricacies involved in purchasing needed hardware and software which is required for the IT department (and thus the college).

Two participants discussed their heightened awareness of security on campus, primarily due to the changing demographics of students on campus. They believe that although statistics

reflect a reduction in the overall volume of campus security problems, societal and economic changes are impacting the severity of the types of incidents occurring on their campus. A broader demographic range of students are having greater needs and an increase in personal problems, which causes an undue burden on many of the services provided at the institution.

Lastly, three participants shared new marketing and communication strategies utilized on campus in order to reach out to their student body. Technology and communication devices used by students are changing rapidly. In order to stay competitive and retain student interest, it is imperative for student affairs, marketing and Information Technology (IT) staff as well as college faculty to stay abreast of the latest technology. The data presentation shown in Table 17 presents the responses received to question three.

Table 17 *Interview Question Three: Impacts from Societal Changes and Technological Advancements*

Primary Themes	Participant's Responses					
	P1	P2	P3	P4	P5	P6
Information Technology and Growth of Online Classes	X	X	X		X	
Bookstore Challenges with Virtual and Online Textbooks, and Rental Programs	X	X	X	X	X	X
Security				X	X	
Marketing and Communication				X		X

Listed among the bookstore and information technology challenges were virtual textbooks, online textbook sales, Kindles, e-books, and the expanded use of tablet and laptop computers in the classroom. Also aligning with the societal and technological advancements is

the increased use of social networking and media, including Facebook, Amazon, and Twitter. Communication and marketing pieces for auxiliary managers in the bookstore, food service and child care centers have taken a turn towards the technologically savvy in order to attract and retain their target market and to improve hiring practices. To remain competitive, auxiliary administrators must anticipate change and create the appropriate plan(s) in order to compete with the external environment and retain their consumers as well as personnel. Table 18 presents pertinent quotes describing the societal and technological advancements foreseen by the administrators' of auxiliary services.

Table 18 *Participant Quotes Supporting the Effect of Societal and Technology Advancements*

College	Salient Points
P 2	...another one of the things we're struggling with right now in our bookstore is keeping it relevant and current...Since we look at our bookstore as a profit center, we're very concerned about the implications of Amazon and Barnes and Noble, and some of these other companies betting into the textbook business in a big way.
P 3	The economy has driven people back to school that wouldn't otherwise be here and in some cases they're not choosing to be here, they're almost forced to be here by the types of aid program they have.
P 4	Students are paying a lot more attention because the price of books is almost the price of tuition.
P 5	I think the other thing that's affecting our business models is the social networking, communicating everything from menus to deals. For auxiliary services to stay competitive they're going to have to stay on top of the social media.

It is apparent that advancements in technology have the largest impact on many auxiliary units. Textbooks and online delivery pose challenges, albeit with a different focus, for the administrator of the bookstore as well as the information technology department. To be successful, auxiliary service administrators must frequently evaluate and identify the strengths and weaknesses of their competition. Staying abreast of the external environment will help to identify effective and efficient strategies to support and implement the necessary changes required to meet the demands of the community college students.

Interview Question Four

What Measurement Tools Are Used, If Any, to Monitor the Success of Auxiliary Services?

Within the paradigm of decision making for auxiliary service administrators, success is measured by the effectiveness and the accomplishment of distinct objectives. Table 19 displays the insights received from the six interview participants concerning measurement tools used to monitor the success of auxiliary units. Responses to this interview question were wide-ranging and no commonalities were noted outside of the business accounting standard of profit/loss (P&L) statements, which is in the general sense an assessment tool. In particular, use of this standard accounting tool (P&L statement) is critical for the majority of the auxiliary departments such as the bookstore and food service operations.

There was a broad-range of standard yet simple assessment tools used by these auxiliary administrators. Three participants acknowledged monitoring independent reports, or audits of data, for several departments. One participant mentioned the monitoring of a personnel overtime report in order to keep additional personnel expenses from increasing in the budget. Another participant stated they consistently utilize five year trend data to review the history of the

operational unit. Analysis of the trend data then assists in evaluating the unit and allows for improvement of the planning process and targeted annual budgeting. Interestingly, the use of qualitative assessment tools was also mentioned by two participants. These participants described the use of quality surveys to obtain student attitudes regarding the bookstore and food service operations at their institution.

Table 19 *Interview Question Four: Measurement Tools Used to Monitor Success in Auxiliary Services*

Primary Themes	Participant's Responses					
	P1	P2	P3	P4	P5	P6
Ongoing Meetings	X					
Maintain/Monitor Reports			X		X	
Conduct Five Year Analysis	X					
Monitor Profit and Loss Statements	X	X	X	X	X	X
Review Data from External PR Organization					X	
Quality Surveys			X			X
Facebook /Marketing					X	

Measurement tools used to evaluate and monitor success of auxiliary departments are varied and selected by auxiliary service administrators for their value depending upon the unit. Evaluative measurement tools for most auxiliary services and department consistently employ profit and loss statements. The business and accounting standards of profit and loss statements are prominently used to identify outcomes for resale operations such as the bookstore and food service operations. Consumer satisfaction reports are also utilized providing a more broad-based

qualitative assessment of both the revenue and non-revenue generating operations units. Table 20 presents comments which are representative of the measures of success utilized throughout all six community colleges.

Table 20 *Interview Question Four: What Measurement Tools Are Used, If Any, to Monitor the Success of Auxiliary Services?*

College	Salient Points
P1	We do a lot of five year analyses. Why this year was higher and made a little note so I would know. And we kind of know if there are things that happen every so many years. We usually have to do this and do some of that planning that way.
P 2	...it's two things: since they're a business, one is cash flow and the second thing we do is meet our requirements, and then how well do we meet our requirements.
P 3	We're really not as data driven with some of the auxiliary services as we are with the pure academics side of the house. Although with security we certainly have a monthly report. With facilities we have a sustainability scorecard...Bookstore is pretty much financial... Food service they do surveys periodically and we can look at that as far as satisfaction with that operation...Purchasing I'm just starting to track where we are purchasing from, which is driven more by sustainability than anything.
P 5	Obviously we use the P&L statements and look at the profit and loss. We look at the finances and ask whether they met the budget and should we be re-evaluating how we budget things like that...We also look at hits to our Facebook site. What things that people are interested in? How do they want to be communicated to? We look at the website to see what they are looking at; how long they are staying...We look at our overtime reports.
P 6	... we do two quality surveys. We survey all students and all staff just on the cafeteria and the bookstore. We also do the ACT survey here.

What these particular administrators of auxiliary services consider to be positive feedback is when students are satisfied with their options for textbook purchases, the quality of food is acceptable and prices are low, and the facilities are maintained, comfortable and inviting. Although not uncommon, these types of satisfaction measures align with the nine Academic Quality Improvement Program (AQIP) categories which “provide a framework that colleges and universities can use to examine their key processes to make sure they are investing energy and resources in ways that will help achieve their goals” (Higher Learning Commission, 2011).

These nine AQIP categories used for self-assessment are to:

- help students learn
- accomplish distinctive objectives
- understand students’ and stakeholders’ needs
- value people
- lead and communicate
- support institutional operations
- measure effectiveness
- plan continuous improvement, and
- build collaborate relationships.

Each category allows for a community college to explore, analyze, and understand opportunities for continuously improving processes and effectiveness of performance. Of the six participants interviewed, four institutions are utilizing the AQIP Systems Portfolio for their accreditation process. A community college in AQIP strives to improve its performance with the use of quality improvement principles and accountability activities. Although the auxiliary services are

validated via evaluation and assessment in a different manner from academic and student development departments, the intent is similar. Administrators of auxiliary services strive to provide a pleasant physical environment and a social/cultural climate which is comfortable for all students, faculty and staff.

Interview Question Five

What Issues are Significant for the Administrator /Director?

In general, a combination of both business concerns surrounding profit and loss and personnel issues were cited by participants as the most significant challenges in their departments. Participants felt the bookstore, food service, and the early childhood center were units which presented major issues for administrators. The predominant issue, cited by fifty percent of those interviewed, was related to frequent staff turnover (full-time and part-time) and the impact of staff turnover on running successful operations. For example, one participant commented they had been filling positions in facility services (buildings and grounds) with student workers to help fill vacancies and keep the necessary operations running. They explained that due to budgetary constraints and operational costs, student workers offered the necessary manpower needed to work various shifts while providing much needed support by assuming tasks such as event set-up and teardown, and grounds maintenance.

Early childhood centers were recognized by two participants as having problematic difficulties involving staffing issues and operational (fiscal) challenges. Due to state mandated licensing requirements, hiring qualified individuals to meet the required child-teacher ratio presents significant challenges. Therefore, many centers cap the number of children enrolled. However, another significant problem exists involving finances; since child care centers typically

are not revenue producing and in most cases lose money, it is crucial to keep all costs to the bare minimum if the center is to remain open for the benefit of some community college students.

Obviously, the primary items generating revenue in the community college bookstore involves textbooks. The majority of community colleges clear some profit on their bookstore, or at least, they do no worse than break even. The mission of a community college bookstore is to encourage a collegial and cooperative spirit within their environment and serve as a resource for the students, faculty and staff. However, bookstores are facing new challenges and a changing landscape in regard to textbook prices, textbook rental programs, and the availability of electronic textbooks. Faced with unprecedented financial challenges, students are taking the initiative to seek out the lowest available pricing options to obtain the resources necessary for completing their coursework. All participants concurred that competition from outside vendors was increasingly unfavorable for the bookstore operations. Auxiliary leaders and bookstore managers are continually seeking to identify efficient and effective strategies to compete in today's ever changing and evolving competitive market. The increasing cost of textbooks and expanded titles available in electronic format have presented a conundrum to many auxiliary service administrators.

Two participant responses pertained to the challenges associated with food service operations. Good customer service and financial viability are essential for a successful operation. However, food service operations must prepare and serve nutritious meals to students, faculty, and staff, while adhering to safety and environmental health practices, rules and regulations. Food service is another community college unit which presents auxiliary administrators with difficult staffing issues. Often, the college bookstore and the cafeteria can be seen in much the same light by students and staff; they criticize the bookstore if the textbooks

costs are high and the current edition is not available, while the cafeteria is criticized about the cost, quality, and selection of the food.

Security was also emphasized by two participants. They believed the demographics, of their student body, has changed significantly causing concern for increased security measures. Finally, one participant specifically mentioned the associated challenges with information technology and the continual costs associated with technological advancements. This question generated a broad number of responses which expressed the significant issues facing auxiliary administrators (Table 21).

Table 21 *Interview Question Five: Significant Issues for an Administrator of Auxiliary Services*

Primary Themes	Participant's Responses					
	P1	P2	P3	P4	P5	P6
Staffing and Labor Contracts	X	X				X
Facility Services / Construction	X		X		X	
Food Service / Catering		X		X		
Bookstore Operations	X	X	X	X	X	X
Security				X	X	
Early Childhood		X	X		X	
Information Technology					X	
Financial Decisions					X	

Notable comments are highlighted and representative of the significant challenges in the daily operations of auxiliary services (Table 22).

Table 22 *Comments on Significant Issues Facing Administrators of Auxiliary Services*

College	Salient Points
P 2	<p>Culinary and catering is an everyday thing, and typically a lot of those are very high profile, and because you have basically three separate entities all working together and trying to coordinate all those efforts and meet all those requirements on a daily basis, that probably currently is taking most of my time...One event, we had three people call in sick, or didn't show up on time. As a result, we had a number of administrators filling water glasses ...and picking up.</p> <p>So staffing and childcare is a challenge, but that's mostly driven by minimum state requirements, and then it's a struggle to keep your staffing costs down.</p>
P 4	<p>Dealing with food service, somebody's not happy; prices are too high, they charge too much, I got bad chicken or something. And you get it from the students; you get it from the staff. We have mandated, because we're pretty small, we mandated with the contract that they can't bring outside caterers in. They need a volume of business to stay in operation to make it worth their while.</p>
P 5	<p>Thinking about the bookstore...we know that in order for it to have electronic books and rental books we're going to have to update the POS system. What path do we need in that bookstore operation? What do we need to have in place? How do we start looking at it from the customer perspective?</p>
P 6	<p>The labor and human resources end of it. Labor problems, labor contracts, which are the majority. I have barely any time to talk about quality or moving it forward.</p>

Interview Question Six

What Issues are Significant for the Staffing in Those Areas?

