

THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM
CRITICAL SUCCESS FACTOR 1 AND THE ASSOCIATION WITH
LEADERSHIP STYLES PRACTICED BY NORTH CAROLINA
COMMUNITY COLLEGE PRESIDENTS

A Dissertation by
JONATHAN DAVID HAUSER

Submitted to the Graduate School
Appalachian State University
In partial fulfillment of the requirement for the degree of
DOCTOR OF EDUCATION

December 2010
Doctoral Program in Educational Leadership
Reich College of Education

THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM CRITICAL
SUCCESS FACTOR 1 AND THE ASSOCIATION WITH LEADERSHIP STYLES
PRACTICED BY NORTH CAROLINA COMMUNITY COLLEGE PRESIDENTS

A Dissertation
By
JONATHAN DAVID HAUSER
December 2010

APPROVED BY:

Jim Killacky, Ed. D.
Chairperson, Dissertation Committee
Director of Doctoral Program

Les Bolt, Ph.D.
Member, Dissertation Committee

Patricia Mitchell, D.P.A.
Member, Dissertation Committee

Edelma D. Huntley, Ph.D.
Dean, Research and Graduate Studies

Copyright by Jonathan David Hauser 2010
All Rights Reserved

ABSTRACT

THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM CRITICAL SUCCESS FACTOR 1 AND THE ASSOCIATION WITH LEADERSHIP STYLES PRACTICED BY NORTH CAROLINA COMMUNITY COLLEGE PRESIDENTS (December, 2010)

Jonathan David Hauser, B.S.E.T., University of North Carolina at Charlotte

M.Ed. North Carolina State University

Chairperson: Jim Killacky

This study examined the association between the North Carolina Community College System's Critical Success Factors - Factor 1: Core Indicators of Student Success, and the practiced leadership styles of North Carolina community college presidents.

The mixed-method research design involved a constructive epistemology. The first stage used quantitative research to gather and analyze data from the Leadership Competence Assessment Instrument and the North Carolina Community College System Annual Reports (2007 – 2009). The second stage used qualitative research to develop interview questions for selected presidents based on the results of the first stage. The third and final stage for this research was comprehensive and combined strategies, approaches, and methods from stages one and two.

Two groups of presidents were studied. One consisted of presidents whose colleges had met the Core Indicators of Student Success. The second comprised of presidents whose colleges had not met the Core Indicators of Student Success. Thirty-five of the 58 presidents participated, a rate of 60.3%, in completing the Leadership

Competencies Assessment Instrument. Respondents identified the relative importance of specific leadership competencies by completing a Likert-type scale of 46 items, grouped into three functional leadership areas: (a) roles, (b) values, and (c) skills. There were significant differences detected in some individual competencies, suggesting that years of experience may have an influence on meeting the Core Indicators of Student Success.

Leadership styles practiced by North Carolina community college presidents remain complex issues that warrant additional research. Results indicate there is a clearly identified need to focus on quality instruction and services for students at individual North Carolina community colleges. While meeting the Core Indicators of Student Success is valuable to colleges, this study did not reveal CISS to be an important part of the vision, mission, or goals of North Carolina community colleges. Results also indicate that while significant responsibilities are placed upon the presidents of North Carolina community colleges, there appears to be sufficient support at many colleges, both in resources and instructional level, to meet either current or anticipated needs for students to succeed, specifically at the presidential level.

Recommendations for future research include: 1) exact replication studies using a different kind of scale on the Leadership Competency Assessment Instrument; 2) studies designed to replicate the research questions used in this study, but drawing samples from other college administrators; 3) how performance-based funding would apply to colleges meeting the CISS and those colleges not meeting the CISS.

ACKNOWLEDGMENTS

Philippians 4:13 - I can do all things through Christ who strengthens me.

I acknowledge and dedicate this effort to my wife, Robin, whose encouragement, motivation, consideration, and guidance inspired me to complete this program. She is the love of my life and my eternal mate who sacrificed the time we would have spent together for this to become a reality. I would also like to acknowledge and express my love to my stepchildren, Logan and Carter for being supportive and giving unconditional love.

I wish to thank my brothers and sister, Jimmy, Jeff, and Dianne for their support and love. Thanks for taking care of our mother and for allowing me time to focus on this research.

I would like to extend my appreciation to my committee members Dr. Patricia Mitchell, Dr. Jim Killacky, and Dr. Les Bolt who provided excellent counsel regarding this research and accommodated me from their busy schedule for my research. A special thanks to Dr. Patricia Mitchell for friendly advice and guidance during my professional career. I greatly appreciate the strong co-operation of Dr. George Baker for being able to access the Leadership Competency Assessment Instrument.

I would like to acknowledge and express my love for my parents, Rosa and Wade Hauser, for all things they made possible for me. This is completed in memory of my father and in honor of my mother.

TABLE OF CONTENTS

ABSTRACT.....	iv
ACKNOWLEDGMENTS	vi
LIST OF TABLES	xii
LIST OF FIGURES	xiii
CHAPTER 1. INTRODUCTION TO THE ISSUE	1
Problem Statement	4
Research Question	4
Methodology	5
Significance of Issue.....	8
Definition of Terms.....	11
Organization of the Study	12
CHAPTER 2. REVIEW OF THE LITERATURE	14
Classic Leadership Theories	14
Trait Theories.....	16
Behavioral Theory	17
Situational (Contingency) Theory.....	19
Levels of Analysis in Leadership Theory	22
Leadership Connected to Higher Education Organizations.....	26
Leadership Challenges in Community Colleges.....	28
The Path-goal Theory	34

The Leadership Competencies Assessment Instrument (LCAI).....	36
Leadership Roles.....	37
Leadership Values.....	40
Leadership Skills.....	41
Leader and Follower – A Critical Path	44
Conceptual Framework.....	45
Summary	47
CHAPTER 3. IMPORTANT CONSTRUCTS FOR THE RESEARCH	
METHODOLOGY	49
Problem Statement and Research Questions.....	49
Research Design.....	51
Design Rationale.....	54
Role of the Researcher	55
Ethical Issues	56
Data Sources	57
Data Collection	58
Participants / Participant Selection	58
Interview Protocol.....	59
IRB Procedures	61
Data Coding / Analysis	62
Trustworthiness.....	63
Summary	64
CHAPTER 4. FINDINGS	66
Introduction.....	66

Participants.....	66
Findings.....	67
Research Question 1	67
Methodology.....	67
Procedure	69
Findings.....	70
Summary.....	76
Research Question 2	78
Methodology.....	78
Procedure	79
Findings.....	79
Motivating Employees	80
Making Effective Decisions.....	81
Visioning.....	82
Allocating Resources	83
Communicating Effectively	84
Behaving in Fair and Consistent Manner.....	85
Summary.....	87
Summary.....	88
CHAPTER 5. ANALYSIS.....	90
Introduction.....	90
Analysis Link with Literature / Research	90
Link to Research	90

Motivating Employees	94
Making Effective Decisions.....	95
Visioning.....	95
Allocating Resources	96
Communicating Effectively	97
Behaving in a Fair and Consistent Manner.....	98
Links to Literature.....	98
Limitations	99
Survey Method.....	100
Research Participants	100
Performance Funding.....	101
Revisiting the Framework.....	101
Implications.....	102
North Carolina Community College System Administrators	103
Board of Trustees	103
Presidents and Future Leaders	104
Reporting Groups of the CISS	105
Further Research	106
Survey Method.....	107
Research Participants	107
Performance Funding.....	108
Conclusion	108
REFERENCES	110

APPENDIX A: North Carolina Administrative Code	123
APPENDIX B: North Carolina Community College System Strategic Plan	125
APPENDIX C: North Carolina Community College System Critical Success Factors	129
APPENDIX D: NCCCS CSF – Factor 1. Core Indicators of Student Success	131
APPENDIX E: Permission to use LCAI Letter	132
APPENDIX F: Appalachian State University IRB Approval Letter	133
APPENDIX G: President Interview Questions.....	134
APPENDIX H: Letter for Participation in Survey.....	136
APPENDIX I: Participant Introductory Letter for Interviews	137
APPENDIX J: Informed Consent.....	139
BIOGRAPHICAL SKETCH	140

LIST OF TABLES

Table 1. Participants' Years of Employment at Current College ($N = 35$).....	71
Table 2. Years of Experience as a President at Any College ($N = 35$).....	72
Table 3. Enrollment Size of Participants' Colleges ($N = 35$)	73
Table 4. Leadership Competencies Assessment Instrument Mean Responses by Item	75
Table 5. A Comparison of Means by President Responses on the LCAI in relation to CISS	76
Table 6. Presidents Profile of Interview Participants.....	78

LIST OF FIGURES

Figure 1. Mintzberg's Managerial Roles.....	19
Figure 2. Path-goal Leadership Theory	36
Figure 3. LCAI Comparison of Mintzberg (1973) and Baker & Associates (1998) leadership roles. (Adapted from Hugh and Hickson (1989) and Baker & Associates (1998))	38

CHAPTER 1: INTRODUCTION TO THE ISSUE

This research explored the association between the North Carolina Community College System's Critical Success Factors - Factor 1: Core Indicators of Student Success, and the practiced leadership styles of North Carolina community college presidents. First mandated by the North Carolina General Assembly in 1989 (S.L. 1989; C. 752; S. 80) (Appendix A), the Critical Success Factors have evolved into the *major accountability document* for the North Carolina Community College System. The purpose of the Critical Success Factors is twofold: first, they are the means by which the community college system reports on performance measures, referred to as core indicators of success, for purposes of accountability and performance funding; second, the Critical Success Factors serve as an evaluation instrument for the North Carolina Community College System Strategic Plan (Appendix B). The Critical Success Factors (Appendix C) are comprised of five factors: 1) core indicators of student success; 2) workforce development; 3) diverse populations' learning needs; 4) resources; and 5) technology. Factor 1 of the CSF is the measure that is institutionally focused and affects performance funding for colleges. The purpose of Factors 2 through 5 of the CSF is to monitor the progress of the North Carolina Community College System (NCCCS) in achieving the objectives in the strategic plan.

This research focused on Factor 1: Core Indicators of Student Success (Appendix D), a defined standard measure of performance to ensure public accountability for

programs and services offered by community colleges in North Carolina. Factor 1: Core Indicators of Student Success (CISS) are:

1. Progress of Basic Skills Students
2. Passing Rates on Licensure and Certification Examinations
3. Performance of College Transfer Students
4. Passing Rates of Students in Developmental Courses
5. Success Rates of Developmental Students in Subsequent College-Level Courses
6. Satisfaction of Program Completers and Non-Completers
7. Curriculum Student Retention, Graduation, and Transfer
8. Client Satisfaction with Customized Training

Any college meeting the eight performance measures in Factor 1 receives designation as an *Exceptional Institutional Performance*. Any college achieving this designation receives additional funding. Those colleges not meeting a performance measure are required to submit to the State Board of Community Colleges an action plan for improving performance.

The literature pertaining to the North Carolina Community College System Critical Success Factors is discussed, a literature review on leadership and leadership styles is presented, and a review of the theoretical framework for the Leadership Competencies Assessment Instrument (Appendix E), a survey used to identify leadership styles most often used by presidents, are presented in this study. Additionally, this study reviewed existing research on the effect that an institution's presidential leadership style has on meeting the institution's Critical Success Factor – Factor 1: Core Indicators of

Student Success. A mixed methods research design used quantitative and qualitative methods to obtain the best and most useful information for this study. The results of this study offer practical information for use by leaders to assist current and aspiring community college leaders to understand the importance of leadership styles and institutional success.

For the purpose of this study, the leadership practices of two groups were explored using the Leadership Competencies Assessment Instrument (LCAI) quantitative data to develop interview questions to gather qualitative information from the two groups of interviewees. The first group consisted of presidents of North Carolina community colleges whose colleges had met Factor 1: Core Indicator of Student Success (CISS). The second group consisted of the presidents of North Carolina community colleges whose colleges had not met the CISS. The NCCCS has 58 community colleges and the study focused on all fifty-eight institutions. Participants were asked to complete a LCAI. The LCAI, based on the work of Mintzberg and Drucker (as cited in Athans, 2000; Baker & Associates, 1998) in managerial roles, is intended to measure the leadership competencies of community college presidents. The primary purpose of the LCAI was to evaluate the importance of these competencies to self-assess a president's individual leadership skills. The responses from the LCAI provided the data from which to develop the questions for the one-to-one interviews to qualitatively seek a deeper understanding of what leadership style a particular president normally (or "most often") uses and how the leadership style practiced relates to successfully meeting the CISS.

A mixed method research design included quantitative and qualitative research data, techniques. The mixed method research used quantitative data from the LCAI for

the first stage of the research study. The second stage of the research study used qualitative data from the one-to-one interviews from stage one to develop additional interview questions to supplement the baseline questions. The third stage of the research study combined the quantitative data and qualitative information from stages one and two to produce the outcomes of the study. It was anticipated that, for each of the two interviewed president groups, there would be differences in leadership styles practiced by presidents of community colleges who have met the CISS and presidents of community colleges who have not met the CISS.

Problem Statement

While a body of literature demonstrates there is agreement among scholars that successful leadership styles are of crucial importance to those who will lead 21st century community colleges (American Association of Community Colleges, 2005), there is little investigation into or awareness of the role that presidential leadership styles play in affecting the CISS. Factor 1 (CISS) of the five North Carolina College Systems Critical Success Factors is the factor that is a significant measure of success for a community college. While there is significant research addressing leadership theories, concepts, and practices within many different contexts, there exists negligible literature addressing the impact a community college president's leadership style has on the major accountability document of the community colleges, i.e., the CISS.

Research Question

Mixed methods research uses multiple approaches in answering research questions, rather than restricting or constraining the choices of a researcher. "Mixed method is inclusive, pluralistic, and complementary, and it suggests that researchers take

an eclectic approach to method selection and the thinking about and conduct of research” (Johnson & Onwegbuzie, p. 17, 2004).

The purpose of this study was to determine if the colleges who have met the CISS among North Carolina community colleges have different leadership styles practiced by their presidents than of those college presidents who colleges have not met the CISS. The following research questions were addressed:

1. Do leadership styles practiced by North Carolina community college presidents whose college has successfully met the CISS differ from those leadership styles practiced by presidents whose college has not met the CISS?
2. What core values and/or competencies of Baker & Associates’ LCAI Model (1998) does a particular president normally (or “most often”) use whose college has met the CISS and whose college has not met the CISS?

Methodology

The methodology section of this study includes a review of the problem and central research question, and information regarding the research design, data collection, data analysis, and trustworthiness (reliability of the data analysis) of the study. This mixed-method research explored the association between the North Carolina Community College System’s Critical Success Factors – Factor 1: Core Indicators of Student Success, and the practiced leadership styles of North Carolina community college presidents.

Yin (1984) referred to research design as a plan for getting from here to there with the ‘here’ as the questions and the ‘there’ as an established conclusion or conclusions about the question. This mixed-method research design involved a constructive

epistemology, meaning that knowledge of this research is constructed from multiple research methods. The constructive approach was used to develop knowledge from human construction from the one-to-one interviews.

This study used three stages of research. Stage one employed quantitative methods, stage two used qualitative methods, and stage three combined stages one and two to maximize the information from both stages. Stage one involved gathering quantitative data from the LCAI surveys that served as the baseline data for building the research database. Gall, Gall, and Borg (2003) assert that quantitative research relies on numerical data and statistical methods of data analysis to study representative samples or a complete population in order to make broad, well-grounded generalizations. These authors believe quantitative research requires the ability to use sampling techniques, to define and measure variables, to create a research design, and to conduct statistical analyses. The North Carolina Community College System Annual Reports (2007 – 2009) and the LCAI provided the quantitative data for this study for a statistical analysis.

Stage two of this study used qualitative research methods to gain a rich description of the practiced leadership styles of North Carolina community college presidents. The interview questions in this stage were developed from stage one data from the LCAI. Taylor and Bogdan (1998) posit that qualitative research is used to identify with people “in order to understand how those people see things . . . develop concepts, insights, and understandings from patterns in the data rather than collecting data to assess preconceived models, hypotheses, or theories” (p. 7). The human practice of leadership styles among community college presidents is a reality that is constructed in and out of interaction between other human beings and their college. All knowledge and

meaningful reality are developed and transmitted within an essentially social context. Patton (2002) contends that qualitative research interview format is not so tightly structured because the researcher's goal is to help respondents express their view of a particular interest to the researcher in their own terms. The qualitative stage of this study incorporated one-on-one interviews with three presidents whose colleges have met the CISS and three whose colleges have not met the CISS.

The final stage of this study blended the data and information from stages one and two for a mixed methods research design. According to Brewer and Hunter (1989), mixed method research is a way to produce results with complementary strengths and non-overlapping weaknesses for the reader to develop new knowledge about the practiced leadership style of North Carolina community college president's effect on meeting the institution's Critical Success Factor – Factor 1: Core Indicators of Success.

Considering mixed methods as the design rationale, the sources from which I gathered data were:

1. North Carolina Community College System Annual Reports (2007 – 2009);
2. Leadership Competencies Assessment Instrument (LCAI) of the fifty-eight North Carolina Community College presidents;
3. Two groups of presidents were interviewed. Group one, one-on-one, interviews with three presidents of those colleges who have met the CISS. Group two, one-on-one, interviews with three presidents of those colleges who have not met the CISS.
4. The journal from the one-to-one interviews from each of the two groups of interviewed presidents.

The quantitative responses from the LCAI helped assess the leadership style a particular president normally (or “most often”) uses and how the leadership style practiced correlates to successfully meeting the CISS. The qualitative interview questions were formulated from the LCAI data for both groups of presidents to be interviewed.

Significance of Issue

Higher Education of a different kind will be needed if a new generation of North Carolinians is to become productively employed and find satisfaction in a world dominated by new technology, global competitiveness, and changing work environments (Friedman, 2005). In 1961, Edmund Gleazer, then of the American Association of Community Colleges (AACC), predicted that changing demographics, technological advancements, and a global economy would be issues community colleges have to face in the future (Roueche, Baker, & Rose, 1989). Today, higher education, moreover, isn't something that only 17 year-olds and their parents need to worry about. In the information age, we all depend on colleges and universities to produce groundbreaking research and new inventions, to serve as engines of social mobility for first-generation college students, and to mold the minds of future leaders. The pace of change for community colleges present enormous challenges faced by community college leaders (Roueche et.al., 1989).

Maintaining and adjusting to the pace of change of community college leaders who operate within a system that includes realities, expectations, perceptions, needs (economic and social), and other influences specific to the community college environment requires keeping pace with cyclical economic conditions (Dupuis, 2009). For example, the economic downturn in 2009 resulted in the abrupt layoff of skilled labor

across North Carolina which led to increased enrollments at community colleges with restricted financial resources to operate those colleges. Individuals affected by the layoff often turn to community colleges for immediate re-training in new or emerging technologies. Dupuis (2009) continued by pointing out that community colleges are continuously expected to provide up-to-date training that is available and accessible and to prioritize training to keep pace with cyclical economic conditions. North Carolina Community College System's Core Indicators of Student Success, closely aligned with business and industry perspectives, provide information to link business and industry needs with institutional performance. Community college presidents, charged with maximizing performance, need exceptional leadership skills to ensure organizational efficiency and effectiveness in meeting the Core Indicators of Student Success to support the pace of change of 21st century colleges.

In a region where the community college is often viewed as the focal point to new skills and knowledge, how does an effective leadership style employ missions, objectives, and goals to aid in providing its' region social mobility, a skilled workforce, and services to the community? Roueche, Richardson, Neal, & Roueche (2008) posit the key to success in the 21st century is alignment – staying in alignment with a world that will be characterized by complexity, diversity, and pace of change. Rosenfeld (2001) suggests the aggressive, innovative, and collaborative community college often provides economic developers, chambers of commerce, and industry with opportunities to sustain an economy. While there is agreement among these and other scholars that successful leadership styles are of crucial importance to those who will lead 21st century community colleges, there is little investigation into or awareness of the role that presidential

leadership styles play in affecting the CISS. So how does the community college president transform campuses into lifelong learning cultures that are held accountable to measures such as the CISS?

The purpose of this study was to address the challenges characterized by the Critical Success Factors faced by community college presidents and to identify practiced leadership styles within the context of the affects on Core Indicators of Student Success (CISS). Additionally, this study had several other purposes:

1. To review pertinent literature on leadership;
2. To survey the presidents of the North Carolina community colleges to find out which leadership roles, skills, and values they practice;
3. To use the data collected to determine if the practiced leadership styles of North Carolina community college presidents differ from those presidents of institutions who have met the Core Indicators of Student Success and those who have not met the Core Indicators of Student Success;
4. To offer recommendations for future practice and research regarding practiced leadership styles of community college presidents and Core Indicators of Student Success.