Knowledge of good human resource management is critical to maintaining personnel effectiveness in all the units overseen by auxiliary service administrators. To successfully deal with staff in a variety of diverse departments, these administrators need to be mind-readers, disciplinarians, referees and sometimes even miracle-workers who facilitate a collegial work environment. In general, administrators of auxiliary services must possess an awareness of common hiring principles: the right person, for the right job, at the right time.

All participants identified position vacancies and high turnover associated specifically with part time positions at the college. They felt this places an undue burden on remaining full time and part time staff who keep the operations running. Commonalities were noted among all interviewees regarding staffing challenges focusing on the general areas of financial concerns and job skills. The items expressed fell into the following categories:

- Revenues lacking to fill vacant positions
- Lack of qualified staff: technology skills and state certification
- High turnover: low wages and exhausting work

Staffing issues occupy a significant amount of most administrators' time. Due to the diversity of staff employed in auxiliary units, an administrator must possess a calm and supportive demeanor. Therefore, it is essential for each administrator to acquire the appropriate situational leadership and decision making skills in order to manage and direct their employees. This supportive, yet directive, behavior is required by auxiliary administrators in order to efficiently and effectively deal with all staff while ensuring that job performance is accomplished per employees' job descriptions.

Three participants reported specific auxiliary operations as being contracted out to an external vendor: bookstore, food service, and facility service (buildings and grounds) operations.

This was done by the college in order to minimize managerial oversight and reduce operational overhead costs. Pragmatic to staffing and financial concerns, the participants felt these decisions to outsource auxiliary units was primarily made to minimize the time and effort invested in the daily operations of the unit, guaranteeing a revenue stream to the college by way of rent and commission of overall sales.

Two of six participants specifically noted challenges with hiring qualified staff who possessed appropriate technology skills (technical and “people” or customer skills). In some units, employees are required to operate computerized systems such as mechanical systems, computers, or point of sale systems; for these jobs specific technical skills and experience are required. In other auxiliary units, customer service is an integral part of each employee’s job. Good “people” and customer service skills are an essential asset; however, for some employees these skills may require additional and/or continual training with pertinent professional development activities. Therefore, possessing strong leadership skills for the auxiliary service administrator is equally as important as the required managerial skills, to ensure the proper direction and training for all staffing levels in the department for which they are responsible. Question six sought to identify the associated challenges specifically related to staffing issues in auxiliary operations (Table 23).

Table 23 *Interview Question Six: Significant Issues for Staffing in Auxiliary Services*

Primary Themes	Participant’s Responses					
	P1	P2	P3	P4	P5	P6
Challenges with Vacancies and Turnover	X	X	X	X	X	X
Auxiliary Units Contracted Out	X		X	X		

Staff without Proper Skills	X	X		
Customer Service Difficulties			X	X

Interview participants shared the following responses correlating to staffing issues in their auxiliary units (Table 24):

Table 24 *Administrator Comments on Staffing Auxiliary Units*

College	Salient Points
P1	With our size [community college] we don't have a lot of people who can fill in [replace] other areas. So it's been a little bit of a challenge. Actually my poor administrative assistant probably can go to about any department to at least fill in for a day if she has to because we don't have any other option.
P 2	None of the people in the bookstore have a technology background at all...so we are going to hire a thirty hour person to come in, get them set up, and then start moving more in to technology.
P 3	We have supplemented our physical plant staff with a lot of student employment to help. Where we had one other custodian we have three or four students.
P 6	Turnover. There is a seemingly higher turnover rate than you would see in professional or administrative areas. Part of that is due to the fact that there are many part timers. It's also a lot of physical work so it can be exhausting...Standard customer service across all auxiliary areas is one of our staffing issues.

Interview Question Seven

What Are the Fiscal Challenges Associated With Each Area?

Compounding staffing issues are the fiscal challenges associated with managing auxiliary units. Not surprisingly in this difficult time of a financial recession, these participants commonly cited the issue of decreased financial support from the state or the community (tax based revenues). Historically, in most states, community colleges were supported by a three pronged funding source: state apportionment, property tax base, and tuition and fees. With the probability of a reduced or eliminated revenue stream from the state, community college leaders are in a state of fluctuation in trying to identify revenue streams that are similar to that of a profit center. In states, such as Illinois, Florida, and California, where community colleges receive state apportionment, the likelihood of receiving nearly all to all of state apportionment funding is none. Due to the recent recession, the state tax revenues are severely compromised, therefore, the amount of money available to community colleges is also severely decreased. In addition, the majority of U.S. communities that provided financial support to their community college district have seen their tax base eroded. Thus, what these communities can provide to the community college is also drastically reduced.

Participants recognized that the heightened impact of extreme reduced financial support for community colleges has resulted in the need to identify solutions to generate uncharted revenue streams. Although all participants confirmed that auxiliary service units support the student's community college academic and higher education experience, the reality of fiscal accountability, viability, and sustainability is increasingly more critical and difficult than ever before.

The first priority for all participants was to continually appraise the financial viability of the department or unit, over which they are responsible. This evaluation included the department's comprehensive operating budget which consists of not only a projected profit and

loss (P&L) statement, but also, if appropriate, a supporting cash flow statement, as well as a balance sheet which enables these auxiliary administrators to present a more complete picture of the department's financial position. The data presentation in Table 25 represents a summary of the discoveries relating to current fiscal challenges.

Table 25 *Interview Question Seven: Significant Fiscal Challenges for Auxiliary Services*

Primary Themes	Participant's Responses					
	P1	P2	P3	P4	P5	P6
Auxiliaries Support Student Success	X	X	X	X	X	X
Reduce Cost / Increase Revenue	X	X	X	X	X	X
Institutional Funding Challenges	X	X			X	

Table 26 represents appropriate quotes concerning the fiscal challenges commonly identified by the interview participants.

Table 26 *Participant Quotes Regarding Fiscal Challenges*

College	Salient Points
P 1	It's our location, we have no tax base. We get maybe 10% of our money from local taxes... We have to rely on tuition and fees, and state funding which is really a challenge at this point.
P 2	The fiscal challenges are reducing the costs and increasing the revenue where possible...or if you can't increase the revenue because you know you're not going to make money, minimizing the cost.

- P 3 We just voted in [an increase] and that puts me within \$3 of my cap...The president here has given the directive that we can cut the budget as long as we don't impair the quality of instruction, the quality of the institution, or the services to the students.
- P 6 Primarily with the auxiliary operations it's making sure that they are not a financial burden to the entire organization when using full cost accounting. Within them we have the typical things of rising costs, energy food, commodities; which I think everyone else is seeing.
-

With the heightened awareness of reduced state and local tax funding, it is vital for auxiliary service administrators to identify best practices for becoming profit centers in support of the community college mission. This could result in providing additional, and much needed, income to the college's operating budget; this is essential in sustaining the needs of the student's academic experience. Not surprisingly, community college administrators are seeking innovative and creative ways to generate revenue in order to help meet expenses. While many community colleges are contemplating an increase in student fees and tuition in these tough economic times, these decisions must be tempered by what the students can manage to pay.

Interview Question Eight

How is the Success of Each Department Measured and Reported to the Top-Level Administrator?

To report the success of auxiliary services to senior administration (President, Vice President) timely and accurate data needs to be collected, analyzed and shared with them. There was very little consistency in assessment and measuring tools, or reporting methods, which were

used among the six participants. The information shared with top-level administrators seemed to be based predominantly on current or historical internal data.

Two of six participants stated they present and discuss monthly budget summaries during senior administrative staff meetings. Two other participants provide the vice president an ongoing list of divisional accomplishments for auxiliary units on a monthly basis. Two of the participants noted senior administration as being cognizant of the institution's scorecard, which includes sustainability initiatives (recycling, composting, and energy consumption) and measures of success for each auxiliary unit. The data presentation shown in Table 27 represents a summary of accounts and describes what methods are used to report the success of each department to top-level administrators.

Table 27 *Interview Question Eight: Success of Auxiliary Units and How Reported*

Primary Themes	Participant's Responses					
	P1	P2	P3	P4	P5	P6
Provide Budget Summaries	X	X				
Planning Council and Management Teams	X					
Sustainability Initiatives			X	X		
Written Reports / Matrix			X			
Shares Divisional Accomplishments			X			X
Alignment with Strategic Plan				X		X

Two participants reported aligning their unit's annual goals with the college's strategic plan which is essential to achieving overall institutional commitment. Of these two participants,

one was completely involved in their strategic planning process, whereas the other was not.

Table 28 offers significant comments from the interview participants.

Table 28 *Participant Responses Supporting the Reporting of Auxiliary Service Successes*

College	Salient Points
P 2	At his [the president's] level, it's like, what is the money coming out of in auxiliary services that's going to the college...he's looking at the overall revenue, minus the costs.
P 4	Yes, I do a presentation to the entire senior leadership team here showing what we're doing well at and then it's brought back to my staff where we all discuss strategies.
P 5	We are doing more of an extensive review of process on all of the department managers; what their goals are and how they accomplish those goals... We want to make sure that we are supporting the student that is sitting down in the classroom.
P 6	I do a presentation to the entire senior leadership team here showing what we're doing well at and then it's brought back to my staff where we all discuss strategies.

It is often challenging for auxiliary service administrators to report on how well their auxiliary units perform as compared to peer institutions. In order for these auxiliary community college leaders to receive acknowledgement and support for their work, it is essential for the establishment of a standardized process which allows identification and maintenance of valuable data and information which can then be shared with all divisions of the community college. Setting standards and creating concrete, measurable and quantifiable objectives is becoming

more important. The result of this identified process would add to a unified senior leadership team which works together for the advancement of student success.

Interview Question Nine

How Do Top- Level Administrators View the Importance of Auxiliary Services?

The six participants unanimously agreed that auxiliary services were not identified as a primary resource at the community college, like the larger student affairs and academic departments. They felt their auxiliary units were seen as a part of the college's general support system for students, faculty and staff. This feeling of relative disregard for their unit's work and importance to the institution was voiced by many of the participants. For example, four of the six participants shared a similar viewpoint, that if the president was not apprised of complaints or problems, it was essentially good news for the administrator and staff in each auxiliary unit. It is important for senior administration to recognize the contribution that each individual department makes to the successful performance of the institution as a whole.

Auxiliary service departments are essential contributors in every community college; in reality, these units impact the success of other departments. However, it was apparent these participants felt their senior administrators did not appreciate or recognize the work and efforts made by their departments. By recognizing the importance and contributions of each auxiliary unit, a more holistic approach can be attained as the college undertakes critical activities such as strategic and budget planning processes. Collaboratively working together, rather than functioning in the usual college department "silos", can assist the community college in continuing to meet its mission. Reflected in Table 29 are relevant themes indicating that

auxiliary services are simply viewed as a support mechanism for students, faculty, and staff of the institution.

Table 29 *Interview Question Nine: Importance of Auxiliary Services*

Primary Themes	Participant's Responses					
	P1	P2	P3	P4	P5	P6
Businesses Serve Students	X			X		
Support Activities of the College		X			X	X
Support Academics			X			

Table 30 illustrates the notable comments made by participants regarding the alignment and importance of auxiliary services at their community college.

Table 30 *Notable Participant Quotes Regarding the Importance of Auxiliary Services*

College	Salient Points
P 2	Very important. Because one, it supports the other activities of the college. He puts great emphasis on the events that we do, in the quality of the food and the service...They are extremely important because without them the college would have a hard time functioning.
P 3	We know we are support for the institution and all of our people are aware of that and the importance of what they do, and that it lends itself to the success of the whole.
P 5	But we all know that without them nothing would be here!
P 6	Because we are mission focused we look at what we have in place to support the faculty who support the students.