Definition of Terms

This study used the following definitions:

Administrator: a person primarily responsible for developing and implementing policy, and planning and executing activities at a community college (Hood, 1997).

Board of Trustees (BOT): a select number of appointed or elected officials responsible for creating institutional policy (Chipps, 1989), also referred to as a governing board.

Change agent: a leader who aggressively promotes and enables the change process (McFarlin, 1997).

Community college: a two-year higher education institution accredited to award the Associate in Arts or the Associate in Science as its highest degrees (Cohen & Brawer, 2008).

Community college president: the senior decision-maker for a community college. See also CEO and president.

Core Indicator of Student Success: a set of 12 performance measures of accountability for North Carolina community colleges adopted in February 1999 by the NCGA and include them as the first factor of the Critical Success Factors report. In the 2007 Session, the North Carolina General Assembly approved modifications to the North Carolina Performance Measures as adopted by the State Board of Community Colleges on March 16, 2007. As a result, the number of performance measures was reduced to eight.

Critical Success Factors: is an annual publication report that provides performance data on the NC Community College System and, where appropriate, individual community colleges. The report, mandated by the NC General Assembly in 1989, is one of several System accountability tools.

Exceptional Institutional Performance: In 2007, the NC General Assembly approved modifications to the North Carolina Community College Performance Measures and Standards as recommended by the NC State Board of Community Colleges. The modifications, effective immediately, reduced the number of measures from 12 to 8. To qualify for the Exceptional Institutional Performance rating, colleges must meet or exceed all eight performance measures, cannot have any licensure exam (for which the college controls who takes the exam) with a passing rate of less than 70%, and the performance of students who transfer to a four-year institution must meet or exceed the performance level of native UNC students.

Higher Education: education beyond the secondary level, especially education at a college or university.

Leadership Competencies Assessment Instrument (LCAI): is a tool designed to measure leader competencies (Baker & Associates, 1998).

President: a generic title for the person responsible for leading a postsecondary education institution with degree-granting authority (Fisher, Tack, & Wheeler, 1988). See also CEO and community college president.

Organization of the Study

This chapter provided an introduction of the gap to identify practiced leadership styles of community college presidents and the effects on core indicators of student success. To support these critical questions, Chapter 1 also examined two purposes of the Critical Success Factors: first, they are the means by which the community college system reports on performance measures, referred to as core indicators of success, for purposes of accountability and performance funding; second, the Critical Success Factors

serve as an evaluation instrument for the North Carolina Community College System Strategic Plan.

This chapter introduced the questions for research methodology and the significance of the study. Finally, the chapter provided definitions of terms to clarify the terminology to be used in the study. Chapter 2 presents a literature review on leadership and leadership styles, and a review of the theoretical framework for the Leadership Competencies Assessment Instrument (LCAI).

Chapter 3, the methodology section, presents a review of the problem and central research question, the research design, data collection, data analysis, and trustworthiness used in this study. This mixed-method research explored the association between the North Carolina Community College System's Critical Success Factors – Factor 1: Core Indicators of Student Success, and the practiced leadership styles of North Carolina community college presidents.

Chapters 4 and 5 present the results of the study as well as analysis for linkage to literature and future recommendations of further studies.

CHAPTER 2: REVIEW OF THE LITERATURE

In this chapter, the literature pertaining to classic leadership theories, levels of analysis in leadership theories, challenges leaders face in community colleges, and a leadership competency assessment instrument are reviewed and lead to the conceptual framework for this study.

Classic Leadership Theories

Literature often relates to leadership as a human dimension that is difficult to define, quantify and qualify. This has baffled scholars for over seven decades of study. Scholars in the mid 1900s defined leadership in practical day-to-day terms. Such definitions include “directing the activities of a group” (Hemphill & Coons, 1957, p. 7); “interpersonal influence. . . toward the attainment of a specific goal/s” (Tannenbaum, Wescheler, & Massarick, 1961, p. 24); and “the initiation and maintenance of structure in expectation and interaction” (Stodgill, 1974, p. 411). Bennis and Nanus (1985) went so far as to conclude that “no clear and unequivocal understanding exists as to what distinguishes leaders from non-leaders, and perhaps more important, what distinguishes effective leaders from ineffective leaders” (p. 4). In subsequent years, scholars have described leadership using a broader perspective.

Attempts to understand leadership with different types of organizations have led researchers to develop a variety of theories. Two broad groups were developed by Birnbaum (1988) and Bensimon, Neumann, & Birnbaum (1989). The first group included

trait theories, behavioral theories, power and influence theories, cultural theories, and contingency theories. These theories involved governmental agencies, military units, corporations, etc., and were labeled as the more traditional organizations. The second group of leadership theories did not always follow suit to the traditional organizations. This group of theories included social exchange theory and organizational frames. Bensimon et al. (1989) identified this group as colleges and universities. Yukl (1994) relates that others have defined leadership in terms of traits, behaviors, perceptions, and interactions between individuals and positions.

Yukl (1998) has gone beyond these theories to classify leadership in terms of the level of analysis. Three domains, identified as dominant domains by Yukl (1998), classify leadership in terms of dyadic, group, and organizational processes. Peters and Austin (1985) maintained that leadership means “vision, cheerleading, enthusiasm, love, trust, nerve, passion, obsession, consistency, the use of symbols, paying attention as illustrated by the content of one’s calendar, out-and-out drama (and the management thereof), creating heroes at all levels, coaching, effectively wandering around, and numerous other things” (p.19).

Stephen Covey (in Hesselbein, Goldsmith, & Beckhard, 1996) asserted that leadership includes three basic functions of path-finding, aligning, and empowering. Path-finding, includes interconnecting one’s value system and vision with the needs of others through strategic planning. Aligning, consists of ensuring that an organization’s structure, systems, and processes all contribute to achieving the vision. Empowering means the co-mingling of each individual’s purpose and mission with the mission of the organization creates synergy.

Jago (1982) combined several perspectives when he claimed that leadership is both a process and a property. The process of leadership is utilization of non-coercive influence to direct and coordinate the activities of group members toward the accomplishment of group objectives. As a property, “leadership is a set of qualities or characteristics attributed to those who are perceived to successfully employ such influence” (p. 316).

Further, in literature with direct links to community college leaders, Roueche et al., (1989) posited that leadership is the “ability of an individual to influence the values, attitudes, beliefs, and actions of others by working with and through them in order to accomplish the college’s mission and purpose” (p. 5). Senge (1990), through his work with learning organizations, described leaders as “designers, stewards, and teachers” (p. 340).

Just as the definition of leadership varies widely, the construct of leadership has been approached from various theoretical frameworks. Historically, most leadership research can be classified into one of three major approaches: the trait approach, the behavioral approach, and the situational (contingency) approach. Each of these three major approaches will be described briefly.

Trait Theories

One of the earliest approaches for analyzing leadership was the trait or great man theory. This theory emphasized the personal qualities of leaders including intelligence, energy, self-confidence, initiative, empathy, patience, and persistence (Yukl, 1994). A basic assumption underlying trait research was that some people have traits that enable them to attain positions of leadership and to be effective in these positions (Yukl, 1998)

The trait theory differentiates leaders from followers as its name implies and can take any number of shapes and characteristics (Campbell, 2003). Bensimon et al. (1989) characterized these differentiating traits as: physical, personal preference, socially affluent, general intelligence, verbally fluent, knowledgeable, innovative, original, and cognitively complex.

Bass (1981) believed that although exemplary leaders may possess some of these characteristics, exemplary leaders who did not have these traits were not prohibited from leadership effectiveness. For this reason, researchers have been unsuccessful in determining the essential traits for success as a leader (Bass, 1981; Campbell, 2003). Therefore, based on the breadth of studies related to characteristics of leaders, trait theory does not receive a large amount of attention from researchers (Bensimon et. al., 1989).

Behavioral Theory

A second approach to leadership, the behavioral approach, also focused on the leader (Yukl, 1998). The primary difference between the trait theories and the behavioral theories is that the latter are concerned with what the leader does rather than who the leader is. The behavioral approach was prompted by the Hawthorne studies that were conducted at the Hawthorne Works Western Electric Plant in the late 1920's and the human resource movement. In the 1940's, Ohio State Leadership Studies were conducted in the area of leader behaviors. The researchers concluded from their studies that there were two main leadership behaviors: consideration and initiating structure. Consideration included behaviors such as warmth, mutual trust, and two-way communication and focused on group needs. Initiating structure included task-oriented behaviors (Kreitner & Kinicki, 1995). Duties, tasks, and behaviors demonstrated by a leader are the focus of

behavioral theories (Birnbaum, 1988). These behaviors have been used in many research studies and in evaluations of leaders by both superiors and subordinates.

Another group of researchers, Lewin, Lippitt, and White (1939), studied leadership and found that the behavior of the leader could substantially influence the climate and outcomes of the group. The behavioral theories have identified certain leadership styles as authoritarian, democratic, and laissez-faire (Bensimon et al., 1989). According to Lewin et al., (1939) and Bensimon et al., (1989) in their research, democratic leadership produced group cohesiveness, the greatest originality of input, and motivation to perform in the absence of the leader. Authoritarian leadership created more time on task but resulted in increased hostility, especially in the absence of the leader. Laissez-faire leadership led to poor performance, low morale, and lack of group unity. These same authors have also noted that leadership behavior can be task-oriented or relationship-oriented. Task-oriented stresses functions such as planning, directing, and coordinating to solve problems; relationship-oriented operates in a friendly, considerate, supportive, and open manner (Bensimon et al., 1989). Finding the right mix of these approaches is a problem that routinely confronts leaders; therefore, leaders should only emphasize accomplishment of tasks in certain situations while focusing on developing and maintaining group dynamics.

Mintzberg (1973) focused on what leaders actually do to identify the workplace activities of a leader. Through his research, he developed ten basic roles and placed them into three behavior categories: interpersonal, informational, and decisional. For each category, Mintzberg further delineates roles. The interpersonal categorical roles include figurehead, leader, and liaison; the informational categorical roles include monitor,

disseminator, and spokesman; the decisional roles include entrepreneur, disturbance handler, resource allocator, and negotiator.

Category I: Interpersonal	Category II: Informational	Category III: Decisional
Figurehead	Monitor	Entrepreneur
Leader	Disseminator	Disturbance Handler
Liaison	Spokesperson	Resource Negotiator

Figure 1. Mintzberg's Managerial Roles (1973)

Bass (1981), and Wood and Payne (1998), citing the work of Bozatzis, have listed as many 17 and 21 categories clustered in six categories. While these numbers and types of behaviors may vary, one factor remains constant. Linking certain behaviors to effective leadership is troublesome, since: “no agreement exists on categories among the many classification systems that have proposed. All of them assume that leaders are effective when they engage in those activities that are most important for the specific situation, so that effective and ineffective leadership changes as the situation changes” (Bensimon et al., 1989, p. 14).

Situational (Contingency) Theory

By the 1960's, leadership theorists began to question the efficacy of seeking the best set of traits or behaviors as indicators of leadership effectiveness, thus the situational or contingency approach surfaced. Theorists concluded that the determinants of leadership style should include the nature of the situation, the skills of the leader, and the abilities of the group members. One theorist, Fred Fiedler (1967), reinforced these findings with the development of his contingency model. He believed that there was a

distinction between leadership *behavior* and leadership *style*. Behavior referred to the leader's specific acts in the initiating structure mode. Style referred to the ways in which the leader motivates others' behavior in various interpersonal situations. Fiedler developed a simple trait measurement scale, which he called the least preferred co-worker (LPC) scale (Yukl, 1998). The LPC score, according to Fiedler (1978), indicates a leader's motive hierarchy. A leader with a high score is primarily motivated to have close, interpersonal relationships. A leader with a low LPC score is primarily motivated by achievement of tasks. According to Fiedler's model (1967), leader effectiveness is contingent upon an appropriate match between the leader's style and the degree to which he or she controls the situation. His research indicated that task-oriented leaders are more effective in high-control and low-control situations, and that relationship-oriented leaders are more effective in moderate-control situations. Fiedler's contingency model has made significant contributions to the study of leadership principles (Welch, 2002).

Vroom and Yetton (1973) focused their research on *decision-making* rather than styles of leadership. They described four categories of leader decision-making: autocratic, consultative, group, and delegated. Vroom and Yetton (1973) defined seven "problem attributes" which indicate situation variables influencing the decision process. These attributes are importance of quality, leader information, problem structure, subordinate acceptance important to implementation, subordinate acceptance expected if decision made independently, subordinate commitment to organizational goals, and the likelihood of subordinate conflict.

One result of Vroom and Yetton's (1973) research was the development of a decision-making tree, a type of flow chart, which could guide a leader in examining any

situation in terms of the attributes and provide a roadmap to navigate the needs of a specific situation. The researchers maintained that leaders normally use a range of decision-making styles along a continuum. Depending on the nature of the problem, the leader's style could range from unilateral decision-making on one end of the continuum, to shared decision making on the other end of the continuum.

Given this framework, Vroom and Yetton (1973) suggested five methods of leader decision-making including: (a) unilateral; (b) leader seeks information from subordinates, then makes decision alone; (c) leader consults with relevant subordinates individually, soliciting their ideas and suggestions, then makes the decision which may or may not reflect the subordinates' influence; (d) leader consults with the group to obtain their collective ideas through discussion, then makes the decision, which may or may not reflect the subordinates' influence; and (e) shared.

The Tri-Dimensional Leader Effectiveness Model, a situational approach to leadership developed by Hersey and Blanchard (1985, 1993), involves an inter-play among task behavior, relationship behavior, and the readiness of the followers. To describe their model, Hersey and Blanchard (1993) first utilized a two-dimensional model in which task behavior and relationship behavior are displayed on a grid from high to low and divided into four quadrants: high task, low relationship; high task, high relationship; high relationship, low task; and low task, low relationship. These quadrants relate to four basic leadership styles: telling, selling, participating, and delegating. In order to choose an appropriate style, the leader must consider the readiness of the followers. Readiness involves follower ability and willingness. Hersey and Blanchard (1993) combine ability and willingness into levels of readiness. The basic underlying premise of Hersey and

Blanchard's model is that there is no one best way to lead people. They propose that "the more leaders can adapt their behaviors to the situation, the more effective their attempts to influence become" (Hersey and Blanchard, 1985, p. 21). According to more recent literature, supporting the Hersey and Blanchard model, Campbell (2003) agrees that some leaders are successful because of the approach they used matched the situation that they were faced. This ability to rise to the occasion does not always exist in leaders and Campbell (2003) promoted the idea that leaders should stay away from those situations where they were unable to lead.

The contingency and behavioral theories are somewhat similar; both imply that effective leadership depends on the nature of the situation. Contingency theories also tend to focus on the external factors to the organization. Bensimon et al. (1989) explained that these theories attempted to show how leaders' behavior is formed and constrained by situations where leaders would experience pressures to conform to others' expectations, regulations, superiors, external environment, and orientation toward goals.

Based on the Fiedler research that was conducted during the 1970s, contingency theory focused on the relationship between leaders and their internal/external environments. Fiedler's research advocated placing a person where the needs matched the persons' leadership preference or style (Bass, 1981; Bensimon et al., 1989; Campbell, 2003).

Levels of Analysis in Leadership Theory

Leadership theory can also be categorized by the level of analysis (Yukl, 1998). This conceptual construct usually links leadership theory in terms of processes to only

one of three levels of analysis: dyadic processes, group processes, and organizational processes (Yukl, 1998).

Dyadic processes view the relationship between a leader and the person who is typically a follower. The crux of dyadic theories is centered on influential processes reciprocated between leader and follower. The conceptual framework of dyadic relationships includes key elements of how a leader establishes a cooperative, trusting relationship with a follower and secondly, how the leader influences a follower and promotes motivation and commitment. Even though dyadic relationships are multi-oriented, the single leader-follower relationship is the focal point of research.

Yukl (1998) states “influence is the essence of leadership” (p. 207). Influence is necessary in order to sell ideas, gain acceptance for plans, and establish support to help operationalize plans. “Power is the capacity to expect influence, but power alone cannot describe a leader’s effectiveness of influencing followers” (p. 207). Influence tactics or behaviors directly impact a leader’s managerial effectiveness. Yukl (1998) and many other researchers have agreed on nine proactive influence tactics pertinent to organizational managers. These nine influence tactics are rational persuasion, inspirational appeal, consultation, ingratiation, personal appeals, exchange coalition tactics, legitimating tactics, and pressure.

Inclusive of influential behaviors is House’s (1971) charismatic influence of leaders. Intrinsic forces of power, self-confidence, personal beliefs and ideals are evident in a charismatic leader and promote strong, influential tactics. Yukl (1998) reviews charismatic theories among the noted researchers. While there are similarities in the varying research works, there are also wide differences, especially in the type of

influence process identified. Psychoanalytical theory relates that the influence process is derived from personal identity. Conger (1989) supports the attribution theory of personal identity. Meindl's (1990) theory diverges towards a social heroic behavior leader.

Hannah, Woolfolk, and Lord (2009) put much less emphasis on personal identity and more emphasis on a leader's internal values, social identity, and a follower's self-efficacy.

Charisma (Yukl, 1998) seems to result from interpersonal attributes between a leader and a follower, reciprocated as much by the needs of the follower. The outcome of a charismatic leader can impact harsh consequences in an organization that may be evidenced by dominant egomaniacs, those who are self-servant to the demise of a group.

The second level of analysis is group process (Yukl, 1998). The two primary issues of group process are the leader's role in a task group and the group's effectiveness as a result of the leader's contributions. Yukl (1989) developed the multiple-linkage model to include four types of variables that demonstrated the effects of managerial behavior interfaced with situational behaviors that in turn may predict a group's performance. The four variables are managerial behaviors, intervening variables, criterion variables, and situational variables.

The key to the multiple-linkage model is that situational variables, or extrinsic and intrinsic rewards, policies, and resources, exert influence. Situational variables "constrain managerial behavior and moderate its effects, they directly influence intervening variables, and they determine the relative importance of the intervening variables" (Yukl, 1998, p. 276).

Another tentacle of group process within leadership processes is the use of teams and self-managed groups. Work groups influence team membership. Social identity, social pressure, and social contagion will occur apart from the formal group leader's actions. A skilled leader will shape social influences to support the desired objectives (Yukl, 1998).

An important aspect of group performance is that the leader must understand determinants of performance. The determinants directly link group members to the group's work. Member's commitment, ability, role, organizational skills, cooperation & teamwork, resources, and external relations with other non-group members will direct the performance of the workgroup (Yukl, 1998).

The third aspect of level of analysis is organizational processes. Yukl (1998) explains that the organizational level of analyses describes leadership as a process that occurs in a larger "open system" of which groups are a subsystem (p. 12). Critical to this process is the leader's ability to help the organization adapt to its environment and procure the resources necessary for survival. Between 1950 and 1980, research in organizational processes was directed with mid-level managers. More recently, the research has shifted to senior administrative management. Controversy exists as to whether or not leadership has a major influence on the organization's effectiveness (Yukl, 1998). However, when the constraints are eliminated, such as powerful stakeholders, culture, internal coalition, and limited resources, leaders actually demonstrate a moderately strong influence on an organization's performance.

Leadership Connected to Higher Education Organizations

The work of Bolman and Deal (1984) enabled Bensimon et al. (1989) to link four organizational frames to view leadership with the four models of higher education identified by Birnbaum (1988): bureaucratic, collegial, political, and anarchical. Linking the structural frame to the bureaucratic model, Bensimon et al. (1989) characterized the leader of higher education as one with great power and as the final decision-making authority. Logically, this person's ascendancy to the president or leader of the organization, coupled with the authority of the position, places them far above the average person. According to Baldrige, Curtis, Ecker, and Riley (1978), this leader is decisive, results-oriented, and committed to comprehensive planning. Birnbaum (1988) believes that a decisive, results-oriented, and committed to comprehensive planning leader is one that has the competencies of an institutional president.

Organizational charts are hierarchical in nature and are routinely used in community colleges (Birnbaum, 1988; Bensimon et al., 1989). They also focus on a means to meet budgets, using those resources to meet budgets, and intentions to the activities of the college (Birnbaum, 1988). Vaughan (1986) noted that a community college president possesses qualities of rationalization and good judgment to reach desired outcomes with solutions to defined problems.

The literature suggests that higher education organizations require an ability to deal with conflict, communicate with varied levels of power, and control certain types of information and manipulate organizational expertise (Bensimon et al., 1989). To be able to lead an institute of higher education, a president is characterized by certain qualities (Bensimon et al., 1989): "leader, educator, creator, initiator, wielder of power, office

holder, caretaker, inheritor, consensus seeker, persuader” (p. 58). These authors continue by saying the president is a mediator of keeping peace within the student body, faculty, trustees, and between and among them. Birnbaum (1988) agreed that persuasion and diplomacy are tactics to get things done with a need to compromise, but he also warned that the president or leader should not lose sight of the end product or goal within these political institutions.

These political institutions were first referred to by Cohen and March (1974) as organized anarchies. While the symbolic frame by Bolman and Deal (1984) and the anarchical institution (Birnbaum, 1988) parallel organized anarchies, higher education institutions can exhibit a form of organizational behavior that organizational theories cannot explain. Cohen and March (1974) explained that so many variables exist in higher education with faculty, students, legislators, donors, and resource allocations, fit in the situational leadership scenario and can change the outcomes of many of the institutions operations.

The literature suggests from this review that leaders in an organized anarchy depend on negotiation to reach the desired outcomes of the institution. However, Bensimon et al. (1989) posited that during negotiation a high-degree of subtlety is needed to bring about a sense of purpose and order through critically thinking about interpretation, varying viewpoints, and reinforcement of the institutional culture.

The symbolic frame and the organized anarchy frame raise serious issues about how leadership can impact an organization. According to Cohen and March (1974) the president of an institution is an illusion or simply a symbol – one having the ability to influence the organization. Bensimon et al. (1989) argued that the symbolic frame

challenges the notion that a leader has the power to make decisions to affect the organizational outcomes. They also questioned the belief of Cohen and March that certain attributes can help or hurt the success of leader.

Regardless of being depicted as symbolic or as “an illusion” (Cohen & March, 1974, p. 2), the president remains a fixture in higher education and the region it serves. The president as the most influential and prominent individual in an institution does and can make a difference (Birnbaum, 1988). As a leader this influence may occur due to a “style, an ability to cope, well-publicized actions on noncontroversial topics, and dramatic performances that emphasize the traits popularly linked to leadership, such as forcefulness, responsibility, courage, and decency” (Bolman & Deal, 1984, p. 184).

Leadership Challenges in Community Colleges

Community colleges have been leaders in educational needs of rural and urban communities since the mid-1900s. They have excelled by “devising new programs and adapting practices to meet the needs of previously underserved populations” (O’Banion, 1997, p. ix). The development and availability of well prepared leaders are vital to the continued success of community colleges and their students. The ability to cope with change and help individuals and companies prepare for change “in response to social, economic, and governmental transformation” has placed these institutions in high regard (Foote, 1998, p. 99).

The North Carolina Community College System (NCCCS) continually emphasizes to the North Carolina General Assembly (NCGA) that the community college plays an important role in closing the socio-economic gaps across the state. As funding allocations become increasingly tightened across North Carolina, the NCGA mandated

that the NCCCS become accountable for the state allocated funds (Brown, 2007). The *performance accountability measures* are the means by which the community college system reports on performance measures, referred to as core indicators of success, for purposes of accountability and performance funding; second, the Critical Success Factors serve as an evaluation instrument for the North Carolina Community College System Strategic Plan. Considering this, the NCCCS annual report of accountability is an additional performance measure on the college and ultimately another challenge for the leadership of the college.

The challenges that have faced community college leaders over the years are nothing new to this field of professionals. However, the challenges community colleges face now are different. A globalized economy is creating more hazards and opportunities for everyone, forcing organizations and communities to make dramatic improvements not only to compete and prosper but also to merely survive (Friedman, 2005). Technological changes, international economic integration, domestic maturation in countries such as China, and the collapse of communism are driving an unprecedented socio-economic transformation worldwide (Friedman, 2005). Performance of a North Carolina community college is another challenge that faces presidents. Any college meeting the eight performance measures in Factor 1 receive designation as an *Exceptional Institutional Performance*. Any college achieving this designation receives additional funding based on full-time equivalent (FTE) enrollments for the specific college. Those colleges not meeting a performance measure are required to submit to the State Board of Community Colleges an action plan for improving performance.

One difference in the 21st century is the impending retirements of the educators who helped create and establish community colleges in the 1960s and 1970s (Miles, 2003). According to the NC Community College System Personnel Survey Analysis (Brown, 2007), North Carolina community colleges need to position themselves to replace over one-third of its full-time faculty and staff over the next 10 years due to retirement. Flynn (2000) noted that community colleges had a uniqueness of “relationships, transactions, and interactions, individually and collectively . . . referred to as the organizational culture, that intangible, yet pervasive thing” (p. 37). This uniqueness was developed over several decades and now a number of changes, including retirements, are occurring simultaneously that are ultimately affecting the culture of community colleges.

The pressures of meeting accountability measures are different than in the 20th century. Now North Carolina community colleges are measured by their performance and held accountable to the State Board of Community Colleges, their Board of Trustees, and ultimately their communities. Consequently the leadership and staff of community colleges must think differently about continuous improvement processes to maintain a level of competitiveness and to receive additional funding to support the changing needs of the communities they serve.

Those community colleges who have adapted to the changing economic, social and culture environments have to be willing to change; “to go beyond repairs to the system to review the mission of the institutions . . . to reinvent the community college” (Boggs, 1994, p. 4). Included in this culture change, but not necessarily documented, is that “institutions of higher education no longer exist exclusively in the non-profit sector”

(Burke, 2002, p. 7). Institutions are becoming financially self-supporting due to the decrease of state funding available for supporting college's growth and expansion. This is yet another difference in the 21st century that has caused a stir and called into question the long-term survival of many community colleges (Burke, 2002). Consequently, the combination of cultures that has resisted change and community college presidents who have not been taught how to create change are a lethal recipe for some community colleges.

The value of community college presidents leadership styles are important traits. The relationship to Core Indicators of Student Success (CISS) is a gap that literature has yet to address. As leadership programs have developed recently, for much of the 20th century, institutions of higher education developed managers to manage larger organizations (Swanson & Holton III, 2001). Management schools emerged in almost every higher education program of study and large organizations encouraged thousands of people to learn management on the job. According to Kotter (1996) management schools created a gap because "people were taught little about leadership" (p. 27). No one agency, organization or government is at fault, but unfortunately, "this emphasis on management has been institutionalized . . . with a strong emphasis on management but not leadership, bureaucracy and an inward focus take over" (Kotter, p. 27).

Swanson and Holton (2001), based on the work of Mintzberg and others, defined the differences in management and leadership with managers focusing primarily on getting the job done – "maintaining the system – with a lesser concern with improving and changing the system" (p. 209). This duo continued by defining leadership tasks "as more focused on concerns about the future state of the system while not losing sight of

the present” (Swanson & Holton, 2001, p. 209). According to Roueche et al. (2008), community colleges, like many other sectors in American life, are experiencing a leadership gap as many current managers/leaders retire. Copa and Ammentorp (1997) informed that a transformational change with strong emphasis on leadership would require “a break with old paradigms . . . a change of mind as well as a change of practice” (p. 22). Moreover, the leadership skills now required have widened because of accountability demands, greater student diversity, advances in technology, and globalization. So now that differences are defined and higher education has changed, now is the time for presidents to lead and change the way institutions operate (Flamholtz & Randle, 1998). While classic literature is clarifying where the leadership gap has occurred, an examination of the relationship between leadership styles and exceptional performing institutions might provide additional information for those community colleges searching for answers of how to meet the CISS.

Based on the differences in 20th century and 21st century higher education institutions, Wheatley (1999) encourages leaders to not look backward toward the deteriorating plans, but to look to the future and set out to discover something new. Kotter (1996) and others describe the leadership gap as an individual and organizational issue. Changing the culture and vision of a college requires a leader who is a change agent. Clanon (1999) believes the type of change that community colleges should strive for in this economically distressed time encompasses a change in focus, practices, thinking, and the quality of interaction among the leaders of the college. He continues by identifying that transformation requires purpose, identity, values, and infrastructures that support the operating principles. Colleges cannot expect immediate results, because

genuine transformation requires a change in attitude, beliefs, and values over a long period of time (Chapman, 2002). Nevis, Lancourt, and Vassallo (1996) agree that organizational transformation is the creation of a new reality, changing not only practices, policies, behaviors, and structures but also the ways of thinking, meanings, and consciousness of everyone involved.

Challenging economic downturns define the need for organizational change with both internal and external effects to the community college (Friedman, 2005).

Responding to these challenging economic downturns through transformation for community colleges is oftentimes the only alternative available if the college is to survive. Wheatley (1999) argues that a living organization, such as a community college, will only respond and change if it is the only means of preserving itself. In other words, if the community college president tries to control the change and not work with the forces of change then the outcomes, such as meeting the CISS, are not achieved. Therefore, community college presidents play a prominent role in leading institutions to meeting the CISS.

A paradigm shift in vision, practices, policies, behaviors, and structures and also the ways of thinking, meanings, and consciousness of everyone involves government, academic and private industry; therefore, the leadership style of a community college president is critical. Among the challenges facing community college presidents are: breaking down internal and external barriers to change; developing systems for strategic planning; and nurturing the college leaders to a deep commitment of collaborative values, goals, and operating strategies for the community college and its region (Alfred & Carter, 1996).

Since the turn of the century globalization is driving changes in our economy, and the need for new ways of thinking are evolving (Friedman, 2005). According to Rosenfeld (2001), community colleges are best situated to impact economic development if the community college leadership is committed to provide economic development tools for the region. The call for exemplary leadership is prevalent now more than ever in the history of the NCCCS. In thinking about the importance of leadership in North Carolina community colleges, what form of leadership does this require and does this mean that a specific type of leadership style is more effective than others to impact the CISS? Is this situation-based leadership (Bensimon et al, 1989)? If so, is that most appropriate for a community college president? Will any leadership style make a good fit between a president and the mission, location, demographics, culture, and the constituencies of a community college to impact the CISS? Answering these questions requires an in-depth evaluation of the practiced leadership styles of presidents of North Carolina community college presidents. House's (1971) Path-goal theory provides the theoretical foundation for this study to research the practiced leadership styles of North Carolina community college presidents.

The Path-goal Theory

The path-goal theory was developed by Robert House (1971) and later revised by House and Mitchell (1974). The theory is called path-goal because it explains the ways in which leaders can influence their subordinates' perceptions of work and personal goals and the *paths* to attaining those goals. According to this theory, leaders are effective when they motivate subordinates toward a journey down the path toward goal fulfillment.

House and Mitchell's (1974) research yielded four categories of leadership and the circumstances in which the various styles are most effective. The Instrumental or Directive leadership, that clarifies expectations and asks others to follow rules and procedures, is most appropriate in dealing with subordinates who have high authoritative orientations and who are working at ambiguous tasks. Achievement-oriented leadership, which sets goals and tries to improve performance and emphasizes excellence, is best suited for non-repetitive, ego involving tasks. Supportive leadership, which creates a friendly climate and assumes that subordinates will take responsibility and achieve challenging goals, is most effective when used with ambiguous, non-repetitive tasks. Finally, participative leadership, which advocates collaborating and consulting with subordinates before reaching decisions that impact them, is the style that has the most positive effects when the work is dissatisfying, frustrating, or stressful to subordinates.

House's (1971) Path-goal theory is grounded in beliefs that motivation is the result of three different types of perceptions that individuals have. *Expectancy* is the first belief that one's efforts will result in performance. The second, *instrumentality*, is the belief that one's performance will be rewarded. And, the last belief is that *valence* is the perceived value of the reward to the recipient. Motivation is the primary belief of expectancy theory as a multiplicative of these three components. According to Greenberg and Baron (1993), motivation is higher when all three components are high and lower when all three are lower. The Path-goal theory provides the conceptual framework and theoretical foundation for the Leadership Competencies Assessment Instrument. Figure 2 provides a descriptive view of the Path-goal theory in a diagram from leadership style to outcomes with three types of perceptions that individuals have.

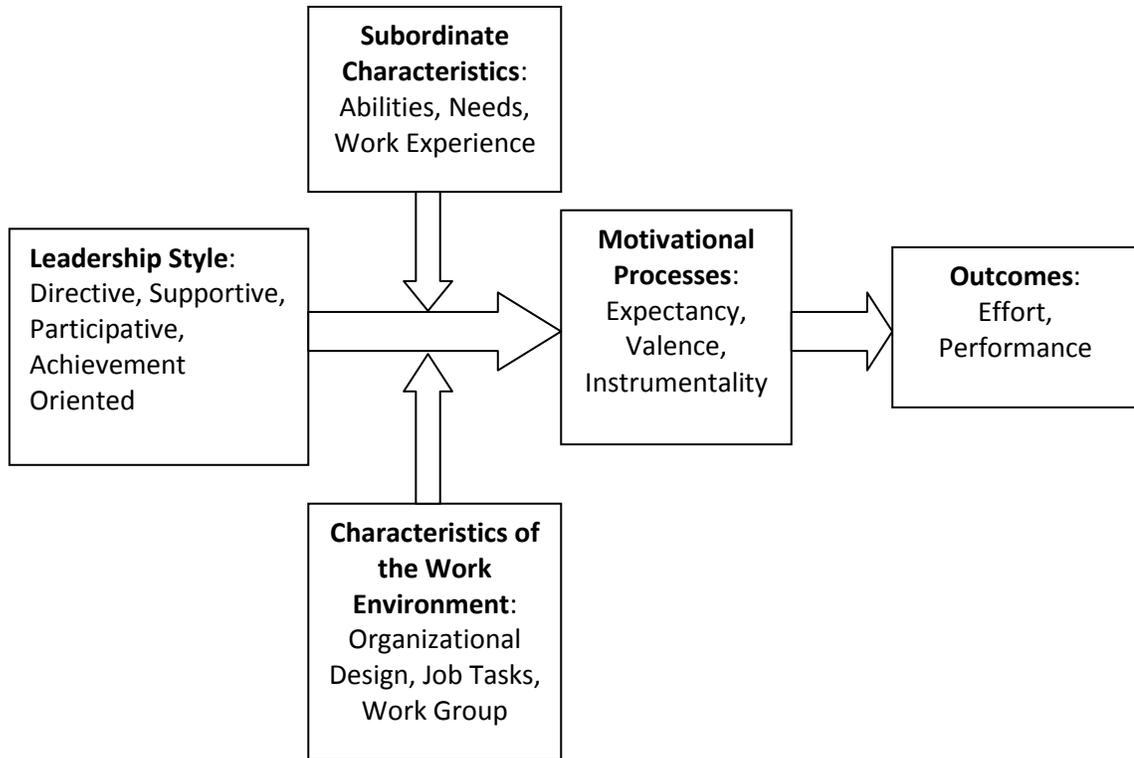


Figure 2. Path-goal Leadership Theory

The Leadership Competencies Assessment Instrument

The Leadership Competency Assessment Instrument (LCAI), authored by Baker and Associates (1998), is a tool designed to measure leader competencies. Baker adapted this instrument from Mintzberg's (1973) managerial roles, as defined by behavior, particularly from the community college environments. The questionnaire lists competencies relevant to the performance of a job. Divided into three parts, the three general categories of competencies are leadership roles, leadership values (emotions), and leadership skills. The intent of the assessment instrument is twofold: to assist in the development of professional development for college leaders and to assist a leader in individual development (Baker & Associates, 1999).

Leadership Roles

Part I of the LCAI assesses one's perceptions of his or her leadership roles regarding the mission and goals of the institution. The leadership roles category is considered influencing roles. Part IA is categorized as leadership roles with five specific criteria: visionary, task giver, motivator, ambassador, and liaison. What Mintzberg (1973) called the interpersonal roles Baker and Associates (1998) called the leadership roles of the LCAI with five defined sub-roles. Mintzberg identified three sub-roles: figurehead, leader, and liaison. Mintzberg's three interpersonal roles dealt with the leader's ability to develop and sustain relationships in the best interest of the institution. As a figurehead, the leader is a representative of his or her organization to external agencies. Baker and Associates ambassador role is synonymous to Mintzberg's figurehead role. The ambassador presides as an official of the college in external affairs. Mintzberg's leader role seemed specific to a leader's job description, which included the assessing, planning, implementing, and evaluating activities of a leader. Baker and Associates subdivided Mintzberg's leader role into visionary, task giver, and motivator. Baker and Associates chose to retain the liaison role and updated descriptor terms to include collaboration and partnering relationships. Figure 3 compares Mintzberg's (1973) and Baker and Associates (1998) updated terminology of roles of Part IA of the LCAI.

Mintzberg's (1973) second category of role behaviors is the informational processing role inclusive of three behaviors: disseminator, monitor, and spokesman, Baker and Associates (1998) explain the informational role as a formal authority in an organization. Wagoner and Hollenbeck (1992) describe formal authority as a unique access to intrinsic and extrinsic informational sources. Written, verbal, and nonverbal

communications are the key factor to the informational role. Baker and Associates (1998) retained the sub-roles of monitor and disseminator but updated the spokesman role to advocate. Figure 2.3 reflects the differences in Mintzberg’s and Baker and Associates informational roles of the LCAI, Part IB.

The last of Mintzberg’s (1973) behavioral categories is referred to as decisional behaviors. Baker and Associates (1998) calls these leadership skills. Both Mintzberg and Baker use the same descriptor roles for three of four categories: disturbance handler, resource allocator, and negotiator. Mintzberg’s fourth descriptor role in the decisional behavior category is called entrepreneur; whereas, Baker and Associates fourth descriptor role is called change agent. The context of the decisional roles evolve around the organization’s need for managers to resolve issues related to people, places, policies, programs, and processes. Figure 3 compares Mintzberg’s and Baker and Associates different terminology of the decisional roles of the LCAI, Part IC.

MINTZBERG’S MODEL		BAKER’S LCAI MODEL	
Category I: Interpersonal	Figurehead	Ambassador	Part IA: Leadership Roles
	Leader	Visionary	
	Liaison	Motivator	
		Liaison	
Category II: Informational	Monitor	Monitor	Part IB: Leadership Values and Emotions
	Disseminator	Disseminator	
	Spokesperson	Advocate	
Category III: Decisional	Entrepreneur	Change Agent	Part IC: Leadership Skills
	Disturbance Handler	Disturbance Handler	
	Resource	Resource Allocator	
	Negotiator	Negotiator	

Figure 3. LCAI Comparison of Mintzberg (1973) and Baker and Associates (1998) leadership roles. (Adapted from Hugh and Hickson (1989) and Baker and Associates (1998))

Yukl (1998) explains that an organization's direction is directly related to a manager's influence evidenced by the decision-making roles. Kraut, Pedriago, McKenna, and Dunnette (1998) have researched and ranked managerial tasks. Their tasks are very similar to Mintzberg's roles. Two concepts have been documented as a result of managerial research. One concept is that there are different levels of managers within an organization and managers use all roles but in varying degrees. The second concept is that, through research, common managerial roles exist regardless of the organization or level of management (Baker & Associates, 1998).

Research demonstrates that managers utilize all the roles as outlined above. Baker and Associates (1998) contends that “. . . significant differences in rank are dependent upon the level in which [managers] are serving their organization” (p. 25). Each role is vital to an organization's life. Yukl (1998) believes that managers will be more effective if they have an understanding of the demands and constraints of their management positions.

Leadership roles have been researched for many years. According to Yukl (1998), descriptive research has focused on patterns of activities and roles specific and common to managers as well as the differences for various types of managers. On the other hand, situational research studied the role requirements of the situation that resulted in unique role behaviors of the manager. This led to the research as that of Mintzberg (1973) and Baker and Associates (1998), which developed taxonomies of behavior content for managers.

Leadership Values

Yukl (1998) reveals that, historically, research on leadership involved managerial traits. “The term trait refers to a variety of individual attitudes, including aspects of personality, temperament, needs, motives, and values” (p. 234). Yukl (1998) contends that values are intrinsic attitudes about right and wrong in ethical and moral situations. Baker and Associates LCAI, Part II (1998) states that “core values are ways of determining what is fair, honest, and ethical are applied consistently in the service of others” (p. 3). In addition to core leadership values, the LCAI-Part II assesses one’s emotional intelligence, which Baker and Associates defines as a “profile of intense feeling situationally applied by leaders in working with others” (p. 3). Baker and Associates (1998) incorporates these core values of decency, fairness and honesty into the LCAI’s values and emotions section. The seven competencies in the values category are:

1. Help others gain a sense of accomplishment.
2. Help others achieve career fulfillment.
3. Help others receive justice in life.
4. Help others fully develop themselves.
5. Help others apply appropriate values in resolving dilemmas.
6. Help others gain self-esteem.
7. Help others gain recognition.