Triangulation of Data Using Theoretical Lenses

Chapter four presented the data collection process through the national and state surveys, and chapter five continued with a data analysis and a presentation of the data which was collected during the face-to-face interviews. Collectively the analysis and presentation enhance the strength, rigor and validity of the research by providing a clear understanding of the competencies which are essential to perform the leadership and managerial functions of an effective auxiliary service administrator.

A Priori Theme of Leadership

An efficient and effective administrator is one who can successfully manage the operations and supervision of the employees of one or many college departments. The situational leadership model (Hersey, Blanchard, & Johnson, 1996) identifies both supportive [relationship] and directive [task] type behaviors of the administrator and aligns them with the levels of influence required for them to accomplish their job well.

The research findings show that the participants understood the complexity of operations of the different auxiliary units as well as the issues which were pertinent to the diverse levels of personnel. Therefore, the findings were consistent with Hersey's et al. (1996) leadership theory and the components of leadership relationship effectiveness with staff and the ability to manage. It is through good leadership that the auxiliary service administrator achieves operational goals which are paramount to the success of the student and the community college.

Reflective in each participant interview was a common understanding that in order to be a successful auxiliary service leader, one must be knowledgeable, flexible, and capable in order to adapt to change and effectively oversee the various departments in college auxiliary services. The role of an auxiliary service administrator can be challenging, especially due to the variety of

operations and staffing issues which are consistently encountered. Skillful leadership, therefore, was acknowledged by the participants as a critical element in achieving balance and operational effectiveness within each unit that reports to the administrators of auxiliary services.

A Priori Theme of Decision Making

Interpreting relevant data and information assists with good decision making. It helps auxiliary service administrators to formulate strategies which can then be tailored to optimize departmental goals and outcomes; this is vital to institutional success. Community colleges continue to strive to meet their institutional mission while facing limited resources and increasing competition. In order to make logical and comprehensive decisions regarding short and long term goals, it is essential that auxiliary service administrators continually advance their decision making capabilities by analyzing data and assessment measures which are gathered from multiple sources.

The research findings show that participants utilized various types of data and information to make their decisions pertinent to the departments for which they are responsible. All participants agreed that having various types of data and information can assist in making better evidence-based decisions; this is critical for every community college. Findings also reveal that a variety of measurement tools are not readily available to these auxiliary service administrators. However, all participants use some type of standard tool such as the budget, balance sheet, and trend data to analyze their departments' performance.

Findings also show consensus among the participants, relative to the auxiliary services which are "business-type" operations (bookstore, food service). They felt these departments typically do not receive institutional subsidies but were expected to generate sufficient revenue

to cover all operating expenses and also provide money to pay for other institutional purchases of large-ticket items or building maintenance needs.

Even though auxiliary service administrators oversee many departments which are crucial to the success of the college, it was apparent that only a few study participants felt they were part of the essential strategic planning process. However, all believed they did have a significant role in the annual budget preparation process. Interestingly, they did not seem to recognize the interconnection of these two fundamental processes.

A Priori Theme of Systems

Organizations such as community colleges are dynamic systems. The concept of “systems thinking” or open systems theory is a dynamic process (Senge, 1990) which centers on the organization as a whole and the dynamic interrelationship between and among its parts as well as the influences of internal and external forces.

It is essential that community college auxiliary service administrators “think ahead of the curve”, monitor the trends, anticipate potential threats, and realize potential opportunities in order to assist the college in meeting its mission. Because the decisions of auxiliary administrator’s affect all parts of the college, and many times the community college district, it should be obvious to the person in this position what is crucial to the organization’s success.

The findings revealed that participants understood that they affected the budget planning process; however, outside of this process, they perceived very little involvement with other organizational planning processes. Decisions made by auxiliary administrators affect most internal departments within the institution as well as the external community college district. Therefore, it is perplexing as to why inclusion as part of the college’s dynamic open system was non-existent.

Overall, the participants affirmed the importance of a “systems approach” as a planning tool for auxiliary units, but it seemed they were not aware of their decisions having a true “systems’ effect” on the other parts of the institution (internal environment). This disconnection is an area which requires further research.

CHAPTER 6

FINDINGS, CONCLUSIONS, AND IMPLICATIONS

Though community colleges experienced an exponential increase in student enrollment and growth during 1960 through the 1970s, it is apparent during the first decade in the 21st century that substantial changes are taking place to the institution itself. The delivery of academic courses and programs, student support services, collaboration with business and industry, and working arrangements for employees are all changing. Coupled with a dynamic shift in student demographics, increased financial pressures, technological advancements, and a call for increased public scrutiny, community colleges require committed and skillful administrators to fill key leadership roles. In response to all the changes and challenges facing community colleges, traditional administrative structures are reorganizing to enable quicker, more responsive and creative leadership for the institution. One position has steadily grown and adapted to encompass a larger arena of responsibility vital to the operations of the college, the auxiliary service administrator. Today, administrators of auxiliary services must be prepared to successfully respond to the unique and overwhelming complex challenges facing community colleges.

This unique exploratory study seeks to discover existing and emerging trends, issues and challenges facing community college auxiliary service administrators and their departments. This qualitative case study was used to gather information and data from current auxiliary service administrators by conducting a national and state (Illinois) survey as well as six face-to-face interviews of Illinois community college auxiliary service administrators. The information and perspectives gathered from this research will provide insights which are beneficial to current and future auxiliary service administrators seeking to implement and support institutional

effectiveness and efficiencies. This final chapter includes the following: (a) a brief summary of chapters one through five, which establishes a context for the research findings; (b) a summary of the findings followed by implications for practice, organized by driving questions; (c) the conclusion; and (d) recommendations for further research.

Summary of Chapters 1 – 5

Chapter one provided an introduction to the background and context of the study and its significance to community college leaders. The purpose of the study and driving questions were presented, providing guidance for the research. A brief literature review highlighted the pertinent concepts and theories utilized for the study's conceptual framework. An overview of the methodology described and established a contextual framework for the reader, allowing for a greater understanding of the research.

In chapter two, an overview of relevant literature was presented which provided the framework or lens with which to view the research and the findings. This literature overview included: (a) community college and auxiliary service history, (b) graphical representation of the functions and placement of auxiliary services within a community college setting, and (c) the conceptual framework for the study. The theories and concepts serving as the framework for the study were Hershey and Blanchard's (1969) situational leadership theory, the concept of data-driven decision making, and Katz and Kahn's (1978) open system theory.

Chapter three provided the design and criteria used to guide the research design identifying it is a qualitative multimethod case study, situated within an interpretive paradigm. The design was described in detail and included the case study methodology, site and participant selection criteria, participant contact protocol, data collection tools and process, and data analysis procedures. This chapter also included a comprehensive discussion of the concepts related to

trustworthiness, validity, and rigor of the research as well as the limitations of the study and the researcher as the instrument.

In chapter four, a detailed description of the data collection process was presented and a summary of the data gathered from the national and Illinois surveys. In addition, demographic data of the participants who participated in the interviews and their respective institutions was provided. The gathered data was sorted, coded and summarized in a series of tables and figures in order to display the data. This display of data and information assists the reader to understand the context of the study and facilitates transferability of the study findings.

Chapter five continued with the presentation and analysis of data collected from the six Illinois participant interviews. The rich, thick data garnered from the interviews was presented in table format to assist in identification of the primary themes. For ease of understanding, these tables were followed by analysis and discussion which included illustrative quotes from the interview transcripts. Finally, the *a priori* themes from the study's conceptual framework facilitated with the analysis of all data and information gathered from the study's multiple data sources.

Findings and Implications

The Purpose of the Study

The purpose of this study is to explore significant emerging non-academic support issues as identified by auxiliary service administrators in community colleges.

Driving Question One

What Are the Non-Academic Support Issues Most Significant to the Community College?

It was apparent from all participants that fiscal challenges for all auxiliary units are escalating throughout the community college system. First and foremost, financial uncertainty plagues decision-making for administrators of auxiliary services. The current economic recession has produced a striking effect not only on student enrollment at each community college but also on funding sources; funding sources have become less reliable forcing administrators to reduce expenses, increase revenues, and identify new funding sources. Auxiliary services support student success, staff and faculty processes and procedures, and ultimately, the community college mission. Therefore, there is no doubt that these auxiliary service administrators are making critical decisions which affect everyone at the community college.

The participants identified facility services (buildings and grounds) and early childhood centers as two support centers having a significant impact at community colleges. For many students and their parents, walking on the campus of a higher education institution can help finalize decisions regarding college selection. Facilities that are modern and well maintained present an inviting and secure environment in which to learn. Early childhood centers also provide much needed support for many students who are challenged with finding convenient and safe child care facilities where they can leave their children while they attend classes. However, these units were noted by all study participants as presenting high overhead and operational costs.

Two of the departments traditionally seen in the purview of auxiliary service administrators as “business-type” operations were the bookstore and food service. The common problems faced by auxiliary service administrators in regard to these specific units are financial concerns and staffing issues. Study participants felt the most substantial issues confronting

bookstore operations involved reducing the costs of textbooks while at the same time struggling to provide the necessary revenue stream to the college. The common challenges of food service operations acknowledged by study participants involved operations staffing and the retaining of customers since patrons expect good quality food and low prices. This presents a managerial conundrum when trying to maintain an operational breakeven point.

Implications for Community Colleges

There is no doubt that forecasting enrollment, revenues and expenses, and staffing needs are challenging for community college senior administrators. The quandary associated with the economic recession and a decrease in traditional funding sources will continue to plague administrators in the coming years. Findings from the study confirm that auxiliary service administrators must focus on two primary issues over the next few years: 1) departmental financial viability and/or sustainability, and 2) adequate, yet responsible departmental staffing.

Financial viability encompasses revenue and expenses; it provides the ability for each auxiliary unit to continue to achieve its operating objective thereby satisfying the mission and vision of the community college. Based on the projected number of students and credit hours generated, revenue forecasts are traditionally estimated by examining each auxiliary unit's earnings potential as well as the unit's bottom line. Budget assumptions are created from historical data and trends, and/or projected sales which are established from future projections on student enrollment and market trends, depending on the auxiliary unit. Both revenue and expense budgets use the same historical data and projects and must be closely monitored. Many departments do not or will not ever break even or make money; however, the reputation of the institution is established by the quality of the support services that students, faculty, and staff

receive from all divisions and units of the college. Therefore, auxiliary service administrators must provide the same careful attention to all departments/units for which they are responsible.

Responsible departmental staffing is another major issue facing auxiliary service administrators. Staffing encompasses many variables such as attracting, hiring and retaining the right employees for each department/unit position. An adequate number of well-trained and educated staff is crucial to the effective and efficient management of the institution's support services. For that reason, auxiliary service administrators must make certain that caution is taken when hiring a suitable person for the position, helping to minimize the day-to-day operational departmental challenges, along with the problems and/or difficulties associated with providing excellent customer service to the campus community and the constituents in the college's district.

Consequently, it is vital that the auxiliary service administrator possess leadership characteristics as well as critical thinking and decision-making skills in order to manage the college's support service departments. Auxiliary service administrators can no longer sit in their office; they must "manage by walking around", asking questions, soliciting solutions from their employees and generating new thinking in order to solve problems facing the college. In today's ever-changing environment, auxiliary service administrators also require creativity in order to work well with those within the community college district and with the various constituents, promoting sustainable efforts with business partners. To maintain the viability of the institution and to meet the needs and demands of students, it is critical for auxiliary service administrators to remain alert for potential opportunities, which would be beneficial to the college and the community, and bring these to the attention of senior administrators.

Driving Question Two

What Identified Issues are Expected to Increase in Intensity Over the Next Five Years?

Not only do study participants agree that the bookstore and food service operations present the most difficult problems and issues, they also believe the issues and challenges pertinent to these two departments will continue to grow in significance. Student demands for all types of college e-commerce, textbooks offered via various delivery methods, excellent affordable meals, continuous improvement of facilities (building and grounds maintenance), and consistent upgrade of technological (computer) advancements were issues identified by study participants as expected to significantly increase in intensity over the next five years.