The five competencies in the fairness and honest section are:

8. Empathy: to understand and effectively respond to emotional make up of others.

9. Self-awareness: to recognize and control emotions and their effect on others.
10. Self-regulation: to control and redirect disruptive impulses.
11. Motivation: to demonstrate a passion for work.
12. Social skills: to be proficient in managing relationships.

Yukl (1998) describes personality traits as a relatively stable frame of mind that leads to particular behaviors. Examples include self-confidence, emotional maturity and stability, energy level, and stress tolerance. Bouchard, Lykken, McGue, Segal, & Tellegen (1990) report that traits are determined by learning and inheritance, and individuals are capable of gaining satisfaction from various types of stimuli or experiences. Yukl (1998) explains that traits such as values may be more determined by learning than such values as temperament.

Hundreds of research studies have been conducted on leader traits. An early work, Stogdill's (1948) identified leadership traits, such as awareness of other's needs, task understanding, and conflict resolution that were relevant to a leader. Stogdill (1948) further explained that traits were situational and specific dependent. Stogdill (1948) concluded that traits did not equate to the success of the leader and actually discouraged research of traits. However, in 1974, Stogdill's (1948) review of additional research of trait studies led to his admission that possession of specific traits does indeed increase the likelihood of an effective leader (Yukl, 1998).

Leadership Skills

Yukl (1998) defines skill as the ability to effectively do something. Just as traits are determined by learning and heredity, so are skills. Baker's and Associates LCAI—Part III (1998) assesses six competencies in the Skills category of the LCAI:

1. Thinking skills: judgment, visionary activity, financial acumen, global perspective.
2. Management skills: strategic planning, problem solving, allocating resources, developing personnel, team building.
3. Communication skills: promote open dialog, use high impact delivery, effective oral communication, and effective written communication.
4. Motivational skills: drive for follower achievement, risk taking, global integration, proving pathways to success.
5. Influencing skills: confidence, adaptability, situational orientation, personal integrity, coaching followers.
6. Cultural skills: organizational understanding, lateral knowledge (other organizations), institutional memory, customer focus, community understanding.

Yukl (1998) identifies the most accepted approach to management skills as a three tiered taxonomy: technical, interpersonal, and conceptual skills. Technical skills focus on things and include “methods, processes, procedures, and techniques for conducting a specialized activity; and the ability to use tools and equipment relevant to that activity” (p. 235).

Baker and Associates (1998) cultural skills are evident in Yukl’s (1998) taxonomy. Interpersonal skills center on people and involve “human behavior and interpersonal processes; ability to understand the feelings, attitudes, and motives of others from what they say and do (empathy, social sensitivity); ability to communicate clearly and effectively (speech fluency, persuasiveness); and ability to establish effective and

cooperative relationships (tact, diplomacy, listening skill, knowledge about acceptable social behavior)” (p. 235). Baker and Associates (1998) skills of management, communication, motivation, and influence are all linked to people.

Conceptual skills involve ideas and concepts and include “General analytical ability; logical thinking, proficiency in concept formation and conceptualization of complex and ambiguous relationships; creativity in idea generation and problem solving; ability to analyze events, perceive trends, anticipate changes, and recognize opportunities and potential problems (inductive and deductive reasoning)” (p. 235). Baker and Associates (1998) thinking skills are primarily targeted in the conceptual skills area, with his cultural and management skills overlapping the conceptual skills of Yukl. Yukl (1998) reports a fourth taxonomy known as administrative skill, which involves management functions of planning, organizing, and coaching. Baker and Associates (1998) management and influencing skills represent administrative skills.

Controversy remains about the difference between leadership and management. It is true that leaders can lead without being a manager, and managers can manage without being a leader. Bennis and Nanus (1985) suggest that “managers are people who think right, and leaders are people who do the right thing” (p. 21). Bass (1981) proposes leading and managing as distinctive processes not different people. The terms leader and manager are used interchangeably in the context of leadership competency.

Although managers use the roles and skills outlined above, Baker and Associates (1998) demonstrates that differences in the level of management responsibility equate to different perspectives of what the most important roles are for managers:

...significant differences in rank are dependent upon the level in which they are serving in the organization. Top-level managers rank the roles of liaison spokesperson, and resource allocator as most important. Middle managers rank leader, liaison, disturbance handler, and resource allocator as most important. And finally, first line supervisors rank the leader role as most important because they spend the majority of their time directing non-supervisory personnel (p. 25).

Even though the concept of management is different than the concept of leadership, the leader's contribution shapes the organization's success. Each competency exercises a vital link in the life of the organization. Additionally, Baker and Associates (1998) LCAI reflects inquiry into roles, values and skills necessary for effective leadership and applies House's (1971) Path-goal theory. Implicit throughout the LCAI is the concept that leadership is a fluid set of complex interactions between the leader and the follower, group and organization, and these interactions occur on a situation by situation basis.

Leader and Follower – A Critical Path

The Path-goal theory is grounded in the approach that the leader's style is vital to facilitate the process of meeting objectives by providing a critical path to that objective for the individual (Mondy & Premeux, 1993). There is little effect on followers for simple, repetitious assignments (Yukl, 1998). "The path-goal theory of leadership examines how aspects of leader behavior influence subordinate satisfaction and motivation" (Yukl, 1998, p. 292). The LCAI allows a leader to estimate two perceptions of leadership competencies on a seven point Likert scale. The first scale asks the leader to

estimate the amount of energy he or she uses when working directly with followers in goal achievement. The second scale asks the leader to estimate the effectiveness of the follower's increased effort and satisfaction because of his or her influencing behaviors.

According to Baker and Associates (2000), when the two perceptual scales (competency level of energy exerted and estimated effectiveness on followers) are multiplied, the resulting number is a power score, which could range from 1 to 49 for each individual role. The greater the power score, the greater the leader perceives his or her, own competency and effectiveness with followers. Underpinned by the Path-goal theory the LCAI is an individually rated self-assessment instrument that considers the leader, the follower and the situation to guide leadership development programs for community colleges administrators (Athans, 2000).

According to House (1971), effective leaders develop a critical path for their followers to achieve the goals and make the path to success easier by reducing obstacles while individual performance and satisfaction are influenced positively when the leader compensates for the shortcomings in either the individual or the work environment. House's model focuses on the interconnected relationships between the leader and the follower within specific situations. The combination of leadership style and follower response provides an excellent framework for the study.

Conceptual Framework

Baker and Associates (1998) uses Robert House's (1971) Path-goal theory as the conceptual framework for the LCAI, in that it considers the leader, follower and situation. The Path-goal leadership theory is a contingency theory of effective leadership. Developed initially by Evans (1970) and revised by House (1971), Path-goal theory

explains how a leader's behavior influences the satisfaction and performance of a follower (Yukl, 1998). Other contingency models, which were discussed in this chapter, include Fiedler's Contingency Model, Hersey-Blanchard Situational Theory, and Vroom-Yetton Leadership Model (Pugh & Hickson, 1989).

The Path-goal theory is grounded in the approach that the leader's style is vital to facilitate the process of meeting objectives by providing a critical path to that objective for the individual (Mondy & Premeux, 1993). Consideration of the varying aspects of a situation is critical to Path-goal theory (Yukl, 1998). To accomplish this, leaders use four leadership behavioral styles that comprise the Path-goal theory: directive, supportive, participative, and achievement orientation leadership and are based on two primary factors.

This LCAI was administered to collect data from the 58 presidents of the North Carolina Community College System and interviewed three presidents of colleges meeting the CISS and three presidents of colleges not meeting the CISS. The data collection instrument used in this study is the Leadership Competencies Assessment Instrument (LCAI).

The LCAI was developed by Baker and Associates (1998) and others, and was used to gather information about the practiced leadership styles in three broad categories: leadership roles, leadership values and emotions, and leadership skills. The LCAI provided a model by which the community college presidents measured their perceptions of their own competence and effectiveness (Baker and Associates, 1998). The LCAI lists leadership competencies that relate to job performance. The interview questions developed were based on the leadership theories presented in this chapter.

Additional interview questions were developed after the data from the LCAI instrument was collected and analyzed. The conceptual framework for the interview questions related directly to the colleges who have met the CISS and to those who have not met the CISS. House's (1971) Path-goal theory was used as the conceptual framework from which to consider the study's interview questions. House's study of leadership and leadership situations includes information on relationships that are part of a manager's environment and draws from management and leadership theory. This foundation provided a springboard from which to consider leadership styles as expressed by presidents during the study. Baker and Associates (1998) LCAI survey instrument provides broad categories and subcategories of leadership roles, values and emotions, and leadership skills for the parameters within which to categorize responses.

Baker and Associates (1998) categories were used as a template to compare the CISS against the president's practiced leadership styles. A comparison of the practiced leadership styles associated to meeting the CISS and this study's results utilized the framework of the Path-goal theory which yielded information for use by board of trustees, presidents, and aspiring community college presidents. These results also provided direction for professional development opportunities, leadership training needs, and/or president hiring decisions.

Summary

This chapter examined the literature relative to leadership styles and qualities to identify the practiced leadership styles of North Carolina community college presidents and the association to the Core Indicators of Student Success. This chapter also explored the various types of leadership theories and their relationships with community college

presidents. Although leadership serves as the most desirable characteristic for top level positions in higher education, a number of authors have also pointed out a vast array of other professional qualities. Experts agree that certain characteristics are critical for a president to succeed; few of those experts have identified the specific qualities or style possessed by exemplary higher education presidents. Even less literature is available about the specific practiced leadership style and the association to meeting performance criteria related to Core Indicators of Student Success. Closing this gap in the literature is needed for North Carolina community colleges, future community college presidents, and selection committees hiring a new president. Chapter 3, Methodology, detailed the research methods employed in this study to explore the practiced leadership styles of community college presidents and their association to the CISS, in order to see how these characteristics differ from the current literature.

CHAPTER 3: IMPORTANT CONSTRUCTS FOR THE RESEARCH METHODOLOGY

The lack of literature addressing practiced leadership styles of a community college president and specific performance levels of presidents related to the Core Indicator of Student Success (CISS) was the inspiration for this study. Leadership traits are and can be common characteristics among community college presidents but the practiced style of leadership is a manner/method/way of conducting oneself to lead a community college. Therefore, all 58 North Carolina community college presidents can possess similar or even the same leadership traits, but can practice a different leadership style. The gap in the literature was whether or not there was an association between practiced leadership styles of North Carolina community college presidents and the CISS.

This research explored the association between the North Carolina Community College System's Critical Success Factors – Factor 1: Core Indicators of Student Success, and the practiced leadership styles of North Carolina community college presidents. Chapter III describes the mixed methods research design used for this study. This chapter includes a review of the problem and central research question, and information regarding the research design, data collection, data analyses, and trustworthiness (reliability of the data analyses) intended to be used in this study.

Problem Statement and Research Questions

First mandated by the North Carolina General Assembly in 1989 (Appendix A), the North Carolina Community College System Critical Success Factors (CSF) is the

major accountability document. Specifically, Factor 1: Core Indicators of Student Success (CISS), a defined standard measure of performance to ensure public accountability for programs and services offered by community colleges in North Carolina is the focus of this research.

The study focused on the association of the practiced leadership style of a North Carolina community college president and the major accountability of Factor 1: Core Indicators of Student Success. As a researcher, I sought to know not only what practiced leadership styles are related to the presidents of community colleges who have met the CISS, but the association to those community colleges who have not met the CISS. I also explored the relationships among the practiced leadership styles of the two groups of president interviews on methods or ways that were unique, individual and qualitative based. The first group consisted of presidents of North Carolina community colleges whose colleges have met Factor 1: Core Indicator of Student Success (CISS). The second group consisted of the presidents of North Carolina community colleges whose colleges have not met the CISS.

The central research questions for this study were: Do leadership styles practiced by North Carolina community college presidents whose colleges have successfully met the CISS differ from leadership styles practiced by presidents whose colleges have not met the CISS? What core values and/or competencies of Baker and Associates LCAI Model (1998) does a particular president normally (or “most often”) use whose college has met the CISS and whose college has not met the CISS?

Fundamental to any research is the research question – research methods should follow the path(s) of the research questions to obtain the best and most useful answers.

Many research questions and/or combination of questions are best/most fully answered through mixed solutions (Johnson & Onwegbuzie, 2004).

Creswell (2008) explained, in qualitative studies, the research questions are typically in the most general form a statement of the question being studied. Creswell (2008) described qualitative research as a means for testing theory while examining relationships with variables. This study examined the leadership relationships with the Core Indicators of Student Success. To do this, additional interview questions were developed after the data from the LCAI instrument was collected and analyzed. The conceptual framework for the interview questions related directly to the colleges who have met the CISS and to those who have not met the CISS. These data identify the variables in leadership styles that might impact the success of a community college striving to meet the Core Indicators of Student Success. Creswell (2008) contends that mixed methods research is a combination of both qualitative and quantitative methods so that the “overall strength of the study is greater” (2008, p. 4) than either quantitative or qualitative by examining relationships with variables from research disciplines.

Research Design

The mixed-method research design of quantitative and qualitative involved a constructive epistemology. Yin (1984) referred to research design as a plan for getting from here to there with the ‘here’ as the questions and the ‘there’ as an established conclusion or conclusions about the question. The research design for this study occurred in three stages. The first stage was intended to use quantitative research methods to gather and analyze data from the LCAI survey instrument and data from the North Carolina Community College System Annual Reports (2007 – 2009). The second stage

used qualitative research methods to develop additional interview questions for selected presidents based on the results of the first stage of quantitative data. The third and final stage for this research was mixed method. This mixed method research sought to be comprehensive to combine strategies, approaches, and methods from the quantitative data and qualitative interviews.

The first stage of this research design for this study used a quantitative method of research to obtain the practiced leadership style of North Carolina community college presidents through the LCAI survey instrument. This data was associated with the North Carolina Community College System Annual Reports (2007 – 2009) data of 58 North Carolina community colleges who have either met or not met the requirements for the CISS. The quantitative data sampling provided a representative sample of leadership styles and those colleges meeting the CISS to make a broad, well-grounded generalization about whether leadership styles differ from those colleges meeting the CISS and those colleges not meeting the CISS.

Gall, Gall, and Borg (2003) assert that quantitative research relies on numerical data and statistical methods of data analysis to study representative samples or a complete population in order to make broad, well-grounded generalizations. Quantitative research requires the ability to use sampling techniques, to define and measure variables, to create a research design, and to conduct statistical analyses (Gall et al., 2003). The North Carolina Community College System Annual Reports (2007 – 2009) and the LCAI were intended to provide the quantitative data for this study to develop a statistical analysis.

Stage two of this research study used the responses from the LCAI of stage one to help assess the practiced leadership style a particular president normally (or “most often”)

uses and how the leadership style practiced correlates to successfully meeting the CISS. The qualitative interview questions were formulated from the LCAI data for both groups to be interviewed.

Creswell (2003) proposes that qualitative research occurs in the natural setting of the participants, relies on multiple data-collection methods, and permits the researcher to view the social phenomena holistically. Potentially case studies and analysis of conversation will occur during this research to have direct interaction “with their perspectives and behaviors” that will focus and refine the study’s interpretations (Schram, 2006).

The third or final stage of this research seeks to combine the quantitative and qualitative information from stage one and two to produce the outcomes to the study; a mixed method research design to effectively provide the best possible results to inform the study.

This mixed method study sought to use multiple data collection methods to implement this research. The reported data in The North Carolina Community College System Annual Reports (2007 – 2009) provided the quantitative information for those colleges who have met the CISS and for those colleges who have not met the CISS. Baker and Associates (1998) Leadership Competencies Assessment Instrument (LCAI), based on the work of Mintzberg (1973) and others, was used to measure the practiced leadership competencies of community college presidents and was used in a quantitative comparison to the president’s self-assessment on the college’s CISS. The LCAI is divided into three broad categories: leadership roles, values and emotions, and skills. The primary purpose of the LCAI is intended to evaluate the importance of these

competencies to self-assess a president's individual leadership skills. The content of the LCAI was aided by Thompson (1981) and was further refined by Doty (1995), Chen (1998) and Athans (2000). The responses from this survey seek to assess the practiced leadership style and how it relates to successfully meeting the CISS. Additionally, the survey data was a source for developing the interview questions for a deeper understanding of leadership styles and characteristics of presidents. It was be hypothesized that, for the two categories, there will be differences in leadership styles practiced by community college presidents and the successful attainment of the accountability measures of the CISS.

While there is significant research addressing leadership theories, concepts, and practices within many different contexts, there exists scant literature addressing the impact a president's practiced leadership style has on successfully meeting the CISS. This study was designed to investigate the association between CISS and the practices of North Carolina community college presidents regarding leadership.

Design Rationale

The mixed method research was comprehensive to provide credible interpretations for the reader to develop new knowledge about the practiced leadership style of North Carolina community college president's effect on meeting the institution's Critical Success Factor – Factor 1: Core Indicators of Success. Yin (1984) pointed out that mixed methods may involve a single person, group, or communities, and they depend on multiple data collection sources, e.g. interviews, histories, and participant observation. Mixed-methods research provided an understanding of the leader's environment and insights to the style of leadership employed in various settings and the context in which

the leader demonstrates leadership styles most effectively in a specific or particular setting. The responses from the LCAI helped to assess the leadership style a particular president normally (or “most often”) uses and how the leadership style practiced relates to successfully meeting the CISS. The one-on-one interviews helped associate the in-depth information with the LCAI and to the CISS.

Role of the Researcher

I sought to understand the practiced leadership styles of a community college president and the role the practiced leadership style of a community college president can play in affecting CISS. While the North Carolina Community College System Annual Report on Critical Success Factors is a *major accountability* document, there is little investigation into or awareness of the role that presidential leadership styles play in affecting the CISS. My role, through this mixed methods study, was to seek an understanding of the relationship between the types of leadership style(s) of a community college president and the effect upon an individual institution’s performance data on meeting the CISS.

As a Dean at Wilkes Community College I had a unique role and opportunity to study in-depth the practiced leadership styles of community college presidents. The goal of qualitative research is not, as in a quantitative study, to distill a single theory that can be generalized to other situations or groups. Instead, qualitative research seeks to understand and expose the complexities of a situation or process (Glesne, 1999; Maxwell, 1996; Patton, 2002). In this study, mixed-methods was a move beyond qualitative and quantitative research methods by drawing on both research methods strengths and minimizing the weaknesses while opening up an almost unlimited potential for future

research (Johnson & Onwegbuzie, 2004). My goal was to use mixed-methods research to understand the practiced leadership styles of community college presidents and the differences of North Carolina community college presidents practiced leadership styles as related to being successful / unsuccessful on meeting the CISS. While my findings may not be generalized to other groups, the research may be useful to others interested in community college leadership styles and the association to CISS. This research can then potentially be used to affect future hiring decisions and the placement of high-level personnel in the community college setting.

Ethical Issues

Having been a community college employee for 12 years, I am familiar with some of the issues and administrative requirements of the president. I knew this could be a potential ethical issue with my research. Glesne and Peshkin (1992) address the issue of “over-rapport” that can create a loss of objectivity and bias with regard to subjectively selecting participants, being denied access to sources because of friendship with others, and over-identification with the interviewees. I was cognizant of the potential ethical issues related to my research; however, I also believe that I was objective because I was not familiar with the particular day-to-day work. I was also aware my insider knowledge of the community college system, as well as being a community college administrator, provided insight to probe more deeply into issues of colleges who have met the CISS and those who have not met the CISS. I was aware of the interplay of the role of my professional affiliations and the role of being the researcher. I kept this in check through journaling throughout the process. “The goal is to get as fully possible in touch with the embodied self who performs the act of research” (Glesne & Peshkin, 1992, p. 106).

I understood and respected mixed-methods research and the process of creating new knowledge for people, organizations, and communities. The mixed method research philosophy was an ideal mechanism for determining leadership styles of community college presidents. Fifty-eight North Carolina community colleges were intended to be studied in this research to offer a base of leadership style assessment and practiced leadership competencies to provide an initial framework to research the differences in practiced leadership styles of North Carolina community college presidents. One-to-one interviews were conducted with three presidents of college's who have met the CISS and with three presidents of college's who have not met the CISS to connect the quantitative survey data and qualitative interview questions developed from the LCAI survey results to corroborate the findings.

Data Sources

McNabb (2002) called mixed methods a popular choice of researchers to inform administrators or leaders what is going on in the field of a particular sector. He also lauded this methodology as holding great promise for uncovering information that can lead to improvements in the public sector. To help facilitate such improvements, this study sought four sources of data:

1. North Carolina Community College System Annual Reports (2007 – 2009);
2. Leadership Competencies Assessment Instrument (LCAI) of the fifty-eight North Carolina Community College presidents;
3. Three one-on-one interviews with presidents of those colleges who have met the CISS and three one-on-one interviews with presidents of those colleges who have not met the CISS;

4. The journal from the one-to-one interviews from each of the two groups of interviewed presidents.

These data sources examined the association between practiced leadership styles of North Carolina community college presidents and the CISS.

Data Collection

The following four principles of data collection guided this study: multiple sources of evidence, the formation of a quantitative database, the creation of a chain of evidence from the interviews, and the journal used for documenting the qualitative interviews (Yin, 1984). Archival records from the North Carolina Community College System Annual Report of Critical Success Factors (2007 – 2009), analysis of the Leadership Competencies Assessment Instrument (LCAI), one-to-one interviews, and journaling served as the primary evidentiary sources. Electronic files and the cataloging and maintaining of all pertinent documents formed the mixed methods study database. The one-to-one interview questions were derived from the LCAI survey results were documented with transcripts and coded to develop themes that correlate to Baker and Associates (1998) LCAI and finally to the Core Indicator of Student Success with a matrix showing categorical columns that related to the respective colleges presidents who were interviewed.

Participants / Participant Selection

All presidents of the 58 North Carolina Community Colleges served as the selected participants. They were chosen as participants based on their leadership responsibility of each community college in North Carolina. Each of the 58 North Carolina Community Colleges is measured for accountability; therefore, each institution

had a CISS rating that was intended to address the association to the practiced leadership style of the participating presidents with a matrix identifying the presidents LCAI survey response from each college.

A portion of the LCAI incorporated a profile section to gain information about the presidents of each college. Additional information such as educational degree, years of experience as a president, and tenure at their current position was compiled and organized with each respective college's data.

One-on-one interviews were conducted with three presidents whose colleges have met the CISS and three presidents whose colleges have not met the CISS. The criteria used to select the participants for interviews were based on the size of college's Full-Time Equivalent ranking established by the North Carolina Community College System. There was one college chosen from the largest, medium, and small size community college according to their respective category (Appendix E). In other words, if college 'A' has met the CISS and is considered a large size college, this college president was selected for a one-on-one interview. This protocol was followed until each category had three representative cross-sections for the interview portion of the study.

Interview Protocol

Interviewing is vital to many forms of qualitative educational research; qualitative researchers interview respondents for oral histories, life histories, ethnographies, and case studies (Tierney & Dilley, 2002). Despite the primacy of verbal data in qualitative research, basic introductions to qualitative research (e.g., Glesne & Peshkin, 1992; Merriam, 1988; Rossman & Rallis, 2003) and "how to" guides for conducting qualitative projects (e.g., Goodall, 2000) include only sections on interviewing.

Interviews with the presidents allowed me to investigate, in critical ways, comprehensions of their experiences and beliefs – as well as my own. Of course, the structure of the interview event shapes the meanings made (and conveyed) by both the interviewer and the respondent. Seidman (1998) emphasizes structuring interview projects and protocols in particular ways to develop this understanding, but appears open to the notion that different questions, which would require different ways of knowing or comprehending, would require different ways of asking questions. I concurred with Seidman's (1998) approach to ensuring such efforts are at the heart of interview projects and analyses, not a check-and-balance additive.

Where Seidman (1998) concentrates upon the structure of the interview event and research project, Herbert J. Rubin and Irene S. Rubin, in *Qualitative Interviewing* (1995), emphasize a different set of necessary skills in qualitative interviewing: "the art of hearing data." The Rubins reiterate interviewing's epistemological origins: "Qualitative interviewing is a way of finding out what others feel and think about their worlds. Through qualitative interviews you can understand experiences and reconstruct events in which you did not participate" (Rubin & Rubin, 1995, p. 1). They, too, place an emphasis upon comprehending and conveying understandings of the researched and the researcher.

I sought to collect data from individual interviews with community college presidents, written non-verbal observation of the president during the interview session, and additionally – the one-on-one interview were tape recorded. Marshall and Rossman (2006) state that interviews can capture the individual lived experience, as well as the meaning of the experience from the participant. An interviewing protocol will be

developed for interviews that will allow me to learn “that which you cannot see or can no longer see” (Glesne, 2006, p. 80).

A series of questions derived from the presidents response to the LCAI survey was developed in addition to some general questions already established (Lasker & Weiss, 2003) (Appendix G). I anticipated the additional questions would emerge from the LCAI survey results which narrowed the focus of the questions based on the prevalent leadership styles from the survey. The interview questions served as a guideline to ensure consistency among the interviews, which took place at different times and dates. I used a digital voice recorder to capture the interviews so that I could focus on the interviewees, their responses, and make them feel as comfortable as possible. I limited the interviews to no longer than one hour and a half each.

IRB Procedures

Before collecting data, I obtained Institutional Review Board (IRB) approval from Appalachian State University to conduct the study (Appendix F). This approval ensured an ethical study so that certain “protocols are explained to the research participants and that the risks of harm are reasonable in relation to the hoped-for-benefits” (Johnson & Christensen, 2000, p. 84). I communicated in writing with the participants seeking their participation. I asked the North Community College System President, Dr. Scott Ralls, to aid in gaining support and participation of the presidents. The presidents who were selected for one-on-one interviews were communicated with in writing and in person to ensure the protocols for the interviews were clearly understood prior to the interview.

Data Coding / Analysis

Mixed method research experts have detailed many ways to process and analyze data. Glesne (1999) defined data analysis as organizing “what you have seen, heard, and read so that you can make sense of what you have learned” (p. 130). Wolcott (2001) linked it to following certain standard procedures for “observing, measuring, and communicating with others about the nature of what is ‘there,’ the reality of the everyday world as we experience it” (p. 33). Meloy (2002) labeled data analysis an intuitive process, one that provides “strong indications of themes within and across sites” (p. 142).

The straightforward nature of creating a baseline template of the LCAI and interview data required quantitative statistical analysis to formulate results that were used to develop additional interview questions. I identified from the North Carolina Community College System Annual Reports (2007 – 2009) those colleges who have met the CISS and those colleges who have not met the CISS. Additionally the presidents profile data was entered into columns along with the personal interview information from selected participants who related directly to the president’s college. Data were displayed by the use of tables created in Microsoft Excel spreadsheets that model what Miles and Huberman (1994) referred to as a conceptually clustered matrix. According to these authors, the matrix is comprised of rows and columns of information that conceptually belong together. McNabb (2002) indicated that drawing conclusions requires “interpret the results of the study . . . and . . . explain what the data mean in relation to the study design and objectives; and in terms of their contribution to theory” (p. 396).

Trustworthiness

The cornerstone for this study was the ability to establish validity on multiple data sources. Establishing validity on multiple data sources is known as triangulation and involves the “use of multiple data-gathering techniques . . . to counteract the threats to validity identified in each one” (Berg, 2001, p. 5). Glesne (1999) also indicated that triangulation can increase trustworthiness in research findings that rely on multiple kinds of data sources. Triangulation allows researchers to offer perspectives other than their own and Berg (2001) implies that triangulation often involves three data-gathering techniques. Additionally, triangulation based on multiple data sources can strengthen reliability (Merriam, 1988; Yin, 1984). This is the why the research design chosen for this study was mixed method.

This mixed-methods study sought to use four criteria to ensure trustworthiness for this qualitative inquiry. Lincoln and Guba (1985) identified credibility as one of the four criteria. They defined this particular criterion as an “evaluation of whether or not the research findings represent a ‘credible’ conceptual interpretation of the data drawn from the participants’ original data” (p. 296). The use of triangulation, with multiple data collection sources helped to achieve credibility (Twining, 1999).

Transferability is the second criterion for trustworthiness in qualitative research (Lincoln & Guba, 1985). It refers to “the extent to which . . . findings can be applied in other contexts or with other respondents” (Erlandson, Harris, Skipper, & Allen, 1993, p. 31). This study provided information that could be expanded upon for further research related to accountability measures and practiced leadership styles of North Carolina community college presidents.

The third criterion for trustworthiness involves dependability (Lincoln & Guba, 1985). Dependability is the extent to which, if a study, “were replicated with the same or similar respondents (subjects) in the same (or similar) context, its findings would be repeated” (Erlandson et al., 1993, p. 33). The North Carolina Community College System Annual Report (2007 – 2009) served as the document to provide dependability where as the respondents of the respective colleges were the same (presidents) and the context of the findings were consistent as it related to the practiced leadership styles recorded from the LCAI. According to Twining (1999), the creation and maintenance of an archive will enhance the dependability of a study. The aforementioned creation of a quantitative statistical analysis database and formation of a research chain of evidence through qualitative interviews and journaling added dependability to this study.

Confirmability, the measure of how the findings of a study are supported by the collected data, serves as the last trustworthiness criterion (Lincoln & Guba, 1985). Twining (1999) indicated this measure “is achieved via a ‘confirmability audit’ which allows external reviews to judge the conclusions, interpretations and recommendations of the inquiry” (p. 6-7).

Summary

This mixed method research documented and described the framework for various leadership styles practiced by community college presidents and the association, if any, to meeting the NCCCS CISS. In general the quantitative data from the LCAI provided analytical data which related to the CISS and combined with rich description from qualitative interviews. Mixed method research principles were intended to be used as a guide to structure the analysis. This study developed interview questions after the LCAI

survey results were analyzed. This data identified the variables in leadership styles that may impact the success of a community college striving to meet the Core Indicators of Student Success.

Focusing on the importance of student success in education and the accountability of colleges, this research detailed the practiced leadership styles of North Carolina community college presidents and the association to Core Indicators of Student Success. In 2008, Roueche et al., suggested that with good reason, a national discussion is occurring about the poor state of our educational system. This research may provide vital information for colleges facing changing demographics, technological advancements, and a global economy (Roueche et al., 2008). The information collected and analyzed could become a benchmark for community college boards of trustee assessment of their criteria for employing a new leader to meet a colleges' missions, objectives, and goals to aid in providing its' region's social mobility, a skilled workforce, and services. This study provided a practiced leadership styles inventory for colleges to assess how they align with a world that will be characterized by complexity, diversity, and pace of change (Barlow, 2007). This study identified colleges who were successful at meeting the Core Indicators of Student Success and suggested the practiced leadership styles of North Carolina community college presidents which provide boards of trustees, college communities, and aspiring community college president's information regarding successful leadership styles to achieve the *Exceptional Performance Institution*.

CHAPTER 4: FINDINGS

Introduction

The purpose of this study was to explore the association between the North Carolina Community College System's Critical Success Factors – Factor 1: Core Indicators of Student Success, and the practiced leadership styles of North Carolina community college presidents. The first portion of the study involved an investigation to identify the practiced leadership style of the 58 North Carolina Community College presidents based on the responses on the Leadership Competencies Assessment Instrument (LCAI). The second portion of the study looked at the Core Indicators of Student Success (CISS) and involved interviews with three presidents whose college met the CISS and three presidents whose college did not meet the CISS. A mixed-model design was used for this study, with both quantitative and qualitative data being collected and analyzed. Two samples were drawn and used for data analysis from the indicated population.

Participants

The first portion of the study consisted of 35 presidents who participated in a survey on leadership competencies (LCAI). The response rate represented 60.3% of the entire population of 58 presidents examined in this study. The second sample used for investigation was a representative sample of six presidents, which comprised 10.3% of the entire population of 58 presidents. This second sample consisted of three presidents from each of the respective groups; those whose college met the CISS and those whose college had not met CISS. Sample participants were selected in such a way as to ensure reasonably equal distribution in regards to enrollment size.

Findings

Research Question 1

Do leadership styles practiced by North Carolina community college presidents whose college has successfully met the CISS differ from those leadership styles practiced by presidents whose college has not met the CISS?

Methodology. In order to identify the most important competencies for effective leadership as addressed in Research Question 1, a quantitative approach was taken. A research design was used involving the administration of a computerized survey to determine the practiced leadership competencies as identified by presidents in North Carolina community colleges. Given the limited number of potential respondents, the targeted study participants consisted of the entire population addressed in the study's design. The sample used in this portion of the study consisted of 35 individuals who participated in a survey on leadership competencies (LCAI). This response rate represented 60.3% of the entire population (state of North Carolina) of 58 community college presidents examined in this study.

The LCAI was administered electronically through email distribution. The researcher introduced himself while describing the study and soliciting participation. The president of Wilkes Community College publicly expressed an endorsement of the researcher's efforts and encouraged participation. Electronic links to the survey were distributed by the researcher to encourage a higher response rate. Subjects were given an opportunity to withdraw from participation without prejudice. Completed surveys were either collected by the researcher or the individual respondents mailed the surveys back at their convenience.

Pre-administration and post-administration correspondence was used to enhance the participation and response. Letters of introduction and encouragement, completed by the president at the researcher's home college, were used to encourage a higher response rate. Those not participating in the initial survey correspondence were contacted by electronic mail and mailed a copy of the survey instrument (with a self-addressed and stamped envelope) for completion and return. Subsequent follow-up with non-responding presidents was electronically mailed and included a cover memorandum from the researcher. Subsequent follow-up with the remaining non-responding presidents was made in an electronically mailed appeal for assistance sent to the president at each of non-respondent's colleges. The additional efforts of both the home college president and the researcher resulted in additional responses.

The LCAI included specific survey items as well as institutionally descriptive information necessary to determine the enrollment size of the respondent's college. In addition, the demographic portion of the survey included questions concerning the respondent's (a) gender, (b) educational attainment, (c) years of experience in their current position at their current college, and (d) years of experience at their current position at any college.

The LCAI packet included informed consent documents; a signed copy to be returned with the survey and an unsigned copy to be retained by the respondent. In the informed consent document, the participants were told the researcher's name, the purpose of the study, and the approximate length of time expected to complete their participation. In addition, the participants were informed that participation was voluntary and that there was no penalty for non-participation. The participants' individual responses were kept

confidential. All participants were given the researcher's contact information and were provided an opportunity to request a copy of the study's results.

Procedure. The quantitative component used in addressing Research Question 1 consisted of demographic and institutional information as well as the LCAI results. On the LCAI, respondents were asked to identify the relative importance of specific leadership competencies by completing a Likert-type scale of 46 items, grouped into three functional areas: (a) leadership roles, (b) leadership values, and (c) leadership skills. The data were analyzed using the outlined procedures listed below.

In the first step, all data were entered into SPSS (version 18) and checked for accuracy by visual review and by descriptive statistics of all variables to determine whether they fell within expected ranges. No missing values were identified from the survey responses. The nature of the established survey items on the LCAI required no additional coding or recoding to account for negatively worded survey items (Baker & Associates, 1999), as all questions were oriented with a score of 5 being very important and a score of 1 being lowest or not as important.

In the second step, all quantitative variables were analyzed descriptively to determine measures of mean, standard deviation and standard error of mean. These variables included three dependent leadership variables, (a) roles, (b) values, and (c) skills, as well as the independent variable of having met the CISS.

In the third step, the LCAI factors of leadership roles, values, and skills were examined against the assumption of normality of distribution; it was determined that in every case the distribution had a negative skew. However, items of near universal

agreement would not normally distribute in this type of study (Baker & Associates, 1998; Gall et al., 2003; Kirlinger & Lee, 2000).

The *t*-test, a statistical test, was selected as the appropriate tool to compare means of two groups. The *t*-test assesses whether the means of two groups are *statistically* different from each other. An additional benefit is that the *t*-test also addresses violations of the assumption of normality (Gall et al., 2003; Kirlinger & Lee, 2000). A series of *t*-tests were then run on the data set. The Levene test for equality of variances was subsequently used to determine whether the assumption of homogeneity of variance was met for any relationships showing significance.

This process allowed for a determination as to how similar or different the relative importance of leadership competencies are, as identified by all respondents, and as impacted by the different variables of (a) leadership roles, (b) leadership values, (c) leadership skills, and (d) if the college met the CISS or did not meet the CISS. Initially the mean or aggregate score for each college was compared to the scores from other colleges as well, allowing for the determination of the differences between colleges. However, although this procedure allowed the identification of individual responses, no obvious patterns was highlighted and was subsequently discarded.

Findings. An analysis of the demographic questions revealed that respondents were 74.3% male and 25.7% female. A review of the respondents' reported educational attainment ranges indicated 82.9% of the sample had a doctorate in education, 14.3% of the sample had doctorate of philosophy, and 2.8% of the sample was completing a doctorate degree. In examining the experience of respondents at the current college, 60.0% reported to be at the current college less than five years, 11.4% were reported to

be at the current college five years or more but less than 10 years, 28.6% were reported to be at the current college more than 10 years.

It is indicated in Table 1, in looking at work experience at the current college, that only (23.8%) of the respondents employed at their current college five years or less met the CISS, none of the respondents employed at their current college for 6 – 10 years met the CISS, while 40.0% of the respondents employed at their current college more than 10 years met the CISS. The average number of years as president at current college was reported as 8.06 years for those participants meeting the CISS and 6.58 years for those not meeting the CISS. Table 1 demonstrates that the respondents with higher years of employment at current college met the CISS more often.

Table 1. Participants’ Years of Employment at Current College ($N = 35$)

Years	Total Participants		Met CISS	Did Not Meet CISS	% Meeting CISS by Category
	<i>f</i>	%			
0-5	21	60.0	5	16	23.8
6-10	4	11.4	0	4	00.0
> 10	10	28.6	4	6	40.0

As shown in Table 2, there was an uneven distribution between the first identified levels of experience as reported by this same group of presidents, when indicating their experience in a president role at *any* college. However, the largest group (57.1%) was comprised of those individuals with the least experience. Over 70% of the respondents participating in this study had less than 10 years of experience as a president at one or more colleges. Presidents reporting more than 10 years of experience only make up 22.9% of the population; a significantly smaller number of respondents than those with

less experience. Additionally, the average number of years as president at any college was reported as 12.17 for those participants whose college met the CISS and 7.17 years for those participants whose college did not meet the CISS. Table 2 indicates that 50% of the presidents reporting more than 10 years of experience were at colleges who met the CISS, while only 25% of the presidents reporting less than 10 years of experience were at colleges who met the CISS.

Table 2. Years of Experience as a President at Any College ($N = 35$)

Years	Total Participants		Met CISS	Did Not Meet CISS	% Meeting CISS by Category
	<i>f</i>	%			
0-5	20	57.1	5	15	25.0
6-10	7	20.0	0	7	00.0
> 10	8	22.9	4	4	50.0

Table 1 and Table 2 indicate that for those participants whose colleges have met the CISS with greater than 10 years of experience was nearly twice the percentage of those participants whose college met the CISS with less than 10 years of experience. This data indicates that presidents, whose college met the CISS, have a greater number of years of experience than those with less experience of this same group.

It is indicated in Table 3 that (22.9%) of the respondents worked at colleges with a weighted full time equivalent (FTE) enrollment (funded) during the 2010-2011 fiscal year of greater than 5,000 FTE. Colleges with this enrollment size were defined, for the purposes of this study, as large (5,000 or greater FTE). The largest responding group (57.1%) worked at colleges identified as medium-sized (greater than 2,500 but less than 4,999 FTE). Respondents from colleges identified as small (less than 2,500 FTE) made up only (20.0%) of the sample.

Table 3 indicates that for 30.4% of the colleges whose enrollment size was classified as medium met the CISS while 25% of the colleges classified as large met the CISS with a lesser number of colleges classified as large. This data indicates that colleges who have an enrollment of greater than 2,500 FTE were more successful in meeting the CISS than those with enrollment less than 2,500 FTE.

Table 3. Enrollment Size of Participants' Colleges (N=35)

Size	Total Participants		Met CISS	Did Not Meet CISS	% Met CISS by Category
	<i>f</i>	%			
Small (0 - 2,500 FTE)	8	20.0	1	7	12.5
Medium (2,501 - 4,999 FTE)	23	57.1	7	15	30.4
Large (5,000 or greater FTE)	4	22.9	1	3	25.0

Means and standard deviations for the 46 items used in the subsequent analysis are presented in Table 4. Survey respondents were asked to indicate how important they believed each of the competencies are as they relate to success in the respondent's current position. A 5-point Likert-type scale was used to record responses with a score of with a score of 5 being *very important* and a score of 1 being lowest or *not as important*.

On all items the presidents' mean scores indicated a positive orientation. For the participants whose college met the CISS, the top five leadership roles had a mean value of 4.044, leadership values had a mean value of 4.355, and leadership skills had a mean value of 4.156. For the participants whose college did not meet the CISS, the top five leadership roles had a mean value of 4.423, leadership values had a mean value of 4.554, and leadership skills had a mean value of 4.323.