E-commerce and its technological advancements are, at present, causing great difficulties for community college bookstores. Since 1994, with the launching of E-Bay and Amazon, Internet retail has gained in popularity, allowing individuals to save time and comparison shop from their computer, phone and other electronic devices. Today, some of the most prominent e-commerce categories are computers, books (print and e-books), office supplies, music, and a variety of electronics much like college bookstore merchandise. As faculty incorporate the use of e-books, iPads, social media, and other electronic communication devices in their courses, the struggle for college bookstores to remain a revenue stream is problematic. It seems apparent that bookstore sales will continue to struggle against the growing number of Internet retailers and other alternatives.

Access to affordable high quality food services will remain a prominent current and future issue according to study participants. Traditionally, competition for food services was limited to those businesses in close proximity to the college campus. However, adding additional pressure is the growing influence of twitter and social networking offerings such as e-

coupons and every day dollar menus. Retaining the food service customers will not be easy for auxiliary service operations.

Buildings and infrastructures which were built from 1960 through the 1970s need to be modernized and upgraded in order to meet the needs of the changing student population and new building codes and standards. Participants noted that some colleges will be able to procure funding for new buildings, while other colleges will undertake incremental retrofitting of current buildings. Classrooms need enhancements to enable multiple use instructional settings which are adaptable for changing academic pedagogies. Study participants also felt the technological advances in computer hardware and software programs, which are needed to run classroom and administrative applications, must be continuously integrated and upgraded in order to enhance all organizational operations, however, the cost is a concern.

Implications for Community Colleges

In light of the issues identified to grow in intensity over the next five years, community colleges must actively position themselves for success. Consequently, the hiring of qualified auxiliary service administrators is crucial to the institution's success and viability. The auxiliary service administrator must be one of the most knowledgeable, personable and creative administrators in the organization as they interact with all departments in the organization. They must remain current on many issues, be aware of and recognize future trends, while leveraging this information for the long-term good of the college.

Study participants concur that what has not yet been recognized by community college senior administrators is the true breadth and scope of the auxiliary service administrator's role. This is the one administrator who interacts with each and every college department, bypassing the compartmental impact of the traditional college silos. The importance of this "across the

college perspective”, held by the auxiliary service administrators, cannot be exaggerated. Of great benefit to every community college would be their active and continued involvement in the institutional strategic planning process where their unique perspective could alert administration to problematic issues and provide assistance in preparing the college for the future.

To improve their functionality inside the organization, these administrators must strengthen their collegial and collaborative relationships with leaders of all college departments and be an active member of the senior leadership team. Their proactive and deliberate integration within the governance structure allows senior administration a better understanding of the institutional needs.

Understanding their vital role and unique perspective, senior administration must consistently take advantage of their “across the college perspective”. To remain competitive, requires community colleges to methodically advance collaboration with internal and external constituents, resulting in continued communication and organizational strategies. Auxiliary service administrators’ unique organizational-wide knowledge is an under-used college asset with untapped potential benefits to the organization. It is crucial for senior administrators to recognize the importance of these auxiliary service administrators’ contributions to institutional effectiveness and efficiencies and to hire and utilize their talents.

Driving Question Three

What Identified Issues Demand the Greatest Amount of the Auxiliary Service Administrator’s Time?

Not surprisingly, the participants confirmed that the leadership elements consuming the majority of their time focused on staffing and managing (decision-making) the units for which

they are responsible. Broadening the understanding of adequate, yet responsible departmental staffing, it was found that auxiliary service administrators recognize the importance of coaching, developing, and mentoring staff in their respective departments. A continuous agenda of staff development programs and activities can provide two important fundamental elements: a) to advance the continuity of each department's operations, and b) to improve the talents of current staff, reduce turnover, and to facilitate succession planning opportunities within the unit. Findings indicate staffing and labor issues were a constant time consuming challenge for the majority of the auxiliary units they oversee. Study participants strongly understood the importance of having the right managers or directors in place to strengthen the continuance of well-managed daily operations of any unit.

Due to the diversity of auxiliary departments reporting to an auxiliary service administrator, findings revealed that these participants recognized the need for well-rounded responsible leadership. Not only do auxiliary service administrators need to be competent leaders and managers, but study participants acknowledged they must also be aware of the climate and culture of their departments and the institution, in order to efficiently accomplish their tasks. Community colleges operate within a large, open complex system which fosters relationships with various constituent groups. In order for the college to meet relationship demands, these various groups require a delicate balance of relationships and action with those individuals and groups both inside and outside the institution. Leadership in a community college is having an understanding of the college mission, balancing competing demands, making logical data-driven decisions, providing direction and motivating people. Predictably, study participants acknowledged the leadership skills possessed by auxiliary service administrators and its applicability to the various departments under the umbrella of auxiliary

support services. However, what was apparent from these study participants was their feeling that their leadership skills were not recognized or validated by the college senior leadership.

Implications for Community Colleges

Today, leadership in community colleges involves two elements or competencies: a) the personal attitudes (people skills) necessary to manage a diverse departmental staffing, and b) the knowledge and critical thinking skills required to manage diverse operational units. One might contend that of these two competencies, an individual can obtain the knowledge required, in essence it can be taught; however, people skills, often referred to as “soft skills” are seen as an innate trait and are not easily learned by some people. The hiring of the *right* auxiliary service administrator who is suited to the position is crucial to the success of multiple departments and the institution as a whole. Therefore, great care and thought must be given when hiring an auxiliary administrator. Hiring the wrong individual, someone who lacks attention to detail, leadership capabilities, or appropriate people skills can do harm to the college for years to come.

As this position is so vital to the success of the institution, an orientation program is needed which is specifically designed for this position, allowing the new auxiliary administrator to quickly learn, in detail, about the institution. In addition, the appointment of an appropriate administrative mentor can enhance their understanding of the culture and climate of the institution and the position. Taking a proactive stance when hiring a new auxiliary service administrator can mitigate the time required to learn the workings of the college and serve to enhance their functionality and worth to the institution.

For a community college to stay abreast of the trends, needs and demands of their students and the business community, all administrators must be current in the knowledge and information relevant to their positions. Professional development activities and programs for

auxiliary service administrators are a necessity. Since auxiliary administrators are involved in a variety of areas of responsibility such as legal contracts, building and grounds codes, college retail enterprises, purchasing, technology and others as assigned, remaining current regarding the issues is vital. Therefore, it is in the best interest of the institution to attend to the continuing education of the individual holding this important leadership position.

Driving Question Four

What Identified Issues Currently Require the Largest Expenditures of Human and Fiscal Resources in Community College Auxiliary Service Administrators' Time?

Time is an entity that is fleeting; community colleges are no different than business, “doing more with less” and “no one ever has enough”. Dependent on the magnitude and size of a project or decision, it may be difficult to pull away and redirect the college’s focus once a direction has been advanced. According to study participants, multi-tasking for auxiliary service administrators is the norm. Therefore, understanding the issues that currently impose the largest expenditure of human and fiscal resources can better assist the auxiliary administrator in time and resource management.

Participants agreed that the largest expenditures of human and fiscal resources, on a community college auxiliary service administrator’s time, primarily involved three college units: a) the bookstore, b) food service, and c) facility maintenance (building and grounds). Therefore, the continual detailed supervision of the day to day operations, to ensure profitability, staffing and excellent customer service, absorbs the major portion of the auxiliary service administrator’s efforts. In addition, findings clarified that when the college is involved in any type of capital

project, the responsibility for this activity overrides any and all of the auxiliary service administrator's time, depending on the project's complexity and duration.

Implications for Community Colleges

Understanding what tasks and departments consume the largest amount of an auxiliary service administrator's time and efforts provides insight for understanding the skills and competencies required to accomplish the tasks which are needed to address the complexities and responsibilities of the job. Leadership qualities and management skills which are essential to build responsible business practices and which are used consistently throughout the organization, must be continually strengthened. It is the effectiveness and efficiency of the auxiliary service administrator's management skills that are so crucial to the institution.

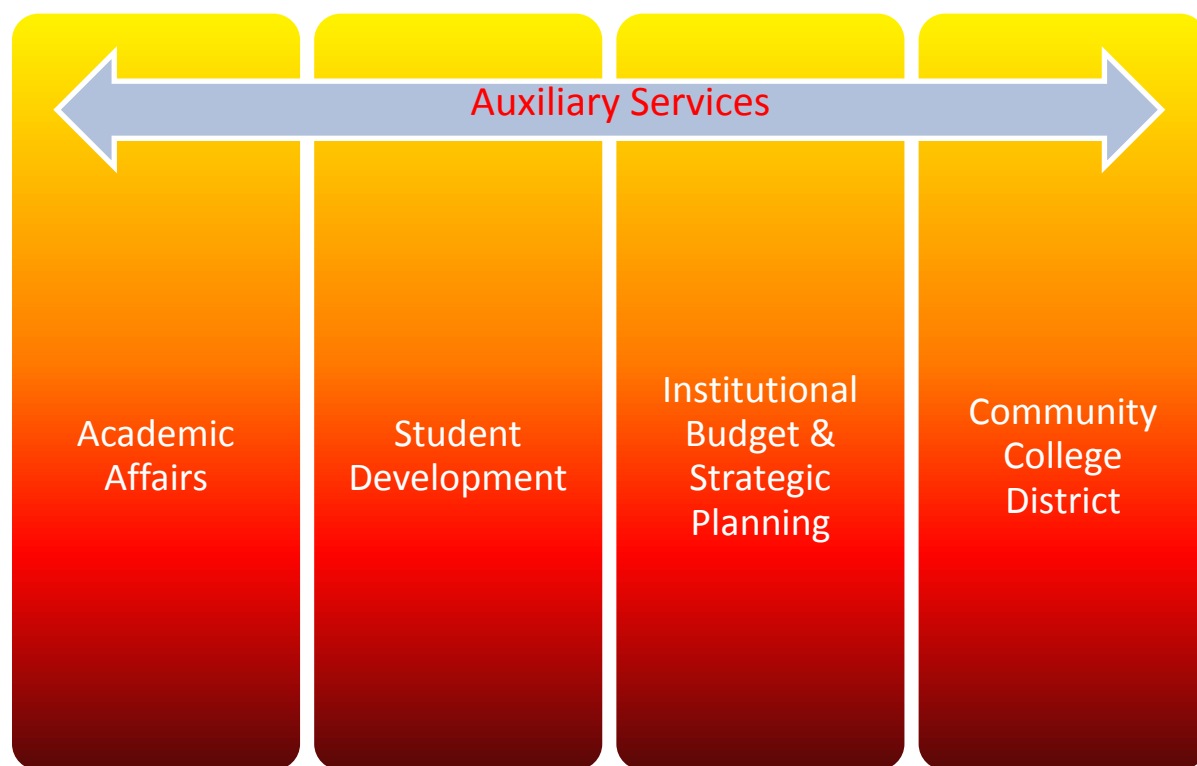
However, it is the intrinsically linked combination of leadership characteristics and management skills which are essential in order to move the community college forward. To better facilitate this, the administrator of auxiliary services must stay current professionally and serve as an active member of the senior leadership team. With a unified understanding of the community college mission and goals, the steady continuity of auxiliary service operations can contribute to the shared vision for service excellence.

Conclusion

This research represents participants' understandings of the significant emerging non-academic support issues that will increase in importance over the next five years. Bookstore and food service operations continually ranked in the top five for many survey questions, primarily due to their structure and the significant funding source they provide to the community college. Given today's economic uncertainty, diligent evaluation and management of revenue sources and expense reductions will be vital to an institution's existence. What was also forthcoming from

the findings was the realization that auxiliary service administrators are uniquely situated given their institution-wide administrative span of control (see Figure 20) to be asked to assume a greater college leadership role. The great advantage these individuals bring to the leadership team is they do not view the college in “silos”, but rather as a single entity.

Figure 20 *Auxiliary Administrator Span of Control Across the College*



Attributable to the vast array of departmental units which can report to an auxiliary service administrator, these leaders must be flexible, adaptable, and possess a unique breadth and depth of knowledge which is not required by other college administrators.

The study findings offer an insight as to what community college auxiliary service administrators view as significant current and emerging non-academic issues. A more in-depth

understanding was also gained surrounding the complex diverse skill sets and leadership qualities necessary to effectively manage the hugely disparate auxiliary units in community colleges. Consistently resonating from the research is the need for qualified individuals to fill these important positions.

One way to validate the mastery of skills and knowledge qualifications of a professional is by the awarding of higher education degrees, state licensure and/or professional credentials. Although knowledge and skill sets can be learned over time, to receive the appropriate recognition many auxiliary service administrators and their colleges are looking toward professional credentialing. Within the last year the National Association of College Auxiliary Services (NACAS) announced its offering of a nationally recognized test for certification, Certified Auxiliary Services Professional (CASP). The CASP credential confirms that the auxiliary service administrator professional possesses specialized knowledge and demonstrates a mastery level of competence. Meeting this standard (credential) also validates the individuals' professional credibility. Interestingly, findings from this study confirmed the five knowledge areas embedded within in the new CASP. Therefore, the Mitchell Certification Preparation Model is designed to assist individuals in creating a professional development program tailored for their specific needs and requirements providing the best opportunity to become successfully credentialed.

Mitchell Certification Preparation Model

Achieving certification can make the difference between creating increased professional recognition and becoming professionally outdated. This model is essential in assisting individuals to prepare well for credentials testing through NACAS or similar organizations. The

Mitchell Certification Preparation Model supports individuals seeking certification in three distinct ways:

- 1) Increases awareness of subject matter topics (knowledge) required for credentialing exam;
- 2) Provides an assessment tool to identify the quality and extent of the individual's knowledge of the subject matter topics to target those requiring further study;
- 3) Provides a Monitoring Form for convenient document and record keeping of professional development activities and courses taken to prepare for the certification exam.

Furthermore, with a pre-determined timeline, the Mitchell Certification Preparation Model (Figure 21) can assist the individual to become prepared in one to two years for the credentialing exam, depending on their knowledge, expertise, and length of time serving as an auxiliary service administrator.

Figure 21 Mitchell Certification Preparation Model



Review of CASP: Five Domains for Competency

The mission of the National Association of College Auxiliary Services (NACAS) is to “provide professional development and leadership opportunities necessary for its members to be successful as they support higher education through auxiliary / campus services in an ever-changing environment” (NACAS, 2012). NACAS, an active organization since 1969, has membership around the world with 150 current members representing community colleges / 2-year institutions. To keep professionals current in this field, in 2010, NACAS decided that a certification program was needed. The Certified Auxiliary Services Professional (CASP) program was designed in 2011 with direction, guidance and input from experts. The certification exam represents a standard for auxiliary service professionals to validate knowledge competencies and provide an avenue for peer recognition. The Certified Auxiliary Services Professional credentialing exam consists of five knowledge domains: a) management; b) marketing, communications, and business relations; c) leadership; d) student development; and, e) operational areas (NACAS, 2011). These five knowledge domains were confirmed by findings gleaned in this study as most relevant to individuals in auxiliary service administrative positions.

Leadership competency is identified as the first subject matter competency necessary for an auxiliary service administrator which is a blending of effective management styles and social influence. Although leadership abilities and characteristics are seen as innate traits, leadership can be enhanced, nurtured, and developed by intent. The second competency (*marketing, communications, and business relations*) focuses on effective collaboration with internal and external constituents thereby assisting to build effective business partnerships. Third is the *Management* competency necessary for an auxiliary service administrator. This domain focuses

on the decision-making ability of each auxiliary administrator which is necessary to manage and lead each of their diverse auxiliary units. The fourth competency, *student development*, focuses on creating positive relationships by providing support for student services and academic programs which enhance a student's academic experience. The fifth and final competency, *operational areas*, focuses on the acquiring and managing of the required institutional resources necessary to meet the operational goals of auxiliary departments/ units and the institution.

Figure 22 illustrates the interconnectedness of the CASP five knowledge domains.

Figure 22 *CASP Competency Domains for Auxiliary Service Administrator*



Leadership

“Effective leadership is a combination of effective management and vision” (AACC, 2012), which work in tandem to attain departmental and institutional goals and objectives. The four CASP components found in this domain are: a) general leadership; b) ethics; c) interpersonal skill and group facilitation; and d) strategic management (NACAS, 2011). Over

the last 10 years, leadership has taken on a new meaning for all community college administrators, requiring a wider subset of skills. Adapted from *Leadership Qualities and Management Competencies for Corporate Responsibility* (Wilson, Lenssen, & Hind, 2006) these selected competencies are similar to the CASP components. The five leadership areas cited by Wilson, Lessen and Hind (2006) correlate well with leadership competencies for auxiliary service administrators in a community college environment (Table 31).

Table 31 *Selected Competencies for Corporate Responsibility as Identified by Wilson, Lessen, and Hind (2006)*

Value	Definition
Customer Care	Providing exceptional customer service to build long-lasting mutually beneficial relationships through constant enhancement of the quality and added value of products and services from ongoing and cost-effective innovation.
Empowerment	Giving people the freedom to pursue excellence by fostering a culture that encourages delegation, risk taking, speed of response, accountability and partnership.
Ethical Behavior	To engender the respect and admiration of all, acting with the utmost regard and concern for the law, the environment and the fair treatment of people and conducting themselves in accordance with our long-standing tradition of ethical behavior based on the principles of honesty, integrity and trustworthiness.
Respect for People	Treating people as valued contributors and fostering a culture where respect and trust abounds; encouraging every individual to exercise constructive independent thinking, and providing opportunities for each to realize his or her fullest potential.
Teamwork	Encouraging open communication and collaboration across our organization through the sharing of knowledge, technologies and best practices to create fruitful synergies that spring from the combined strengths and abilities of all.

Note. Selected Competencies from Solvay adapted from “Leadership Qualities and Management Competencies for Corporate Responsibility”, a research report for the European Academy of Business in Society. Wilson, A., Lessen, G., Hind, P., July 2006.

Important to the success of each operational department is the open solicitation of ideas and suggestions from staff. Fostering shared problem solving and decision-making assists to identify practical and useful solutions so vital to the high-quality functionality of the department. Encouraging the creativity and collegial relationships of their department's staff can only improve the overall function of the college.

Finally, good leadership skills are exhibited through effective strategic management and planning. Study findings corroborated that a primary responsibility of auxiliary service administrators is to the development and implementation of departmental budgets and strategic plans as well as to their assistance with the overall institutional budget and strategic plan. An effective leader can set strategic and operational agendas and provide the direction and guidance to meet those goals and objectives. Not unlike a business plan, strategic management requires the development, implementation, monitoring, and assessment of each new and continuing initiative or project.

Though study participants saw themselves as under-utilized and rarely served on the institution senior leadership team, they strongly felt their expertise and understanding of the entire institution (across silos) could be a beneficial value-added asset to the team offering insights and support in order to foster the mission and growth of the college.

Marketing, Communications, and Business Relations

A successful auxiliary service administrator understands the importance to the college of effective internal and external business relationships. The three CASP components found in this domain are: a) marketing, b) communications, and c) business relations (NACAS, 2011). To effectively foster and achieve positive community relationships, auxiliary service administrators must be adept at good communications. Whether the audience is the internal or external college

constituents, active listening and seeking suggestions, ideas, and feedback from others assists to solve problems and successfully achieve departmental or institutional goals.

Every community college auxiliary service unit is unique and provides support for the students, college, and community in various ways. In order to thoroughly represent these non-academic support services and departments, a skilled administrator should have a significant understanding of marketing, how to promote new and current auxiliary services and programs. Findings of this study indicate participants were faced with challenges related to the marketing of institutional retail operations to internal constituents; little was seen as problematic in regard to marketing any services to external constituents.

Good communication skills and knowledge of marketing techniques go hand in hand with creating positive and enduring business relations. Community colleges are facing a great deal of economic uncertainty and are struggling to identify ways to generate new revenue sources. Auxiliary service administrators, therefore, require a great deal of expertise in negotiating mutually beneficial agreements and contracts which protect the integrity of the institution while potentially generating revenue streams. The establishment and nurturing of collaborative business relationships with internal and external constituents can help to leverage business opportunities which will sustain and support the future growth of the institution.

Management

Effective management skills are essential in any business operation. The four CASP components found in this domain are: a) program and project management, b) financial management, c) human resource management, and d) technology and information systems management (NACAS, 2011). Competent and skilled community college auxiliary service administrators possess an understanding and ability to continually assess and improve the

performance and function of departments for which they are responsible. In particular, management of such diverse institutional departments requires a solid background in data management, process and procedures. While data and information is gathered from various sources, the auxiliary service administrator must be able to determine what data is required, be proficient with data retrieval procedures, and competent with data analysis methods in order to guide decisions essential for college and departmental projects, budgets and strategic plans.

Inherent to the management requirements in the auxiliary service administrator position are problem solving and decision-making skills. Throughout the research, participants shared perspectives and experiences related to the successful management of their departments/units as well as challenges they encountered. In particular, these challenges involved management of expenses and revenues streams pertinent to the bookstore and food service operations. Consequently, it is no surprise that good financial management skills are crucial for auxiliary administrators.

Another area of concern resonating from the study involved managing the staff of auxiliary service departments. Challenges experienced by study participants were pertinent to adequate staffing of knowledgeable personnel in the disparate units overseen by auxiliary service administrators. An understanding of human resource management is vital to the continuous well-being and growth of many of the institutions' departments. Finally, an auxiliary service administrator must be cognizant of the types of technology (computers and job-specific) which is considered necessary by the college and have a clear understanding of the financial, administrative, and academic implications. It is apparent that decisions made by auxiliary service administrators can and do affect all facets of the community college.

Student Development

Auxiliary service operations support the efforts of academic and student affairs departments. The four CASP components found in this domain are: a) student personal development, b) facilities management, c) research and assessment, and d) technology and information systems management (NACAS, 2011). A competent auxiliary administrator understands the value of cooperation and teamwork for the benefit of the students, faculty, staff, and the institution as a whole. Undeniably, it takes a collaborative effort by all college departments/units to create a positive learning environment for students. Support services such as the book store, food service, building and grounds maintenance services all play a significant role in student success. Collectively, support services facilitate student access to the services they require, as well as contribute to a friendly campus environment.

Although an auxiliary services administrator may not have as much direct contact with students as other administrators, part time jobs and student internships provide many financial assistance opportunities, an avenue which was supported by the study findings as a support for students.

Operational Areas

To help meet the mission and vision of the institution and therefore the success of a student's academic experience, auxiliary service administrators must have the specific knowledge which is needed to manage a diverse array of college operational departments well. The five CASP components found in this domain are: a) physical facilities; b) commercial / retail; c) food service; d) bookstores; and e) card services (NACAS, 2011). Facility services (buildings and grounds) and the retail operations of the bookstore and food services are three of

the primary areas of responsibility seen by community college auxiliary service administrators across the country and confirmed by study participants.

College physical facilities can serve as a detractor for student learning if not well maintained and modernized. Nonetheless, the upkeep required to maintain these buildings can be a substantial drain on the institutional budget. Therefore, it is critical for an auxiliary service administrator to understand industry standards, codes, and federal or state regulations in order to appropriately document, justify and project accurate plans and budgets for capital and minor maintenance and improvement projects.

A competent and effective auxiliary service administrator continuously identifies, acquires, and deploys the necessary resources required to meet the operational goals of each auxiliary service unit. Therefore, staying abreast of current trends and issues is vital for the success of these operations. Given the present economic recession, a skilled auxiliary service administrator is required to identify the forces impinging on the effectiveness and efficiency of each department. “If managers are slow to respond to competitive, economic, political, global, and other forces, the organization will lag behind its competitors and its effectiveness will be compromised” (Jones, 2008, p.272). It is essential for community colleges to gain the competitive advantage by using effective operational strategies, such as data-driven evidence and proven practices, to successfully solve problems and support the institution’s strategic and budget plans. Contributing greatly to this goal, with a wealth of information and expertise, is the competent auxiliary service administrator.