The individual competencies having the highest mean values typically had the lowest standard deviation indicating little individual deviation from the total group. The

competencies with the lowest mean scores often showed the highest standard deviation indicating much individual deviation from the total group. The leadership roles category for the participants whose college met the CISS reported much more individual deviation, thus creating a significant difference. Specifically, the role of resource allocator reported a p value less than .05, while reporting a value .266 below the mean for the roles category. Further investigation to this outlier for those participants meeting the CISS indicated that these respondents not placing higher value on resource allocator had 16 years of experience at their current college, while those not meeting the CISS only had 6.9 years of experience. This data indicates that the individual deviation from the total group represented by the experience level corresponds with data in Table 1 and Table 2, were those participants with a greater number of years of experience were at colleges that were more successful in meeting the CISS.

Table 4. Leadership Competencies Assessment Instrument Mean Responses by Item

Survey item ^a	Met CISS		Did Not Meet CISS	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Part I: Leadership roles				
Visionary	4.111	0.782	4.423	0.703
Task giver	4.111	0.782	4.385	0.697
Motivator	4.222	0.667	4.500	0.648
*Resource allocator	3.778	0.972	4.346	0.846
Change agent	4.000	1.000	4.462	0.647
Total	4.044	0.841	4.423	0.708
Part II: Leadership values				
Prosperity	4.111	0.782	4.615	0.571
Good health	4.444	0.527	4.615	0.496
Family	4.556	0.527	4.538	0.508
Equal opportunity	4.222	0.667	4.462	0.582
Maturity	4.444	0.527	4.538	0.706
Total	4.355	0.606	4.554	0.573
Part III: Leadership skills				
Financial acumen	3.778	1.302	4.308	0.838
Strategic planning	4.556	0.527	4.462	0.647
Visionary thinking	4.000	1.323	4.154	0.881
Global perspective	4.111	0.782	4.308	0.647
Allocat. org. res.	4.333	0.707	4.385	0.838
Total	4.156	0.928	4.323	0.770

^a*N* = 35 for each survey item.

*outlier, significant difference from total group mean

As illustrated in Table 5, it was found in the study that a statistically significant relationship existed at the .05 level between those colleges who met CISS and those colleges who have not met CISS and the roles competencies ($F = .930, p = .026$). Reflected in Table 4, the significant relationship at the resource allocator category in the leadership roles competencies was determined to be a difference in the level of experience. Those participants with a greater number of years of experience were more successful in meeting the CISS according to the data in the previous tables.

Table 5. A Comparison of Means by President Responses on the LCAI in Relation to CISS

Leadership Competencies	Overall ^a	Presidents of Colleges		<i>t</i>	<i>df</i>
		Met CISS ^b	Did Not Meet CISS ^c		
Roles	4.234	4.044	4.423	.026*	33
Values	4.453	4.356	4.554	.091	33
Skills	4.240	4.156	4.323	.213	33
Total	4.309	4.185	4.433	.110	33

aN = 35. bn = 9. cn = 26. * $p < .05$

Summary

Identifying the significant difference in which leadership competencies (roles, skills, and values) are identified as most important for effective leaders required an examination of several key factors. Included in these key factors were (a) the responses of presidents at North Carolina's 58 community colleges to the LCAI; (b) institutional identification of those colleges who met the CISS; and (c) demographic information (gender, educational attainment, years of experience at their current college, and years of experience as a president). The quantitative approach used to address Research Question 1 provided definitive data, as supplied by survey responses.

In response to Research Question 1, a series of *t*-tests were run on the data. The answer to Research Question 1 is that there were significant differences between groups as they responded to the importance of leadership competencies on the LCAI, specifically on the roles scale ($F = .930, p = .026$). There were no apparent differences between groups as they responded to the importance of leadership values and skills competencies.

The Levene test for equality of variances was subsequently used to determine whether the assumption of homogeneity of variance was met for the relationship showing significance. The Levene test was selected as an alternative to the Bartlett test in that it is less sensitive to departures from normality (National Institute of Standards and Technology, 2004). The Levene test indicated no violations in the assumption of homogeneity of variances in the relationship identified by the *t*-test as significant: (a) roles (Levene = .930, $p = .342$), and (b) total score (Levene = 2.147, $p = .202$).

These test results suggest that there is no significant difference in which leadership competencies (values and skills) are identified as most important for effective leaders as measured by the responses to the LCAI of presidents whose college met the CISS and whose college did not meet the CISS. The only difference lies equally distributed between presidents when examining leadership roles; between those who met the CISS and those not meeting the CISS.

Implications from the LCAI quantitative results informed the qualitative portion of the study by identifying areas to focus the interview questions for the selected participants. The data in Table 6 presents president profile information and demographic information pertinent to Research Question 2.

Table 6. Presidents Profile of Interview Participants

President Number	Met CISS	Did Not Meet CISS	Years of Experience at Current College	Enrollment Size (S,M,L)	Gender (M,F)	Education Level
1	Yes		2	Small	M	EdD
2	Yes		14	Medium	M	PhD
3	Yes		18	Large	M	EdD
4		Yes	4	Small	M	EdD
5		Yes	5	Medium	M	EdD
6		Yes	15	Large	M	EdD

Research Question 2

What core values and/or competencies of Baker and Associates LCAI Model (1998) does a particular president normally (or “most often”) use whose college has met the CISS and whose college has not met the CISS?

Methodology. In order to determine if leadership values and/or competencies differ for presidents whose colleges have met or not met the CISS, a qualitative approach was taken. Semi-structured interviews took place with a sample drawn from each of the two president groups, and the data from the LCAI survey, which addressed the issue of triangulation or structural corroboration (Bogdan & Biklen, 2003). Participants were selected through purposeful sampling, as described in detail for the previous question, and interviewed in person or by telephone.

The six presidents interviewed were from different colleges, and the individuals in each of the two groups were from colleges of different sizes. The sample size of participants represented 10.3% of the entire population addressed in this study and 17.1%

of the pool from which the sample was drawn. All those interviewed were all respondents to the administration of the LCAI, used in answering Research Question 1.

Procedure. The qualitative component used in addressing Research Question 2 consisted of a series of standardized, open-ended inquiries used during the semi-structured interviews. Responses to the interview questions were examined using the constant comparative method to review qualitative data (Bogdan & Biklen, 2003). The data were formatted into an analysis matrix and categorized using both enumeration coding (frequency of individual themes) and constant comparison coding (reviewing the data looking for consistent trends in all cases). The resulting qualitative data were then analyzed as well, using thematic coding (Bogdan & Biklen, 2003). This technique used a coding paradigm involving setting and context codes, process and activity codes, and definition of the situation codes (Bogdan & Biklen, 2003). In order to provide consistency and maintain context to the questions presented to participants, the results are presented as they precipitated around each of the specific interview question topics. In all instances, the answers were not mutually exclusive and in most instances involved overlap.

Findings. In order to determine the most often used leadership core values or competencies based on Path-goal Leadership Theory, six presidents were first asked to describe what elements of leadership are valued and needed as a president. Presidents 1, 2, 5, and 6 referred to innate traits they associated with leadership, such as the ability to interact and connect to people; Presidents 3 and 4 primarily described leadership with action words. President 2 described how he valued communication as the main element of leadership whether it was verbal or non-verbal. All of the respondents thought

leadership involved strategies for various teams to have common goals, or strategic plans. Common threads across both groups were evident in the themes developed from all six interviews.

The themes that emerged from the coding of the interviews were as follows: (a) motivate, (b) make effective decisions, (c) vision, (d) resource allocator, (e) communicate effectively, and (f) behave in a fair and consistent manner. While there was commonality among the themes, the significant difference in the themes between the two groups (those whose college met the CISS and those whose college did not meet the CISS) was in the allocate resources theme.

Motivating employees. Participants were asked what the necessary ingredients were in motivating people to be successful in meeting the CISS. All respondents indicated that the CISS is not a publicized document and they would be surprised if all employees knew the elements to meet the CISS. All respondents focused more on the motivation of employees to succeed at their role and understand the vision of the college to create a learning environment for students to succeed. President 5, who did not meet the CISS, said,

. . .administration knows the CISS and understands the value, but our core emphasis is on student learning and meeting the objectives for the degree requirements and certifications. If we are doing those things correctly and our customer service is student focused, we will be successful whether we meet the criteria for the CISS or not.

All six respondents indicated that motivation is both intrinsic and extrinsic to individuals. They also indicated that the economic stress on families has impacted not

only families outside of the college but internal to the college environment also. Therefore, all respondents referred to tactics of motivation through professional development. Providing opportunities for personal growth to gain new knowledge and skills to motivate employees was a consistent message from all six presidents. The focus of motivation through professional development was to become stronger in their field to enable personnel to transfer their knowledge to students to enhance student success. President 2, who met the CISS, used the example of a leadership development program where fifty-eight employees are being provided a two-year leadership program on-campus to inspire future leaders of the college. President 4, whose college has not met the CISS, described a similar program but for a one-year leadership program.

President 1, who met the CISS, shared an example of a college family day that included college employees and their families networking during a picnic and softball day to enjoy a day of fun and games.

Motivation came in various methods and tactics from both groups during the interviews but none of those methods or tactics were directly focused on the CISS, there was a focus on student success through motivated employees. Both groups consistent response on motivation indicates that there are no differences in the theme of motivation for the presidents whose college met the CISS or did not meet the CISS.

Making effective decisions. According to all six presidents, motivation was linked to their effectiveness at making decisions. President 6, whose college had not met the CISS, talked about the importance of involving others to promote openness, collaboration and cooperation to obtain data to make informed decisions. This message was consistent throughout the interviews in the sense of allowing employees to be a part of the decision

making process served as motivation, buy-in to the decision, and increased the likelihood of the meeting the outcome for the decision. President 3, whose college had met the CISS and who had been at his current position for 18 years, spoke specifically to the collaboration component of decision making by stating, “leaders must know that the president cannot be the sole solution to all of the problems and collaborative decision making involves everyone to support the final decision.”

All six presidents made it clear that the financial and human resource decisions are made under controlled groups; however, as I sensed an heir of self-confidence in each respondents voice tones, all six reported that ultimately the final decision was made by the president. No apparent differences emerged in the theme of making effective decisions for the presidents whose college met the CISS or did not meet the CISS.

Visioning. All six respondents thought that the college’s vision was to be demonstrated by the president and involved strategies for various teams to have common goals, or strategic plans for student success. President 2, whose college met the CISS and has 14 years of experience at this college as president provided a sample of their new vision statement for the next 10 years. Their new vision would include becoming a learner-centered institution, which in his description was directed toward student success. He expanded by stating, “I have to demonstrate my belief in our vision at all levels of my life as president while interacting with the community, boards, and within the academic setting. This new vision provides the mechanism to focus on the learner.”

This message was consistent throughout the six presidents responses. President 5, whose college has not met the CISS, believes that vision is a key ingredient as a leader by stating, “vision is one the main elements that I convey to my constituents as being vital to

my abilities to effectively lead this college.” He continued by saying, “my vision for this college must be portrayed through the colleges vision and I must be thinking of the future for this institution.”

The importance of vision as a theme in these interviews was apparent with immediate responses without pausing to think about a response. Visionary thinking was easily identified early on in the interview process as a key element based on the tone of the presidents voices and the excitement it carried when the vision of the respective colleges were discussed by both groups.

Allocating resources. The three presidents who met the CISS were quick to point out they were more hands-on as a change agent, disturbance handler, and advocate, while being less hands-on as a resource allocator. While speaking about resources, President 3 of this group, stated “he provided the resources, tools and guidance” but did not get involved with allocation of specific funding to specific divisions. He was involved in obtaining college resources but his focus was to allow the vice-presidents, deans, and other administrators handle the allocation of those resources. He also noted that his chief financial officer was the primary resource allocator for his college.

President 2 was consistent in his response that he was involved with obtaining the resources and the administrators of the college (i.e., senior vice presidents) were responsible for allocating the resources. A noteworthy fact about these two presidents, whose colleges have met the CISS, is they possess a combined 32 years of service at the same college (18 and 14 respectively). President 1 of this same group indicated he was more involved with allocating resources but he also leads a smaller institution and has only served 2 years at his institution.

Presidents 4, 5, and 6, whose college has not met the CISS, indicated during their interviews they worked hand-in-hand with their chief financial officer. They offered that their work in financial acumen was highly important to their role as president. President 5 indicated that he led bi-weekly budget meetings at his institution to ensure proper allocation of resources, both human and fiscal. Presidents 4 and 6 shared these same practices but on a lesser scale of meeting monthly. Additionally, President 6 intended to increase his involvement by meeting with division deans in the future to ensure equitable distribution of resources.

The role of resource allocator, while as a theme, was also identified as a significant difference in how the two groups practiced their role as president. Those presidents who had met the CISS indicated they felt their role was to obtain the resources and allow other college administrators to allocate the resources (i.e., business officer, chief financial officers, vice presidents, deans). Those presidents whose college had not met the CISS indicated they worked more closely with allocating the resources by meeting regularly with other college administrators and ensuring allocations were appropriate.

Communicating effectively. The nature of the job for all six presidents was mentioned in every interview. Expanding on this topic led to the theme of communication. Often, as presidents reported, their travel schedule, meetings, and community involvement meant they must communicate clearly and with precision to college personnel to ensure effectiveness of the organization. President 3, who met the CISS, informed the study from a large institution perspective. He noted in the region his college is located offers an abundance of opportunity for meetings, luncheons, and other

political engagements, which meant he spends a great deal of time off campus. Therefore, he communicates with his administration through electronic mail, video conferences, and in person during regularly scheduled meetings. He stated, “. . .to the extent possible due to my schedule, I have to over communicate.” He was asked to expand on “over communicate” and he responded by explaining he would communicate in person, by telephone and via electronic mail to provide clarity and accuracy.

For the presidents who did not meet the CISS, their statements paralleled President 3. As an example, President 4 implied that he would make himself available during times outside of the regularly scheduled work day to meet with personnel. He would communicate with his personnel through electronic mail and routine visits to the various divisions as his schedule permitted. President 6 shared that he likes to conduct quarterly meetings with all his college staff to inform them of college information such as budgets, facilities, and general operations.

President 2, whose college did meet the CISS, statements concurred with his counterparts and added that his institution uses a virtual information internet link to provide personal to professional information relative to the college. While there were various methods shared for communicating with college personnel by all six presidents, it was clear there were no differences in the importance on the theme of communication by both groups.

Behaving in fair and consistent manner. The concept of characteristics of the work environment was addressed to the participants in terms of how they perceive their role in the characteristics of the work environment. President 4 said, “Good leadership involves taking responsibility for professional growth of those you supervise, and

blending the goals of individuals with the mission and goals of the institution.” He elaborated further and informed the study that all employees of the college from vice-presidents to custodial maintenance share opportunities in professional development which, according to his response, was equitable and fair to all personnel.

All six respondents described their college’s efforts at leadership recognition to be an element of creating a good work environment. Presidents 2 and 5 added that this element was a very intuitive process at their college and when appropriate they would formally recognize personnel for their work and accomplishments. President 2, whose college met the CISS, described a recognition program for Excellence in Teaching Award and Outstanding Staff Member of the Year. He continued by stating “this is by nomination from peers across campus and we recognize these individuals with a monetary gift along with recognition at the annual faculty/staff gathering.”

This recognition also included student success and ensuring that student interest was always put first. An example of student recognition is the North Carolina Community College’s Excellence Event, “The Great Within the 58.” NC Community Colleges honor students, faculty and staff during the event, which is part of a weeklong celebration of “North Carolina Community College Excellence in Education,” as proclaimed by Governor Beverly Perdue.

Rounding out the descriptors for behaving fair and consistent from all respondents included visioning, motivating people, being a change agent by encouraging new and different thinking, as well as being advocates for the college and each other creating a sense of family among the college constituents. These descriptors are consistent with the American Association of Community Colleges (2005) competencies for community

college leaders. The AACCC (2005) competencies of advocacy, professionalism, communication, collaboration, organizational strategy, and resource management were reported by presidents across the United States parallel the results of this study.

Summary. Identifying the core values and/or competencies a president normally (or “most often”) uses whose college has met the CISS and whose college has not met the CISS required an examination of several key factors including (a) elements of leadership valued and needed in role as president, (b) leadership strategies involved to include others in meeting goals, (c) the president’s role in the characteristics of the work environment, (d) necessary ingredients in motivating employees in meeting the CISS, and (e) what results have occurred in meeting or not meeting the CISS. The qualitative approach used to address research question two provided definitive data as supplied by respondent opinions collected during personal interviews with a representative sample of presidents whose college had met the CISS and those whose college had not met the CISS.

The general consensus of the respondents was that student success is defined by quality instruction and services. Student success involves the consistent application of a number of leadership values and/or competencies including but not limited to the ability to (a) motivating employees, (b) making effective decisions, (c) visioning, (d) allocating resources, (e) communicating effectively, and (g) behaving in a fair and consistent manner. Leadership was thought to be action and people oriented rather than task oriented and involves positive thought, collaboration, and customer networking. The interactive nature of leadership, including the concept of customer-service and student first orientation and the blending of individual needs with a college’s goals and objectives was a common theme as well.

Finally, in response to Research Question 2, it was clear from all six presidents that effective personal and institutional leadership is critical to the success of North Carolina community colleges. While there was commonality among the themes, the significant difference in the themes between the two groups (those whose college met the CISS and those whose college did not meet the CISS) was in the allocate resources theme. The results of this qualitative review of core leadership competencies of North Carolina community college presidents confirm that there is a significant difference in leadership roles between groups in relationship to meeting the CISS. However, there was not a significant difference in leadership values and skills between groups in relationship to meeting the CISS. These results are linked to the LCAI survey data and the relationship between the two groups at the leadership roles.

Summary

This study was conducted to determine whether the relative importance of leadership competencies (roles, values, and skills) differs between presidents whose college have met the CISS and those whose college have not met the CISS. Further, this study examined the identified leadership role, values, and skills as reported by presidents in North Carolina community colleges. The findings indicate that there is a significant difference in how presidents report the relative importance of leadership roles to succeed in meeting the CISS. However, there was not a significant difference in how presidents report the relative importance of leadership values and skills to succeed in meeting the CISS. Additionally, the prevalent themes identified in this chapter indicate there are characteristics common from both groups of important leadership competencies to succeed as a community college president.

There is a clearly identified need to focus on quality instruction and services for students at individual community colleges in North Carolina and meeting the CISS is important but does not carry enough importance to be a part of the vision, mission, or goals of North Carolina community colleges. The results of this study also indicate that while significant responsibilities are placed upon the presidents of North Carolina community colleges, the CISS is only one of many activities and programs that take place under the leadership of the president. In addition, there appears to be sufficient support at many colleges, both in resources and at the instructional level, to meet either current or anticipated needs for students to succeed, specifically at the presidential level.

CHAPTER 5: ANALYSIS

Introduction

Leadership research has studied the impact of leaders on followers from varied approaches including trait, behavioral, situational, decision-making, charismatic, visionary, and transformational. Leadership research also has examined leadership styles and their relationship to leadership effectiveness. The approach that provides the framework for this study is leadership competencies of North Carolina community college presidents and the association with the Core Indicators of Student Success. This chapter links the analysis of this study to leadership literature with implications, limitations, and recommendations for further research.

Analysis Link with Literature/Research

Link to Research

The review of the literature located in Chapter 2 suggests the sample used for this study was very similar to samples used in other LCAI-related studies as well as in other community college leadership surveys. Findings in this study indicated respondents in the sample were mostly male (74.3%), over two-thirds had less than 10 years experience as president at any college (70.6%), and (97.2%) held a doctorate degree. Most respondents worked at a college with more than 2,500 FTE (77.1%). The target population for this sample was presidents at North Carolina community colleges, and the study achieved a 60.3% response rate (35 of 58 possible).

Athans (2000) used the LCAI in examining leadership perceptions and temperament styles of community college presidents from 39 states around the country. His initial sample of 300 presidents was randomly selected from the population of 463 presidents of single, stand-alone campuses with less than 5,000 students. He ultimately ended up with a useful sample size of 119, or a return rate of 25.7%. Because of the random selection and random assignment techniques used, the sample was considered to be representative of the population it was drawn from. Athans (2000) found 82.35% of his sample to be male, 46.22% had served as a college president for 10 or more years, and 90.76% held an earned doctorate.

Welch (2002) used the LCAI to look at perceptions of competency and temperament in 61 North Carolina nursing administrators. Her efforts resulted in 46 usable responses, or a 75.4% return rate. Respondents in her sample were 97.8% female, over 46% of the administrators in Welch's sample had been in their current positions for at least 10 years, and only 2.17% reported holding an earned doctorate (those with a master's 134 represented 84.78% of the sample).