Mitchell Professional Development Assessment Tool

The Mitchell Professional Development Assessment Tool (Figures 23) is the second element in the Mitchell Certification Preparation Model. This assessment tool is a formative assessment as to the quality and extent of the subject matter knowledge possessed by an individual. *Master Level* is advocated as the appropriate aspiration level one must attain in order to successfully pass the certification exam.

This assessment provides individuals with targeted information regarding the subject matter they need to study as they begin to prepare for the credentialing exam. The assessment tool is designed to assist individuals to:

- 1) Understand the specific subject matter topics required for the certification exam;
- 2) Self-evaluate their current competency level for each subject matter topic; and,
- 3) Identify their action plan for obtaining the needed professional development required to become knowledge in all subject matter topics required for the certification exam.

Mitchell Professional Development Monitoring Form

The Mitchell Professional Development Monitoring Form (Figures 24) is the third and final element in the Mitchell Certification Preparation Model. This form allows individuals to monitor and track their progress in preparation to sit for the certification exam. In order to adequately and thoroughly prepare for this exam, a systematic integrative approach is essential. This means that an individual will have a thorough assessment of one's knowledge, of the required subject matter contained in the credentialing exam, followed by a detailed thoughtful account of professional development programs and courses specifically selected to meet the certification exam subject matter competencies.

For auxiliary service administrators, holding certification shows a degree of commitment and competency to their positions and to the institution. It gives the individual the professional credibility they deserve among the institution's senior administrator as well as their counterparts throughout the community college system.

Figure 24 *Mitchell Monitoring Form of Professional Development Activities to Meet Certification Exam Competencies*

Mitchell - Professional Development Monitoring Tool							
This worksheet assists administrators of auxiliary services to tracking professional development and training sessions essential to sitting for the Certified Auxiliary Services Professional (CASP) exam.							
Performance Indicators	Seminar, Professional Development, Evidence				Completion Date	Continuing Education Credits	Syllabus Attached
Competency 1 - Management (30% of content)							
Program and Project Management							
Financial Management							
Human Resource Management							
Technology/Information Systems Mgmt							
Competency 2 - Marketing, Communications and Business Relations (15% of content)							
Marketing							
Communications							
Business Relations							
Competency 3 - Leadership (25% of content)							
General Leadership							
Ethics							
Interpersonal Skills and Group Facilitation							
Strategic Management							
Competency 4 - Student Development (10% of content)							
Student Personal Development							
Facilities Management							
Research and Assessment							
Competency 5 - Operational Areas (20% of content)							
Physical Facilities							
Commercial/Retail							
Food Services							
Bookstores							
Card Services							

Recommendations for Future Research

Even though the future of higher education is challenging and changing, it is certain that leadership skills, continuous quality improvement initiatives and the use of data-driven decision making will remain critical to the effective operations of colleges and universities. The conceptual framework for this research utilized the theories and concepts of leadership, data-driven decision making, and open systems. Further studies using these same theories and concepts can add to the almost non-existent body of literature regarding community college auxiliary service administrators and the significant emerging non-academic support issues for the community college field.

Since 2008, President Obama has repeatedly called on community colleges to enhance student persistence and increase graduation rates. Research regarding the composition and work of community college senior leadership teams could enhance student engagement practices in support of the student college completion agenda. Findings from future research, focusing on these elements, could reveal needed changes and enhancements to academic programs and instructional pedagogy, relationships with universities and local K-12 systems, and partnerships with local businesses.

Another research topic of benefit to higher education institutions, businesses and students would focus on the study of how and in what ways valuable community partnerships can be developed and facilitated by community college auxiliary service administrators. These research findings could provide a better understanding of what different types of partnerships are in place and how they benefit students, the college and the businesses as well as how to select appropriate businesses partners and examine the processes and procedures needed to develop, implement and monitor long term business partnerships. This exploratory research could embed a business-type

orientation of how these strategic partners can be better crafted to lead change for a specific industry, and in return impact the appropriate community college academic programs.

Also of benefit to community college auxiliary service administrators who are struggling to make the decision to sit for the credentialing exam, research could be conducted that would focus on the professional recognition and advancement for those individuals who hold the appropriate credentials. Findings from such a study could provide information related to the value of the credential to individuals in these positions and the job market, the professional recognition from peers, and improved job performance ratings. The insights from this study could benefit the institution as well as the individual.

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Appendix A

Questionnaire for Study Participants – National

This research project is being conducted by Judith L. Mitchell, a doctoral student at National-Louis University located in Chicago, Illinois. The study is entitled Beyond Academics: Challenging Issues Facing Community College Non-Academic Support Services. The purpose of the study is to identify emerging issues in auxiliary service support service areas as identified by community college administrators.

I understand that the results of this study may be published but my identity will in no way be revealed, or that of my employer (community college). I also understand that there are no anticipated risks to me greater than those encountered in daily life. Moreover, the information gained from this study could be used to assist community colleges in becoming more effective in their daily and strategic planning cycles. By completing this survey I am giving my consent of approval.

This questionnaire will take approximately ten minutes to complete.

Date of Survey: _____

Participant's Institution: _____

Institution Classification (select one):

- 1) Urban
- 2) Suburban
- 3) Rural

Please complete this questionnaire for this study.

- 1. For the next four questions, please rank the following areas from 1 (most important) to 10 (least important):**

What are the auxiliary service issues most challenging to your community college?	
<i>Issue</i>	<i>Rank 1 – 10 (One being most important)</i>
Certifications for staff members	
Parking and Transportation	
Card systems	
Bookstores	
Dining and food service	
Facilities management	
Marketing and communications	
Student unions	

Print and mail services	
Sustainability efforts	
Other:	
Other:	
Other:	

What identified issues/challenges are expected to increase in importance over the next five years?

<i>Issue</i>	<i>Rank 1 – 10 (One being most important)</i>
Certifications for staff members	
Parking and Transportation	
Card systems	
Bookstores	
Dining and food service	
Facilities management	
Marketing and communications	
Student unions	
Print and mail services	
Sustainability efforts	
Other:	
Other:	
Other:	

What identified issues/challenges demand the greatest amount of the auxiliary service leader's time?

<i>Issue</i>	<i>Rank 1 – 10 (One being most important)</i>
Certifications for staff members	
Parking and Transportation	
Card systems	
Bookstores	
Dining and food service	
Facilities management	
Marketing and communications	
Student unions	
Print and mail services	
Sustainability efforts	
Other:	
Other:	
Other:	

What identified issues/challenges currently require the largest expenditures in terms of human, operational, and fiscal resources in community college auxiliary departments?

<i>Issue</i>	<i>Rank 1 – 10 (One being most important)</i>
Certifications for staff members	
Parking and Transportation	
Card systems	
Bookstores	
Dining and food service	
Facilities management	
Marketing and communications	
Student unions	
Print and mail services	
Sustainability efforts	
Other:	
Other:	
Other:	

Thank you for taking the time from your busy schedule to complete this questionnaire. Your careful responses will provide substantive depth and clarity to this study.

Judith L. Mitchell
 Doctoral Candidate in Community College Leadership
 National-Louis University
jlmitch@sbcglobal.net

815-405-5844

Appendix B

Questionnaire for Study Participants - Illinois

This research project is being conducted by Judith L. Mitchell, a doctoral student at National-Louis University located in Chicago, Illinois. The study is entitled Beyond Academics: Challenging Issues Facing Community College Non-Academic Support Services. The purpose of the study is to identify emerging issues in non-academic support service areas as identified by community college administrators.

I understand that the results of this study may be published but my identity will in no way be revealed, or that of my employer (community college). I also understand that there are no anticipated risks to me greater than those encountered in daily life. Moreover, the information gained from this study could be used to assist community colleges in becoming more effective in their daily and strategic planning cycles. By completing this survey I am giving my consent of approval.

This questionnaire will take approximately 20 minutes to complete.

Date of Survey: _____

Participant's Institution: _____

Please complete this questionnaire for this study.

2. **Gender:** ☐ Male ☐ Female

3. **Age Group:**

☐ 25 – 30 years

☐ 31 – 35 years

☐ 36 – 40 years

☐ 41 – 45 years

☐ 46 – 50 years

☐ 51 – 55 years

☐ 56 – 60 years

☐ Over 60 years

4. Current Position:

Institution: _____

Job Title: _____

City/State: _____

Number of years in current position: _____

Educational requirements for this position: _____

Years experience required for this position: _____

5. Previous positions within higher education: Please list the two previous positions you've held prior to your current position

Institution: _____

Job Title: _____

City/State: _____

Number of years in previous position: _____

Educational requirements for this position: _____

Years experience required for this position: _____

Institution: _____

Job Title: _____

City/State: _____

Number of years in previous position: _____

Educational requirements for this position: _____

Years experience required for this position: _____

6. Reporting Relationships**Supervisor** – To what position do you report?

Title: _____

Auxiliary Departments – Your direct reports

Title: _____

Area of Responsibility: _____

Title: _____

Area of Responsibility: _____

Title: _____

Area of Responsibility: _____

Title: _____

Area of Responsibility: _____

Title: _____

Area of Responsibility: _____

Title: _____

Area of Responsibility: _____

Title: _____

Area of Responsibility: _____

Additional functional responsibilities:

Please list those additional functional areas for which you are responsible:

7. Please list all higher education or business professional affiliations you are a member of on behalf of your institution:

Organization	Member since

8. If you are a member of National Association of College Auxiliary Services (NACAS) please answer the following:

- | | |
|---|-----|
| A) Do you visit the NACAS website? | Y/N |
| B) Do you attend annual meetings, national or regional? | Y/N |
| C) Do you participate in eGroup discussions? | Y/N |
| D) Do you utilize the listserv? | Y/N |

9. What is your current annual FTE?

- ☐ Less than 2,000 students
- ☐ Between 2,000 and 5,000

☐ Between 5,000 and 10,000

☐ Over 10,000

10. For the next four questions, rank the following areas from 1 (most important) to 10 (least important):

What are the auxiliary service issues most challenging to your community college?	
<i>Issue</i>	<i>Rank 1 – 10 (One being most important)</i>
Certifications	
Parking and Transportation	
Card systems	
Bookstores	
Dining and food service	
Facilities management	
Marketing and communications	
Student unions	
Print and mail services	
Sustainability efforts	
Other:	
Other:	
Other:	

What identified issues are expected to increase in importance over the next five years?	
<i>Issue</i>	<i>Rank 1 – 10 (One being most important)</i>
Certifications for staff members	
Parking and Transportation	
Card systems	
Bookstores	
Dining and food service	
Facilities management	
Marketing and communications	
Student unions	
Print and mail services	
Sustainability efforts	
Other:	
Other:	
Other:	

What identified issues/challenges demand the greatest amount of the auxiliary service leader's time?

<i>Issue</i>	<i>Rank 1 – 10 (One being most important)</i>
Certifications for staff members	
Parking and Transportation	
Card systems	
Bookstores	
Dining and food service	
Facilities management	
Marketing and communications	
Student unions	
Print and mail services	
Sustainability efforts	
Other:	
Other:	
Other:	

What identified issues currently require the largest expenditures in terms of human, operational, and fiscal resources in community college auxiliary departments?

<i>Issue</i>	<i>Rank 1 – 10 (One being most important)</i>
Certifications for staff members	
Parking and Transportation	
Card systems	
Bookstores	
Dining and food service	
Facilities management	
Marketing and communications	
Student unions	
Print and mail services	
Sustainability efforts	
Other:	
Other:	
Other:	

11. What place do auxiliary services hold in the organizational structure of the community college? *Please attach a copy of your institution's organizational chart and highlight where your position is located.*

12. Optional: Would you be willing to be interviewed? Y/N
If yes, complete the following:

Contact Name: _____

Institution: _____

Contact Number: _____

What is the best day and time if selected? _____

Thank you for taking the time from your busy schedule to complete this questionnaire. Your careful responses will provide substantive depth and clarity to this study.

Judith L. Mitchell

Doctoral Candidate in Community College Leadership

National Louis University

jlmitch@sbcglobal.net

815-405-5844

Appendix C

Informed Consent—Participant

Thank you for agreeing to participate in this study that will take place from October, 2010 to January, 2012. This form outlines the purposes of the study and provides a description of your involvement and rights as a participant.

I consent to participate in a research project conducted by Judith L. Mitchell, a doctoral student at National-Louis University, located in Chicago, Illinois.

I understand the study is entitled *Beyond Academics: Challenging Issues Facing Community College Non-Academic Support Services*. The purpose of this study is to explore significant emerging auxiliary service issues as identified by auxiliary service administrators in community colleges.

I understand that my participation will consist of audio recorded interviews lasting 60 to 90 minutes with a possible second, follow-up interview lasting 60 to 90 minutes. I understand that I will receive a copy of my transcribed interview at which time I may clarify information.

I understand that my participation is voluntary and can be discontinued at any time until the completion of the dissertation.

I understand that my anonymity will be maintained and the information I provide confidential. I understand that only the researcher, Judith L. Mitchell, will have access to a secured file cabinet in which will be kept all transcripts, audio recordings, documents and field notes from the interview(s) in which I participated.

I understand there are no anticipated risks or benefits to me, no greater than that encountered in daily life. Further, the information gained from this study could be used to assist in the identification of emerging non-academic support issues, in addition to giving guidance for institution-wide planning for budgeting and strategic planning purposes.

I understand that in the event I have questions or require additional information I may contact the researcher: Judith L. Mitchell, 1740 Edmonds Ave., New Lenox, IL 60451. Phone: 815.405.5844 or E-mail: jlmitch@sbcglobal.net.

If you have any concerns or questions before or during participation that you feel have not been addressed by the researcher, you may contact my Primary Advisor and Dissertation Chair: Dr. Rebecca S. Lake, National-Louis University (Chicago Campus), 122 S. Michigan Avenue, Chicago, IL 60603. Phone: 312-261-3534 or E-mail: rebecca.lake@nl.edu

Participant's Signature: _____ **Date:** _____

Researcher's Signature: _____ **Date:** _____

Appendix D

Face-to-Face Interview Questions

- 1) *Do auxiliary services affect your college's strategic planning process?*
- 2) *How do auxiliary services affect your college's budget planning process concerning revenues and expenses, (excluding personnel expenses)?*
- 3) *Do societal changes and technology advancements affect auxiliary services?*
- 4) *What measurement tools are used, if any, to monitor the success of auxiliary services?*
- 5) *What issues are significant for the administrator/director?*
- 6) *What issues are significant for the staff in those areas?*
- 7) *What are the fiscal challenges associated with each area?*
- 8) *How is the success of each department measured and reported to top-level administrators?*
- 9) *How do top-level administrators view the importance of auxiliary services?*

Appendix E

Confidentiality Agreement / Data Transcription

This confidentiality form articulates the agreement made between Judith L. Mitchell, the researcher, and [NAME OF INDIVIDUAL AND COMPANY OF A PROFESSIONAL TRANSCRIBER].

I understand and acknowledge that by transcribing the audio files provided to me by Judith L. Mitchell, that I will be exposed to confidential information about the research study and the research participants. In providing transcription services, at no time will I reveal or discuss any of the information of which I have been exposed.

In addition, at no time will I maintain copies of the electronic or paper documents generated. Further, upon completing each transcription, I agree to provide the electronic and paper documents to the researcher:

Judith L. Mitchell
1740 Edmonds Ave
New Lenox, IL 60451
815.405.5844
jlmitch@sbcglobal.net

I understand that breach of this agreement as described above could result in personal and professional harm to the research participants for which I will be held legally responsible.

Transcriptionist's Signature: _____ Date: _____

Researcher's Signature: _____ Date: _____

Appendix F

National Data and Non-Aggregate Data (Question #1)

National data and non-aggregate data for each of the four questions were obtained from the Survey Monkey website upon completion of the survey.

Question #1 – What are the auxiliary services issues most challenging to your community college?

	1	2	3	4	5	6	7	8	9	10	Response Count
Certifications for Staff Members	4.3% (1)	0.0% (0)	4.3% (1)	0.0% (0)	4.3% (1)	4.3% (1)	4.3% (1)	21.7% (5)	8.7% (2)	47.8% (11)	23
Parking and Transportation	26.9% (7)	7.7% (2)	3.8% (1)	3.8% (1)	7.7% (2)	3.8% (1)	7.7% (2)	11.5% (3)	11.5% (3)	15.4% (4)	26
Card Systems	8.7% (2)	26.1% (6)	4.3% (1)	17.4% (4)	4.3% (1)	8.7% (2)	4.3% (1)	4.3% (1)	8.7% (2)	13.0% (3)	23
Bookstores	13.0% (3)	21.7% (5)	13.0% (3)	8.7% (2)	8.7% (2)	13.0% (3)	8.7% (2)	8.7% (2)	4.3% (1)	0.0% (0)	23
Dining and Food Service	34.6% (9)	26.9% (7)	0.0% (0)	15.4% (4)	7.7% (2)	7.7% (2)	3.8% (1)	0.0% (0)	0.0% (0)	3.8% (1)	26
Facilities Management	8.3% (2)	4.2% (1)	25.0% (6)	4.2% (1)	16.7% (4)	20.8% (5)	0.0% (0)	8.3% (2)	12.5% (3)	0.0% (0)	24
Marketing and Communications	0.0% (0)	8.0% (2)	24.0% (6)	16.0% (4)	12.0% (3)	12.0% (3)	16.0% (4)	4.0% (1)	0.0% (0)	8.0% (2)	25
Student Unions	8.3% (2)	4.2% (1)	0.0% (0)	20.8% (5)	12.5% (3)	0.0% (0)	16.7% (4)	16.7% (4)	16.7% (4)	4.2% (1)	24
Print and Mail Services	0.0% (0)	0.0% (0)	17.4% (4)	4.3% (1)	8.7% (2)	13.0% (3)	26.1% (6)	4.3% (1)	17.4% (4)	8.7% (2)	23
Sustainability Efforts	8.0% (2)	4.0% (1)	12.0% (3)	12.0% (3)	12.0% (3)	16.0% (4)	8.0% (2)	16.0% (4)	12.0% (3)	0.0% (0)	25

Appendix G

Illinois Data and Non-Aggregate Data (Question #1)

Illinois data and non-aggregate data for each of the four questions were obtained from the Survey Monkey website upon completion of the survey.

Question #1 – What are the auxiliary services issues most challenging to your community college?

	1	2	3	4	5	6	7	8	9	10	Response Count
Certifications for staff members	0.0% (0)	0.0% (0)	0.0% (0)	4.5% (1)	9.1% (2)	13.6% (3)	13.6% (3)	22.7% (5)	13.6% (3)	22.7% (5)	22
Parking and transportation	4.3% (1)	17.4% (4)	4.3% (1)	13.0% (3)	8.7% (2)	4.3% (1)	0.0% (0)	8.7% (2)	30.4% (7)	8.7% (2)	23
Card systems	0.0% (0)	4.8% (1)	4.8% (1)	28.6% (6)	19.0% (4)	4.8% (1)	4.8% (1)	14.3% (3)	9.5% (2)	9.5% (2)	21
Bookstores	16.7% (4)	20.8% (5)	29.2% (7)	12.5% (3)	8.3% (2)	4.2% (1)	4.2% (1)	4.2% (1)	0.0% (0)	0.0% (0)	24
Dining and food service	12.0% (3)	16.0% (4)	16.0% (4)	16.0% (4)	4.0% (1)	12.0% (3)	12.0% (3)	0.0% (0)	8.0% (2)	4.0% (1)	25
Facilities management	45.8% (11)	12.5% (3)	12.5% (3)	8.3% (2)	4.2% (1)	0.0% (0)	8.3% (2)	0.0% (0)	0.0% (0)	8.3% (2)	24
Marketing and communications	8.3% (2)	4.2% (1)	8.3% (2)	8.3% (2)	16.7% (4)	4.2% (1)	16.7% (4)	12.5% (3)	8.3% (2)	12.5% (3)	24
Student unions	8.3% (2)	0.0% (0)	4.2% (1)	4.2% (1)	12.5% (3)	20.8% (5)	8.3% (2)	8.3% (2)	12.5% (3)	20.8% (5)	24
Print and mail services	0.0% (0)	4.0% (1)	12.0% (3)	4.0% (1)	12.0% (3)	12.0% (3)	20.0% (5)	16.0% (4)	8.0% (2)	12.0% (3)	25
Sustainability efforts	8.0% (2)	24.0% (6)	12.0% (3)	4.0% (1)	8.0% (2)	20.0% (5)	4.0% (1)	16.0% (4)	4.0% (1)	0.0% (0)	25

Appendix H

National Data and Non-Aggregate Data (Question #2)

National data and non-aggregate data for each of the four questions were obtained from the Survey Monkey website upon completion of the survey.

Question # 2 – What identified issues/challenges are expected to increase in importance over the next five years?

	1	2	3	4	5	6	7	8	9	10	Response Count
Certifications for Staff Members	5.3% (1)	0.0% (0)	5.3% (1)	0.0% (0)	0.0% (0)	5.3% (1)	15.8% (3)	10.5% (2)	21.1% (4)	36.8% (7)	19
Parking and Transportation	14.3% (3)	19.0% (4)	14.3% (3)	0.0% (0)	14.3% (3)	9.5% (2)	9.5% (2)	14.3% (3)	0.0% (0)	4.8% (1)	21
Card Systems	13.6% (3)	13.6% (3)	9.1% (2)	13.6% (3)	22.7% (5)	4.5% (1)	4.5% (1)	9.1% (2)	4.5% (1)	4.5% (1)	22
Bookstores	25.0% (6)	16.7% (4)	12.5% (3)	20.8% (5)	12.5% (3)	8.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	4.2% (1)	24
Dining and Food Service	17.4% (4)	21.7% (5)	21.7% (5)	17.4% (4)	8.7% (2)	8.7% (2)	0.0% (0)	0.0% (0)	4.3% (1)	0.0% (0)	23
Facilities Management	11.1% (2)	11.1% (2)	16.7% (3)	5.6% (1)	5.6% (1)	5.6% (1)	11.1% (2)	11.1% (2)	11.1% (2)	11.1% (2)	18
Marketing and Communications	0.0% (0)	10.0% (2)	5.0% (1)	15.0% (3)	20.0% (4)	15.0% (3)	10.0% (2)	10.0% (2)	10.0% (2)	5.0% (1)	20
Student Unions	5.3% (1)	5.3% (1)	5.3% (1)	10.5% (2)	0.0% (0)	21.1% (4)	10.5% (2)	10.5% (2)	15.8% (3)	15.8% (3)	19
Print and Mail Services	4.8% (1)	4.8% (1)	0.0% (0)	0.0% (0)	9.5% (2)	9.5% (2)	23.8% (5)	19.0% (4)	19.0% (4)	9.5% (2)	21
Sustainability Efforts	15.0% (3)	10.0% (2)	15.0% (3)	10.0% (2)	5.0% (1)	10.0% (2)	10.0% (2)	15.0% (3)	5.0% (1)	5.0% (1)	20

Appendix I

Illinois Data and Non-Aggregate Data (Question #2)

Illinois data and non-aggregate data for each of the four questions were obtained from the SurveyMonkey website upon completion of the survey.

Question # 2 – What identified issues/challenges are expected to increase in importance over the next five years?