Unfortunately, Sharples (2002) did not collect or examine demographic data as part of his LCAI-driven study on the importance of leadership competencies as reported by North Carolina community college presidents. However, his study did involve 51 usable responses, representing a return rate of 87.93%. Fifty-two percent of community college leaders indicated male gender in the 21st Century Educational Leadership Profiles Project (Campbell & Kachik, 2002). In research conducted on behalf of the American Association of Community Colleges (Amey & VanDerLinden, 2002), 72% of community college presidents nationally were male. Most presidential respondents in AACC's

sample held a doctorate (88%), while 77% had been at their current jobs 10 years or less. In another national study, Vaughan (1990) found very similar results for chief instructional officers (74% held a doctorate and 79% were identified as being male).

The current study looked for significant differences in which leadership competencies (roles, skills, and values) were identified as most important for effective leaders as indicated by president responses on the LCAI. The variables of having met the CISS and not met the CISS were the focus of this study. Similar to Sharples (2002) study, he also looked at perceptions about which leadership roles are most important (as influenced by the institutional characteristics of enrollment size, enrollment growth, and the urban or rural setting of the college). Sharples (2002) looked at two responses for each competency: (a) degree of energy spent addressing the specific competency and (b) estimated effectiveness in achieving the competency. Similar to other current research, the results of Sharples' (2002) study indicated some areas of significant difference on an item-by-item analysis of the competencies being measured. However, Sharples' (2002) investigative construct required significant differences on both the responses of energy spent and estimated effectiveness for the overall relationship to be deemed significantly different. While he found no significance at the .05 level for leadership role competencies overall ($p = .311$ and $p = .297$ respectively), suggesting no significant differences based on enrollment size, he did find significant differences on the reported degree of energy spent for leadership values competencies ($p = .001$) and leadership skills competencies ($p = .010$).

In contrast to Sharples (2002) study, the current study did find significant differences in the leadership role competencies scale ($F = .930, p = .026$). The survey

data from demographic information indicates that significant differences based on a president's having a greater number of years of experience were more successful in meeting the CISS than those with less experience. This was also a theme in the qualitative interviews. Specifically within the leadership roles competencies of the LCAI, the role of *resource allocator* was of significance with the group of presidents whose college had met the CISS having 32 years of combined experience versus 24 years of experience for those who had not met the CISS.

Athans (2000), in looking at leadership perceptions and temperament types with the LCAI as one of the instruments used, only found significant differences on the self-reported competencies that Baker and Associates (1998) labeled ambassador and visionary. No other significant differences were noted in the LCAI-related portion of Athans' (2000) study. However, Athans (2000) also looked at temperament type using a situational temperament assessment instrument, and noted significant differences in how temperament types responded to some competency items based on the age of the respondent. Welch (2002) looked at how nursing administrators rated themselves as more or less competent on the roles portion of the LCAI. She found results that were similar in nature to those of Athans (2000).

The results of the current study on the importance of leadership competencies found similarities with the results of the studies by Athans (2000), Sharples (2002), and Welch (2002), with the exception of the leadership roles competencies. No other significant differences were found between the current study and previous studies. Additionally, the literature supports the findings in this study that House's (1971) Path-goal theory explains the ways in which leaders can influence their subordinates'

perceptions of work and personal goals and the *paths* to attaining those goals. According to this theory, leaders are effective when they motivate subordinates toward a journey down the path toward goal fulfillment. This was evident in the themes and common threads across both groups in the LCAI survey data and from all six president interviews.

Motivating Employees

House's (1971) Path-goal theory is grounded in beliefs that motivation is the result of three different types of perceptions that individuals have. *Expectancy* is the first belief that one's efforts will result in performance. The second, *instrumentality*, is the belief that one's performance will be rewarded. And, the last belief is that *valence* is the perceived value of the reward to the recipient. Motivation is the primary belief of expectancy theory as a multiplicative of these three components. According to Greenberg and Baron (1993), motivation is higher when all three components are high and lower when all three are lower.

The results of this study indicated motivation a key element in leadership. The methods and tactics employed by the two groups of presidents varied but supported House's (1971) Path-goal theory focus on motivation. Both groups consistent response on motivation indicated there were no differences in the theme of motivation between the groups. Motivation was linked by all six participants to individual and college performance levels in relationship to student success. The survey data from Table 4 of the LCAI results supports these findings in the motivator competency of leadership roles. The self-reported competency that Baker and Associates (1998) labeled motivator was the highest rated mean score element for all 35 survey respondents of presidents whose

college met the CISS and whose college did not meet the CISS (4.222 and 4.500 respectively).

Making Effective Decisions

House and Mitchell's (1974) research yielded four categories of leadership and the circumstances in which the various styles are most effective. One of them, participative leadership, advocates collaborating and consulting with subordinates before reaching decisions that impact them, is the style that has the most positive effects when the work is dissatisfying, frustrating, or stressful to subordinates.

According to all six presidents, motivation was linked to their effectiveness at making decisions. An emphasis on collaboration and openness to obtain informed decisions was prevalent among both groups. The interview themes revealed decision making as a key to meeting goals, objectives and strategic plans for the college. Decision making was important to the presidents of both groups in the LCAI survey data also. An analysis of the LCAI leadership skills category indicated the strategic planning mean score was 4.556 for those colleges who met the CISS and 4.462 for those colleges not meeting the CISS. Consistent with motivator, strategic planning mean scores were the highest for the leadership skills category.

Visioning

The research findings for vision supported the achievement-oriented leadership style, another category of leadership from House and Mitchell's (1974) research in which various styles are most effective. Achievement-oriented leadership, which sets goals and tries to improve performance and emphasizes excellence, is best suited for non-repetitive, ego involving tasks. Visionary thinking was identified early in the interviews of both

groups of presidents. All six presidents thought the college's vision was to be demonstrated by the president and involved strategies for common goals and strategic plans for student success.

Visionary, identified as one of the top five elements in leadership roles of the LCAI survey, was apparent by the excitement and change in voice tones of the presidents during the interviews. Vision and the skill of visionary thinking were identified as an important leadership competency that is consistent with House and Mitchell's (1974) literature and research. These findings are supported by the data from the LCAI survey responses with visionary mean scores of 4.111 for those colleges who met the CISS and 4.423 for those colleges who have not met the CISS.

Allocating Resources

House and Mitchell's (1974) identified supportive leadership as one of the four categories of leadership and the circumstances in which the various styles are most effective. Supportive leadership, which creates a friendly climate and assumes that subordinates will take responsibility and achieve challenging goals, is most effective when used with ambiguous, non-repetitive tasks. The role of resource allocator, while as a theme, was also identified as a significant difference in how the two groups practiced their role as president.

Those presidents who had met the CISS indicated they felt their role was to obtain the resources and allow other college administrators to allocate the resources (i.e., business officer, chief financial officers, vice presidents, deans). These data revealed the assumption of responsibility House and Mitchell (1974) identified as most effective with non-repetitive tasks. The LCAI survey data from Table 4 also indicate resource allocator

as a significant difference between the two groups. Further analysis of this difference revealed that the presidents of this group as illustrated in Table 5, a statistically significant relationship existed at the .05 level between those colleges who met CISS and those colleges who have not met CISS and the roles competencies ($F = .930, p = .026$).

While those presidents who had not met the CISS indicated they worked more closely with allocating the resources by meeting regularly with other college administrators and ensuring allocations were appropriate. This same group also indicated they worked hand-in-hand with their chief financial officer, their work in financial acumen was highly important to their role as president, and led regularly scheduled budget meetings to ensure proper allocation of resources, both human and fiscal. Reflective in Table 4, the resource allocator category in the leadership roles competencies provided a mean score of 4.346, versus a mean score of 3.778 for those presidents whose college met the CISS.

The significant relationship at the resource allocator category in the leadership roles competencies was determined to be a difference in the level of experience. Those participants with a greater number of years of experience were more successful in meeting the CISS according to the data.

Communicating Effectively

Communication methods were identified by both groups as a key component to leadership and in specific as a president. Both groups identified the ability to communicate in person was a challenge due to travel schedules, meetings, and community involvement that required working off campus. Therefore, both groups implied that communication through technology was important and clear communication

helped to ensure effectiveness of the organization. While communication was not an itemized element in the LCAI survey, communication is a thread throughout the leadership roles, values, and skills competencies of the LCAI.

Behaving in a Fair and Consistent Manner

Creating equal opportunity and behaving consistently was a theme identified as important to both groups of presidents. Evidenced by the mean score (4.444 for those meeting the CISS and 4.538 for those not meeting the CISS) in the leadership values competency of equal opportunity both groups indicated from Table 4 the importance of this value. There were no significant differences in the LCAI survey or from the six president interviews.

House and Mitchell's (1974) research of the identified four categories of directive, achievement-oriented, supportive, and participative leadership all support the descriptors identified in the theme of fair and consistent manner behavior. This theme according to both groups helped to create a sense of family among the college's constituents.

Links to Literature

The Path-goal theory provided the conceptual framework and theoretical foundation for the Leadership Competencies Assessment Instrument. The characteristics used by respondents in this study to describe core leadership values and/or competencies were mirrored in this research. Data in this study (and others) indicated community college presidents often operate in one or more of the four leadership categories at various times in their work day. The literature also supported the theory based contentions of a number of respondents as they related to the development and

acquisition of leadership competencies (Birnbaum, 2001; Campbell & Kachik, 2002; Frohib, 2002; Witherspoon, 1997). Well-documented leadership theories, including situational, personal and situational, humanistic, behavioral, and exchange, as well as House's Path-goal theory, all provide the structural and conceptual framework for current president's leadership core values and/or competencies.

This study revealed that there is not a significant difference in how presidents report the relative importance of leadership values and skills, but there is a significant difference in the leadership role competencies in meeting the CISS. Furthermore, the NCCCS focus on the CISS is not as prevalent of a focus for the individual colleges that participated in this study. There is a clearly identified need to focus on quality instruction and services for students at individual community colleges in North Carolina and meeting the CISS is important but does not carry enough importance to be a part of the vision, mission, or goals of North Carolina community colleges. The results of this study also indicate that while significant responsibilities are placed upon the presidents of North Carolina community colleges, the CISS is only one of many activities and programs that take place under the leadership of the president. There is little difference in the leadership competencies or likely outcomes colleges should expect to experience based on this study. In addition, there appears to be sufficient support at many colleges, both in resources and at the instructional level, to meet either current or anticipated needs for students to succeed, specifically at the presidential level.

Limitations

While it is true that investigative results indicated statistically significant differences between respondents as influenced by the variables of meeting the CISS or

not meeting the CISS, misinterpretations based on levels of statistical significance are likely in this type of study (Gall et al., 1996; Kirlinger & Lee, 2000). Unfortunately, it is a common mistake to assume that the strength of significance indicates the likelihood a research hypothesis is correct, or that a high p value indicates a high probability of similar results in a replication study (Gall et al., 1996).

Survey Method

The survey portion of the study involved a representative sample and used an instrument that current and prior research indicated had a high level of face validity and instrument reliability. An electronic survey intended to simplify the survey process and to provide electronic data to simplify the data gathering process was used to reduce the time required to complete the survey. However, the limitations of the survey method included the time required to complete the survey which exceeded the actual projected time according to the respondents. This could have been a limitation for respondents who chose not to complete the survey in its entirety. Eight of the 58 presidents completed portions of the survey and these data were not beneficial to the study and ultimately were discarded from the actual study.

Research Participants

The purpose of this study was to explore the leadership style of presidents. A limitation to this study was only presidents of colleges were interviewed during the qualitative portion of the study. Additional survey participants of different levels of administration could have informed the survey with information regarding the presidents perceived leadership style and the importance of the CISS. Expanding the survey to

include vice-presidents, deans, and other administrators could have provided a richer description of the president's leadership style.

Performance Funding

Since 1989, the North Carolina Community College System (NCCCS) implemented its *major accountability document* to measure performance measures, referred to as Critical Success Factors (CISS). The CISS is the measure that is institutionally focused and affects performance funding for colleges. However, the past two years, the North Carolina General Assembly has not awarded performance funding due to State budget constraints in a sluggish economy. This lack of incentive (funding) to achieve the CISS could have caused institutions to not focus or give as much attention to meeting the CISS.

It was indicated during the interviews that the CISS was not a focus or part of college's vision and mission statements. However, if performance funding was a part of a college's annual funding sources, this could potentially change this limitation.

Performance funding represents accountability and improved performance that started in the late 1990s with outcomes assessment and performance reporting. The NCCCS implementation of its *major accountability document* could be evidence for future performance funding programs to be established by the state.

Revisiting the Framework

The conceptual framework for this study proved to work adequately throughout the entire mixed-methods model of research. Baker and Associates (1989) uses Robert House's (1971) Path-goal theory as the conceptual framework for the Leadership Competencies Assessment Instrument (LCAI), the data collection instrument used in this

study. This study administered the LCAI to 58 presidents of the North Carolina community colleges and to provide baseline data to develop interview questions for three presidents of colleges meeting the CISS and three presidents of colleges not meeting the CISS.

The LCAI was developed by Baker and Associates (1998) and others, and proved to be adequate to gather information about the practiced leadership styles in three broad categories: leadership roles, values, and skills. The use of the Path-goal theory helped to expand on the LCAI data by providing the framework for the interview questions developed for the qualitative portion of this study.

Baker and Associates (1998) categories were used as a template to compare the CISS against the president's practiced leadership styles. A comparison of the practiced leadership styles associated to meeting the CISS and this study's results utilized the framework of the Path-goal theory yielded information for use by board of trustees, presidents, and aspiring community college presidents. The results from this study validate the framework and were consistent with the directive, participative and supportive leadership paths in the Path-goal Theory.

Implications

Recommendations for North Carolina community college practitioners based upon this research who might find the results of this study particularly relevant include North Carolina Community College System administrators, presidents, board of trustee members, candidates for leadership positions or those interested in exploring opportunities in community college administration, and those individuals and groups responsible for reporting the results of the CISS.

North Carolina Community College System Administrators

While the NCCCS reports annually to the North Carolina General Assembly its *major accountability document* (Critical Success Factors), NCCCS administrators might consider researching the value of the CISS among North Carolina community colleges. While all colleges are reporting data, currently, the only implications for not meeting the CISS are written reports on how a college intends to improve its performance to meet the CISS. This study was informed by interviews of presidents whose college met the CISS and presidents whose college had not met the CISS. Both groups indicated that the CISS was not a part of their core mission and no obvious themes emerged in the coding of interviews that indicated a high level of importance was placed on the CISS.

As an accountability document, NCCCS might consider methods to ensure North Carolina community colleges are focused on the NCCCS strategies for improving performance and the linkages with performance-based funding. One suggested method which might provide an enhanced focus on the CISS would be to present an analysis of funding comparisons between colleges who have met the CISS and those colleges who have not met the CISS.

Board of Trustees

A minimal number of North Carolina community colleges are currently meeting the requirements of the CISS. The demographic profile of presidents whose college have met the CISS possess a mean score of 8.06 years as president at their current college and mean score of 12.17 years as president at any college. Additionally, the significant differences in presidents who met the CISS and presidents who did not meet the CISS were indicated in the leadership roles category of allocating resources. Along with years

of experience, presidents of this group also informed the researcher they allowed other administrators to allocate resources throughout the college while the presidents were responsible for obtaining the resources. In other words, presidents of this group placed the responsibility of resource allocation on chief finance officers, business managers, deans, and other institutional administrators. On the other hand, the presidents not meeting the CISS informed the researcher they held regularly scheduled budget meetings and they assumed responsibility for resource allocation.

Board of trustee members might consider the data in this study if they are searching for a new president. The relevant data to the board of trustees in this study might be; 1) the years of experience or the leadership competencies identified for presidents whose colleges have met the CISS, and 2) the methods of how a president allocates resources might be of interest if one of their goals is to meet the CISS.

Presidents and Future Leaders

Those responsible for cultivating and nurturing new leaders and those interested in becoming new leaders must continue to scrutinize existing and emerging societal, political, cultural, and educational trends in order to implement or participate in appropriate and beneficial opportunities to prepare for the 21st century requirements on North Carolina community colleges (i.e., Critical Success Factors). It is critical that content for leadership developmental activities and programs remain current and relevant.

North Carolina's community colleges and other similarly situated organizations should look to expand participation by their employees in developmental activities via new or expanded grow-your-own programs at the local college level, or by making regional and national training opportunities more readily available to interested and

capable candidates. In addition, these same institutions should create greater opportunities for peers and immediate supervisors to play a more meaningful and expanded role in identifying and supporting potential leaders. Efforts should be made to institutionalize or at least formalize this expanded role. Improvements should be made in campus-based recognition and rewards programs to enhance the visibility and prestige of emerging leaders and their developmental opportunities. It is evident in the results of this study that presidents of both groups valued professional development by providing on-campus leadership programs. Additionally, community college practitioners might consider additional support and participation in research in the field of community college leadership and encourage both formal and informal scholarship in their subordinates and supervisors as well.

Lastly, current presidents and future leaders might consider researching performance funding and its relationship to future higher education institutions. Considering the economic downturn and conditions of state budgets, performance-based funding for higher education might be more of a reality in the coming years sooner than later. Implications for performance-based funding might be of extreme importance in the coming years to current and future leaders of North Carolina community colleges.

Reporting Groups of the CISS

The Institutional Effectiveness Officer or an equivalent position at each college is responsible for reporting the CISS data annually to the NCCCS office. The information from this study might be considered for analysis of presidential demographics, college size, and identified leadership roles, values and skills successful for meeting the CISS. The study provided mean scores for each of the LCAI competencies which might be

informative to the NCCCS. Additional survey data might be considered for collection with greater response rates if there were mandates for presidents to complete the survey.

The implications for reporting groups of the CISS worthy of consideration might be an analysis of a performance-based funding model for each institution. This model may begin preparing North Carolina community colleges for performance-based funding and might provide sample budget allocations for those colleges meeting the CISS and those colleges not meeting the CISS. Further research would be required for such a model, but might be a valuable tool in the near future.

Further Research

The conceptual framework used in this study and reflected in the research and interview questions involved investigation into the importance of leadership competencies as assessed on the LCAI as well as an examination of the identified core leadership values and/or competencies in North Carolina community college presidents. The concepts of leadership and CISS remain dynamic but complex constructs worthy of additional research. With the diverse theories and complexity of different investigative methodologies available, continual care must be taken to ensure that research undertaken remains credible, valid, reliable, and focused. The results of this study, as well as the methodology and instruments used in the investigation, suggested a number of additional lines of inquiry with great potential to add to the existing knowledge base. A number of additional replication studies would likely enhance and build on the results of studies utilizing the LCAI that were conducted by Athans (2000), Baker and Associates (1998), Sharples (2002), and Welch (2002).

Survey Method

Using the same methodology and framework used in this study, utilizing Baker and Associates (1998) LCAI, but with a different kind of scale, would possibly provide more useful results than found in this study. The use of a Likert-type scale in this study allowed presidents to equally score or rank the importance of all competencies. Some sort of a forced choice scale or ranking would likely be more effective in identifying significant (and potentially more useful) differences between different presidents. Additional investigations with the same purpose and research questions used in this investigation, but using different instruments, methodologies, and analytical techniques would also add to the validity and reliability of Baker and Associates (1998) leadership competency constructs (roles, values, and skills). The results of this study indicated that no significant differences existed in responses on the LCAI leadership values and skills categories. The only differences were primarily between leadership roles of the two groups. The causal-comparative design severely limited the ability to explore the nature of the apparent differences, and additional investigations might provide interesting and useful results.

Research Participants

Another line of investigation for future research might consider drawing samples from other college administrators (i.e., vice-presidents, deans, chief financial officers), would help, over time, to overcome the limitations of the causal-comparative research design. The format and constructs used in the qualitative portion of this study also suggested additional lines of inquiry. Interviewing additional members of the same target population could certainly improve the robustness of the information collected.

Conducting similar semi-structured interviews (and utilizing a similar coding scheme) with sample populations from other employee groups (like mid-managers) would also provide potential opportunities for further study.

Performance Funding

Since the inception of the *major accountability document* for the NCCCS, reporting data for the CISS provides information for the North Carolina General Assembly to consider performance-based funding. Further analysis and research might consider how a community college performance-based funding model would apply to colleges meeting the CISS and those colleges not meeting the CISS. Further criteria would need to be defined, but this study could provide baseline data for identifying relationships between presidents whose college have met the CISS and presidents whose college have not met the CISS.