	1	2	3	4	5	6	7	8	9	10	Response Count
Certifications for staff members	5.0% (1)	5.0% (1)	0.0% (0)	10.0% (2)	10.0% (2)	0.0% (0)	5.0% (1)	15.0% (3)	15.0% (3)	35.0% (7)	20
Parking and transportation	0.0% (0)	15.0% (3)	10.0% (2)	5.0% (1)	0.0% (0)	15.0% (3)	20.0% (4)	10.0% (2)	20.0% (4)	5.0% (1)	20
Card systems	5.0% (1)	15.0% (3)	15.0% (3)	30.0% (6)	0.0% (0)	0.0% (0)	10.0% (2)	20.0% (4)	5.0% (1)	0.0% (0)	20
Bookstores	22.7% (5)	4.5% (1)	27.3% (6)	9.1% (2)	18.2% (4)	4.5% (1)	4.5% (1)	4.5% (1)	4.5% (1)	0.0% (0)	22
Dining and food service	4.8% (1)	9.5% (2)	9.5% (2)	23.8% (5)	19.0% (4)	9.5% (2)	4.8% (1)	4.8% (1)	4.8% (1)	9.5% (2)	21
Facilities management	23.8% (5)	19.0% (4)	4.8% (1)	19.0% (4)	9.5% (2)	4.8% (1)	4.8% (1)	9.5% (2)	0.0% (0)	4.8% (1)	21
Marketing and communications	9.5% (2)	4.8% (1)	4.8% (1)	0.0% (0)	14.3% (3)	28.6% (6)	19.0% (4)	4.8% (1)	14.3% (3)	0.0% (0)	21
Student unions	0.0% (0)	20.0% (4)	5.0% (1)	0.0% (0)	5.0% (1)	5.0% (1)	15.0% (3)	15.0% (3)	5.0% (1)	30.0% (6)	20
Print and mail services	4.8% (1)	0.0% (0)	9.5% (2)	0.0% (0)	9.5% (2)	23.8% (5)	9.5% (2)	14.3% (3)	19.0% (4)	9.5% (2)	21
Sustainability efforts	33.3% (8)	16.7% (4)	20.8% (5)	8.3% (2)	8.3% (2)	0.0% (0)	4.2% (1)	0.0% (0)	8.3% (2)	0.0% (0)	24

Appendix J

National Data and Non-Aggregate Data (Question #3)

National data and non-aggregate data for each of the four questions were obtained from the SurveyMonkey website upon completion of the survey.

Question # 3 – What identified issues/challenges demand the greatest amount of the auxiliary service leader’s time?

	1	2	3	4	5	6	7	8	9	10	Response Count
Certifications for Staff Members	11.1% (2)	0.0% (0)	0.0% (0)	5.6% (1)	0.0% (0)	0.0% (0)	11.1% (2)	5.6% (1)	22.2% (4)	44.4% (8)	18
Parking and Transportation	9.5% (2)	14.3% (3)	4.8% (1)	4.8% (1)	19.0% (4)	9.5% (2)	14.3% (3)	0.0% (0)	14.3% (3)	9.5% (2)	21
Card Systems	15.0% (3)	10.0% (2)	15.0% (3)	10.0% (2)	20.0% (4)	0.0% (0)	10.0% (2)	0.0% (0)	10.0% (2)	10.0% (2)	20
Bookstores	30.4% (7)	26.1% (6)	4.3% (1)	13.0% (3)	8.7% (2)	13.0% (3)	0.0% (0)	0.0% (0)	0.0% (0)	4.3% (1)	23
Dining and Food Service	20.8% (5)	29.2% (7)	33.3% (8)	4.2% (1)	0.0% (0)	4.2% (1)	0.0% (0)	4.2% (1)	0.0% (0)	4.2% (1)	24
Facilities Management	16.7% (3)	5.6% (1)	16.7% (3)	5.6% (1)	11.1% (2)	16.7% (3)	5.6% (1)	11.1% (2)	11.1% (2)	0.0% (0)	18
Marketing and Communications	5.3% (1)	10.5% (2)	5.3% (1)	10.5% (2)	10.5% (2)	21.1% (4)	21.1% (4)	5.3% (1)	10.5% (2)	0.0% (0)	19
Student Unions	5.3% (1)	15.8% (3)	5.3% (1)	10.5% (2)	10.5% (2)	0.0% (0)	10.5% (2)	21.1% (4)	10.5% (2)	10.5% (2)	19
Print and Mail Services	0.0% (0)	0.0% (0)	11.1% (2)	16.7% (3)	5.6% (1)	5.6% (1)	22.2% (4)	22.2% (4)	11.1% (2)	5.6% (1)	18
Sustainability Efforts	5.6% (1)	0.0% (0)	5.6% (1)	22.2% (4)	11.1% (2)	22.2% (4)	0.0% (0)	22.2% (4)	5.6% (1)	5.6% (1)	18

Appendix K

Illinois Data and Non-Aggregate Data (Question #3)

Illinois data and non-aggregate data for each of the four questions were obtained from the Survey Monkey website upon completion of the survey.

Question # 3 – What identified issues/challenges demand the greatest amount of the auxiliary service leader’s time?

	1	2	3	4	5	6	7	8	9	10	Response Count
Certifications for staff members	10.0% (2)	0.0% (0)	5.0% (1)	0.0% (0)	15.0% (3)	5.0% (1)	10.0% (2)	5.0% (1)	10.0% (2)	40.0% (8)	20
Parking and transportation	0.0% (0)	10.0% (2)	5.0% (1)	10.0% (2)	5.0% (1)	5.0% (1)	20.0% (4)	20.0% (4)	20.0% (4)	5.0% (1)	20
Card systems	0.0% (0)	5.0% (1)	10.0% (2)	25.0% (5)	5.0% (1)	0.0% (0)	10.0% (2)	10.0% (2)	30.0% (6)	5.0% (1)	20
Bookstores	30.0% (6)	20.0% (4)	5.0% (1)	25.0% (5)	5.0% (1)	10.0% (2)	0.0% (0)	0.0% (0)	5.0% (1)	0.0% (0)	20
Dining and food service	15.0% (3)	35.0% (7)	10.0% (2)	0.0% (0)	15.0% (3)	10.0% (2)	10.0% (2)	5.0% (1)	0.0% (0)	0.0% (0)	20
Facilities management	41.7% (10)	8.3% (2)	20.8% (5)	8.3% (2)	0.0% (0)	0.0% (0)	4.2% (1)	4.2% (1)	0.0% (0)	12.5% (3)	24
Marketing and communications	0.0% (0)	5.0% (1)	25.0% (5)	15.0% (3)	5.0% (1)	25.0% (5)	5.0% (1)	20.0% (4)	0.0% (0)	0.0% (0)	20
Student unions	0.0% (0)	5.0% (1)	0.0% (0)	10.0% (2)	15.0% (3)	5.0% (1)	10.0% (2)	10.0% (2)	25.0% (5)	20.0% (4)	20
Print and mail services	4.8% (1)	9.5% (2)	9.5% (2)	0.0% (0)	9.5% (2)	14.3% (3)	23.8% (5)	14.3% (3)	0.0% (0)	14.3% (3)	21
Sustainability efforts	12.0% (3)	20.0% (5)	16.0% (4)	4.0% (1)	16.0% (4)	16.0% (4)	0.0% (0)	8.0% (2)	8.0% (2)	0.0% (0)	25

Appendix L

National Data and Non-Aggregate Data (Question #4)

National data and non-aggregate data for each of the four questions were obtained from the SurveyMonkey website upon completion of the survey.

Question # 4 – What identified issues/challenges currently require the largest expenditures in terms of human, operational and fiscal resources in community college auxiliary departments?

	1	2	3	4	5	6	7	8	9	10	Response Count
Certifications for Staff Members	10.0% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	5.0% (1)	25.0% (5)	10.0% (2)	50.0% (10)	20
Parking and Transportation	4.8% (1)	9.5% (2)	19.0% (4)	14.3% (3)	14.3% (3)	4.8% (1)	4.8% (1)	9.5% (2)	9.5% (2)	9.5% (2)	21
Card Systems	14.3% (3)	14.3% (3)	4.8% (1)	14.3% (3)	4.8% (1)	4.8% (1)	9.5% (2)	14.3% (3)	9.5% (2)	9.5% (2)	21
Bookstores	24.0% (6)	12.0% (3)	28.0% (7)	8.0% (2)	8.0% (2)	8.0% (2)	8.0% (2)	0.0% (0)	0.0% (0)	4.0% (1)	25
Dining and Food Service	34.8% (8)	26.1% (6)	8.7% (2)	13.0% (3)	0.0% (0)	0.0% (0)	0.0% (0)	13.0% (3)	0.0% (0)	4.3% (1)	23
Facilities Management	15.0% (3)	30.0% (6)	5.0% (1)	5.0% (1)	10.0% (2)	20.0% (4)	5.0% (1)	0.0% (0)	10.0% (2)	0.0% (0)	20
Marketing and Communications	5.0% (1)	0.0% (0)	20.0% (4)	5.0% (1)	5.0% (1)	15.0% (3)	30.0% (6)	5.0% (1)	15.0% (3)	0.0% (0)	20
Student Unions	5.3% (1)	5.3% (1)	5.3% (1)	10.5% (2)	15.8% (3)	21.1% (4)	5.3% (1)	5.3% (1)	21.1% (4)	5.3% (1)	19
Print and Mail Services	4.5% (1)	4.5% (1)	9.1% (2)	13.6% (3)	9.1% (2)	4.5% (1)	13.6% (3)	9.1% (2)	18.2% (4)	13.6% (3)	22
Sustainability Efforts	0.0% (0)	0.0% (0)	5.0% (1)	10.0% (2)	30.0% (6)	20.0% (4)	15.0% (3)	15.0% (3)	5.0% (1)	0.0% (0)	20

Appendix M

Illinois Data and Non-Aggregate Data (Question #4)

Illinois data and non-aggregate data for each of the four questions were obtained from the SurveyMonkey website upon completion of the survey.

Question # 4 – What identified issues/challenges currently require the largest expenditures in terms of human, operational and fiscal resources in community college auxiliary departments?

	1	2	3	4	5	6	7	8	9	10	Response Count
Certifications for staff members	4.8% (1)	4.8% (1)	0.0% (0)	9.5% (2)	0.0% (0)	4.8% (1)	14.3% (3)	4.8% (1)	28.6% (6)	28.6% (6)	21
Parking and transportation	0.0% (0)	9.1% (2)	9.1% (2)	13.6% (3)	13.6% (3)	9.1% (2)	9.1% (2)	13.6% (3)	18.2% (4)	4.5% (1)	22
Card systems	0.0% (0)	9.5% (2)	28.6% (6)	4.8% (1)	4.8% (1)	0.0% (0)	9.5% (2)	19.0% (4)	14.3% (3)	9.5% (2)	21
Bookstores	26.1% (6)	13.0% (3)	8.7% (2)	8.7% (2)	8.7% (2)	13.0% (3)	4.3% (1)	13.0% (3)	4.3% (1)	0.0% (0)	23
Dining and food service	0.0% (0)	27.3% (6)	18.2% (4)	9.1% (2)	13.6% (3)	9.1% (2)	13.6% (3)	0.0% (0)	9.1% (2)	0.0% (0)	22
Facilities management	54.2% (13)	4.2% (1)	8.3% (2)	8.3% (2)	4.2% (1)	8.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	12.5% (3)	24
Marketing and communications	9.1% (2)	13.6% (3)	9.1% (2)	22.7% (5)	9.1% (2)	13.6% (3)	9.1% (2)	0.0% (0)	13.6% (3)	0.0% (0)	22
Student unions	0.0% (0)	10.5% (2)	5.3% (1)	10.5% (2)	5.3% (1)	10.5% (2)	5.3% (1)	26.3% (5)	0.0% (0)	26.3% (5)	19
Print and mail services	8.7% (2)	0.0% (0)	17.4% (4)	8.7% (2)	17.4% (4)	13.0% (3)	17.4% (4)	8.7% (2)	0.0% (0)	8.7% (2)	23
Sustainability efforts	4.2% (1)	16.7% (4)	8.3% (2)	12.5% (3)	12.5% (3)	8.3% (2)	12.5% (3)	12.5% (3)	8.3% (2)	4.2% (1)	24