Conclusion

The North Carolina community college system critical success factor 1 and the association to leadership styles practiced by North Carolina community college presidents remain complex issues that warrant additional research and investigation in the community college setting. There is a clearly identified need to focus on quality instruction and services for students at individual community colleges in North Carolina and meeting the CISS is important but does not carry enough importance to be a part of the vision, mission, or goals of North Carolina community colleges. The results of this study also indicate that while significant responsibilities are placed upon the presidents of North Carolina community colleges, the CISS is only one of many activities and programs that take place under the leadership of the president. There is little difference in

the leadership competencies or likely outcomes colleges should expect to experience based on this study. In addition, there appears to be sufficient support at many colleges, both in resources and at the instructional level, to meet either current or anticipated needs for students to succeed, specifically at the presidential level.

REFERENCES

- Alfred R. L., & Carter, P. (1996) Inside track to the future. *Community College Journal*, 66(4), 10-19.
- American Association of Community Colleges. (2001). *Leadership 2020: Recruitment, preparation, and support*. Washington, D.C.: Leadership Task Force.
- American Association of Community Colleges. (2005). *Competencies for Community College Leaders*. Washington, D.C.
- Amey, M. J., & VanDerLinden, K. E. (2002). *Career paths for community college leaders*. Washington, DC: Community College Press.
- Athans, S. (2000). *Temperament and competence in the managerial roles of community college presidents*. Unpublished doctoral dissertation, North Carolina State University, Raleigh.
- Baldrige, J. V., Curtis, D. V., Ecker, G., and Riley, G. L. (1978). *Policy making and effective leadership: A national study of academic management*. San Francisco; CA: Jossey-Bass.
- Baker, G. A., III, & Associates. (1998). *Organizational concepts and theories in the public sector*. Raleigh, NC: North Carolina State University.
- Baker, G. A., III, & Associates. (1999). *Organizational concepts and theories in the public sector*. Raleigh, NC: North Carolina State University.

- Baker, G. A., III, & Associates. (2000). *Organizational concepts and theories in the public sector*. Raleigh, NC: North Carolina State University.
- Barlow, A. (2007). *The rise of the blogosphere*. Westport, Conn: Praeger.
- Bass, B. M. (1981). *Stogdill's handbook of leadership*. New York: Free Press.
- Bennis, W., & Nanus, W. (1985). *Leaders: The strategies for taking charge*. New York: Harper and Row.
- Bensimon, E. M., Neumann, A., & Birnbaum, R. (1989). *Making sense of administrative leadership: The "L" word in higher education*. ASHE-ERIC Higher Education Report No. 1. Washington, D.C.: The George Washington University, Graduate School of Education and Human Development.
- Berg, B. L. (2001). *Qualitative research methods for the social sciences* (4th ed.). Boston: Allyn and Bacon
- Birnbaum, R. (1988). *How colleges work: The cybernetics of academic organization and leadership*. San Francisco: Jossey-Bass.
- Birnbaum, R. (2001). *Management fads in higher education: Where they come from, what they do, why they fail*. San Francisco: Jossey-Bass.
- Bogdan, R. C., & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon.
- Boggs, G. R. (1994). Reinventing community colleges. *AACC Journal*, 64, 4-5.
- Boggs, G. R. (2002). In D. F. Campbell (Ed.), *The leadership gap: Model strategies for leadership development* (pp. vii-viii). Washington, DC: Community College Press.

- Bolman, L. G., & Deal, T. E. (1984). *Modern approaches to understanding and managing organizations*. San Francisco: Jossey-Bass.
- Bouchard, Jr., T., Lykken, D., McGue, M., Segal, N., & Tellegen, A. (1990). Sources of human psychological differences: The Minnesota study of twins reared apart. *Science*, *250*, 223-228.
- Brewer, J., & Hunter, A. (1989). *Multimethod research: a synthesis of styles*. Newbury Park, CA: Sage.
- Brown, J. K. (2007). *Planning, accountability, research, and evaluation (PARE)*. Raleigh, NC: North Carolina Community College System.
- Burke, W. W. (2002). *Organization change: Theory and practice*. Thousand Oaks, CA: Sage Publications, Inc.
- Campbell, D. F., & Kachik, C. (2002). Leadership profile research and consortium. In D.F. Campbell (Ed.), *The leadership gap: Model strategies for leadership development* (pp. 3- 14). Washington, DC: Community College Press.
- Campbell, M. H. (2003). Leadership styles of successful tribal college presidents (Doctoral dissertation, University of Montana, 2003). *Dissertation Abstracts International*, *64*, 1548.
- Chapman, J. A. (2002). A framework for transformational change in organizations. *Leadership & Organizational Development Journal*, *23*(1), 16-25.
- Chen, I. E. (1998). *The relationship between leadership roles assessment and other professional variables at National Taiwan Normal University*. Unpublished doctoral dissertation, North Carolina State University, Raleigh.

- Chippis, M. R. (1989). Hiring and maintaining community college presidents (Doctoral dissertation, University of Nebraska-Lincoln, 1989). *Dissertation Abstracts International*, 50, 1149.
- Clanon, J. (1999). Organizational transformation from the inside out: Reinventing the MIT center for organizational learning. *The Organization. Bradford*, 6(4), 147-157.
- Cohen, A. M., & Brawer, F. B. (2008). *The American community college* (5th ed.). San Francisco: Jossey-Bass.
- Cohen, M. D., & March, J. G. (1974). *Leadership and ambiguity: The American college president*. New York: McGraw-Hill.
- Conger, J. A. (1989). *The charismatic leader: Behind the mystique of exceptional leadership*. San Francisco: Jossey-Bass.
- Copa, G. H. and Ammentorp, W. (1997, Fall). A new vision for the two-year institution of higher education: Preparing for a changing world. *New Designs for the Two-Year Institution of Higher Education Executive Summary Report from the NCRVE*, University of Minnesota.
- Covey, S. R. (1996). Three roles of the leader in the new paradigm. In F. Hesselbein, M. Goldsmith, & R. Beckhard (Eds). *The Leader of the future*, (pp. 149 – 160). San Francisco: Jossey-Bass Publishers.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2008). *Research design: qualitative, quantitative, and mixed methods approaches* (3rd ed.). Los Angeles: CA.

- Doty, A. (1995). *Stakeholder expectations, presidential search processes, and post hire performance in community college*. Unpublished doctoral dissertation, North Carolina State University, Raleigh.
- Dupuis, P. A. (2009). *Examination of faculty expectations of technical college administrators as an important factor in high performing environments*. Unpublished doctoral dissertation, University of New Orleans.
- Erlandson, D., Harris, E., Skipper, B., & Allen, S. (1993). *Doing naturalistic inquiry: A guide to methods*. Newbury Park, Ca: Sage.
- Evans, M. G. (1970). Extensions of a path-goal theory of motivation. *Journal of Applied Psychology*, 59, 172-178.
- Fiedler, F. (1967). *A theory of leadership effectiveness*. In L.L. Berkowitz (Ed), *Advances in experimental psychology*, 1, 149 - 190. New York: Academic Press.
- Fiedler, F. (1978). *The contingency model and the dynamics of the leadership process*. New York: McGraw Hill.
- Fisher, J. L., Tack, M. W., & Wheeler, K. J. (1988). *The effective college president*. New York: American Council on Education/Macmillan Publishing Co.
- Flamholtz, E. G., & Randle, Y. (1998). *Changing the game: Organizational transformations of the first, second, and third kinds*. New York: Oxford University Press.
- Flynn, W. (2000, September). This old house: Revitalizing higher education's architecture. *Community College Journal*, 71(1), 36-39.

- Foote, E. (1998, Summer). Sources and information on organizational change in the community college. In J. S. Levin (ed.), *Organizational change in the community college : A ripple or a sea change* (pp. 43-54). New Directions for Community Colleges, No. 102. San Francisco: Jossey-Bass.
- Friedman, T.L. (2005). *The World is Flat*. New York: Farrar, Straus and Girous.
- Frohib, P. B. (2002). *An analysis of transformational leadership attributes and leadership development in two-year colleges*. Unpublished doctoral dissertation, University of Wisconsin, Madison.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction* (7th ed.). Boston: Allyn & Bacon.
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction* (2nd ed.). New York: Addison Wesley Longman.
- Glesne, C. (2006). *Becoming qualitative researchers*, (3rd ed.). Boston: Allyn & Bacon.
- Glesne, C., & Peshkin, P. (1992). *Becoming qualitative researchers: An introduction*. New York: Longman.
- Goodall, H. L. (2000). *Writing the new ethnography*. Walnut Creek, CA.: AltaMira Press.
- Greenberg, J., & Baron, R.A. (1993). *Behavior in organizations: Understanding and managing the human side of work*. Boston: Allyn & Bacon.
- Hannah, S. T., Woolfolk, R. L., & Lord, R. G. (2009). Leadership self-structure: A framework for positive leadership. *Journal of Organizational Behavior*, 30, (2), 269 – 290.

- Hemphill, J. K., & Coons, A. E. (1957). Development of the leader behavior questionnaire. In R. M. Stodgill & A.E. Coons (Eds). *Leader behavior: Its description and measurement* (Research Monograph No. 88). Columbus, OH.: Bureau of Business Research, Ohio State University.
- Hersey, P., & Blanchard, R. H. (1985). *Situational selling*. Escondido, CA: The Center for Leadership Studies.
- Hersey, P., & Blanchard, R. H. (1993). *Management of organizational behavior: Utilizing human resources* (6th ed). Englewood Cliffs: N.J.
- Hesselbein, R., Goldsmith, M., & Beckhard, R. (Eds). (1996). *The leader of the future: New Visions, strategies, and practices for the next era*. San Francisco: Jossey – Bass.
- Hood, J. A. (1997). An analysis of selection criteria, roles, skills, challenges, and strategies of 2-year college presidents (Doctoral dissertation, University of Alabama, 1997). *Dissertation Abstracts International*, 58, 2003.
- House, R. J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Leadership Review*, 16, 321-339.
- House, R. J., & Mitchell, R. R. (1974). Path-goal theory of leadership. *Journal of Contemporary Business*, 3, 81-97.
- Jago, A. G. (1982). Leadership perspectives in theory and research. *Management and Science*, 28, 331-336.
- Johnson, B., & Christensen, L. (2000). Educational research: Quantitative, qualitative, and mixed approaches (2nd ed.). Boston, MA: Pearson Education Inc.

- Johnson, R. B., & Onwegbuzie, A.J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33, (7), pp. 14 – 26.
- Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4th ed.). Fort Worth, TX: Harcourt.
- Kotter, J. P. (1996). *Leading Change*. Cambridge: Harvard Business School Press.
- Kraut, A. Pediago, P., McKenna, D., & Dunnette, M. (1998). The role of the manager: What is really important? *Academy of Management Executive*, 3, 286-293.
- Kreitner, R., & Kinicki, A. (1995). *Organizational behavior*. (3rd ed). Homewood, IL.: Irwin.
- Lasker, R.D., & Weiss, E.S. (2003). *Broadening participation in community problem solving: a multidisciplinary model to support collaborative practice and research*. New York: Springer.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology*.10, 271-301.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. London: Sage Publications.
- Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (3rd ed.). Los Angeles, CA: Sage.
- Maxwell, J. A. (1996). Causal explanation, qualitative research, and scientific inquiry in education. *Educational Researcher*, 33, (2), pp. 3 - 11.
- McFarlin, C. H. (1997). Preparation factors common in outstanding community college presidents (Doctoral dissertation, Iowa State University, 1997). *Dissertation Abstracts International*, 58, 0711.

- McNabb, D. E. (2002). *Research methods in public administration and nonprofit management*. Armonk, New York: M. E. Sharpe.
- Meindl, J. R. (1990). On leadership: An alternative to the conventional wisdom. In B.M. Staw and L.L. Cummings (Eds). *Research in organizational behavior*, 12, (pp. 159-203). Greenwich, CT: JAI Press.
- Meloy, J. M. (2002). *Writing the qualitative dissertation: Understanding by doing*. Mahwah, NJ: L. Erlbaum Associates.
- Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco: Jossey-Bass.
- Miles, C. (2003). Organizational readiness: Middle age and the middle way. *Leadership Abstracts*, 16(3). Retrieved January 23, 2010, from <http://www.league.org/publication/leadership/#03>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Mintzberg, H. (1973). *The nature of managerial work*. New York: Harper and Row.
- Mondy, R.W., & Premeux, S. R. (1993). *Management: concepts, practices, and skills*. Needham Heights, MA: Allyn and Bacon.
- National Institute of Standards and Technology. (2004). *E-handbook of statistical methods*. Retrieved August 29, 2010, from <http://www.itl.nist.gov/div898/handbook/index2.htm>
- Nevis, E. C., Lancourt, J., & Vassallo, H. G. (1996). *Intentional revolutions: A seven-point strategy for transforming organizations*. San Francisco: Jossey-Bass.
- O'Banion, T. (1997). *A learning college for the 21st century*. Phoenix, AZ: Oryx Press.

- Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Peters, T. J., & Austin, N. (1985). *A passion for excellence: The leadership difference*. New York: Random House.
- Pugh, D. S., & Hickson, D. J. (1989). *Writers on organizations* (4th ed). Newbury Park, CA: Sage Publications.
- Rossman, G. B., & Rallis, S. F. (2003). *Learning in the field: An introduction to qualitative research*. Thousand Oaks, CA: Sage Publications.
- Roueche, J. E., Baker, G. A., & Rose, R. R. (1989). *Shared vision: Transformation leadership in American community colleges*. Washington, DC: Community College Press.
- Roueche, J. E., Richardson, M. M., Neal, P. W., & Roueche, S. D. (2008). *The creative community college: Leading change through innovation*. Washington, DC: Community College Press.
- Rosenfeld, S. A. (2001). Rural community colleges—Creating institutional hybrids for the new economy. *Rural America*, 16(2), 2-8.
- Rubin, S. (2001). Rural colleges as catalysts for community change—The RCCI experience. *Rural America*, 16(2), 12-19.
- Rubin, H. J., & Rubin, I. S. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage Publications.
- Schram, T. H. (2006). *Conceptualizing and proposing qualitative research* (2nd ed.) Upper Saddle River, NJ: Pearson Education, Inc.

- Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (2nd ed.). New York: Teachers College Press.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Sharples, R. H. (2002). *The importance of leadership competencies: Perceptions of North Carolina community college presidents*. Unpublished doctoral dissertation, North Carolina State University, Raleigh.
- Stodgill, R. M. (1948). Personal factors associated with leadership: a survey of the literature. *Journal of Psychology*, 25, 35 – 71.
- Stodgill, R. M. (1974). *Handbook of leadership: A survey of the literature*. NY: Free Press.
- Swanson, R. A., & Holton, E. F., III. (2001). *Foundations of human resource development*. San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Tannenbaum, R., Wescheler, I.R., & Massarick, F. (1961). *Leadership and organization*. New York: McGraw Hill.
- Taylor, S., & Bogdan, R. (1998). *Introduction to qualitative research methods: A guidebook and resource*. New York: John Wiley and Sons.
- Thompson, T. (1981). *An investigation of the information and decision-making competencies required of community college administrators*. Unpublished doctoral dissertation, The University of Texas, Austin.
- Tierney, W. G., & Dilley, P. (2002). Interviewing in education. In J. Gubrium & J. Holstein (Eds.) *Handbook of interviewing*, (pp. 453-471). Thousand Oaks: CA: Sage Publications.

- Twining, J. (1999). Dimensional advances for information architecture. *Library Philosophy and Practice, 1, 2.*
- Vaughan, G. B. (1986). *The community college presidency.* New York: American Council on Education/Macmillan Publishing Co.
- Vaughan, G. B. (1990). *Pathway to the presidency: Community college deans of instruction.* Washington, DC: Community College Press.
- Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision making.* Pittsburgh: University of Pittsburgh Press.
- Wagoner, J., and Hollenbeck, J. (1992). *Management of organizational behavior.* New Jersey: Prentice Hall.
- Welch, A. B. (2002). *Temperament and competence in the managerial roles of nursing education administrators in the North Carolina community college system.* Unpublished doctoral dissertation, North Carolina State University, Raleigh.
- Wheatley, M. J. (1999). *Leadership and the new science.* San Francisco: Berrett-Koehler.
- Witherspoon, P. D. (1997). *Communicating leadership: An organizational perspective.* Needham Heights, MA: Allyn & Bacon.
- Wolcott, H. F. (2001). Writing up qualitative research...better. *Qualitative Health Research, 12,* (1), 91-103.
- Wood, R., & Payne, T. (1998). *Competency-based recruitment and selection.* West Sussex, England: John Wiley & Sons, Ltd.
- Yin, R. K. (1984). *Case study research: Design and methods.* Beverly Hills, CA: Sage Publications.

Yukl, G. (1989). *Leadership in organization*. (2nd ed.). Englewood Cliffs, N.J.: Prentice Hall.

Yukl, G. (1994). *Leadership in organization* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Yukl, G. (1998). *Leadership in organization* (4th ed.). Upper Saddle River, NJ: Prentice Hall.

APPENDIX A: North Carolina Administrative Code

November 8, 2007

§ 115D-31.3. Institutional Performance Accountability.

(a) Creation of Accountability Measures and Performance Standards. – The State Board of Community Colleges shall create new accountability measures and performance standards for the Community College System. Survey results shall be used as a performance standard only if the survey is statistically valid. The State Board of Community Colleges shall review annually the accountability measures and performance standards to ensure that they are appropriate for use in recognition of successful institutional performance. (b) through (d) Repealed by Session Laws 2000-67, s. 9.7, effective July 1, 2000. (e) Mandatory Performance Measures. – The State Board of Community Colleges shall evaluate each college on the following 8 performance standards:

- (1) Progress of basic skills students,
- (2) Passing rate for licensure and certification examinations,
- (3) Performance of students who transfer to a four year institution,
- (4) Passing rates in developmental courses,
- (5) Success rates of developmental students in subsequent college-level courses,
- (6) The level of satisfaction of students who complete programs and those who do not complete programs,
- (7) Curriculum student retention and graduation, and
- (8) Client satisfaction with customized training.

The State Board may add measures to those identified in section (e), but may not decrease the number. (f) Publication of Performance Ratings. – Each college shall publish its performance on the 8 measures set out in subsection (e) of this section (i) annually in its electronic catalog or on the Internet and (ii) in its printed catalog each time the catalog is reprinted. The Community Colleges System Office shall publish the performance of all colleges on all 8. (g) Recognition for Successful Institutional Performance.

For the purpose of recognition for successful institutional performance, the State Board of Community Colleges shall evaluate each college on the 8 performance measures. For each of these eight performance measures on which a college performs successfully the college may retain and carry forward into the next fiscal year one-fourth of one percent (1/4 of 1%) of its final fiscal year General Fund appropriations. If a college demonstrates significant improvement on a measure that has been in use for three years or less, then the college would be eligible to carry-forward one-fourth of one percent (1/4 of 1%) of its final fiscal year General Fund appropriations for that measure. (h) Recognition for

Exceptional Institutional Performance. – Funds not allocated to colleges in accordance with subsection (g) of this section shall be used to reward exceptional institutional performance. After all State aid budget obligations have been met, the State Board of Community Colleges shall distribute the remainder of these funds equally to colleges that perform successfully on eight performance measures and meet the following criteria:

(1) The passing rate on all reported licensure /certification exams for which the colleges have authority over who sits for the exam must meet or exceed 70% for first-time test taker, and.

(2) The percent of college transfer students with a 2.0 gpa after two semesters at a four-year institution must equal or exceed the performance of students who began at the four-year institution (native students).

The State Board may withhold the portion of funds for which a college may qualify as an exceptional institution while the college is under investigation by a federal or state agency, or if its performance does not meet the standards established by the Southern Association of Colleges and Schools, State Auditor's Office, or State Board of Community Colleges. At such time as the investigations are complete and the issues resolved, the State Board may release the exceptional performance funds to the college.

(i) Permissible Uses of Funds. – Funds retained by colleges or distributed to colleges pursuant to this section shall be used for the purchase of equipment, initial program start-up costs including faculty salaries for the first year of a program, and one-time faculty and staff bonuses. These funds shall not be used for continuing salary increases or for other obligations beyond the fiscal year into which they were carried forward. These funds shall be encumbered within 12 months of the fiscal year into which they were carried forward. (j) Use of funds in low-wealth counties. – Funds retained by colleges or distributed to colleges pursuant to this section may be used to supplement local funding for maintenance of plant if the college does not receive maintenance of plant funds pursuant to G.S. 115D-31.2, and if the county in which the main campus of the community college is located: (1) Is designated as a Tier 1 or Tier 2 county in accordance with G.S. 105-129.3; (2) Had an unemployment rate of at least two percent (2%) above the State average or greater than seven percent (7%), whichever is higher, in the prior calendar year; and (3) Is a county whose wealth, as calculated under the formula for distributing supplemental funding for schools in low-wealth counties, is eighty percent (80%) or less of the State average. Funds may be used for this purpose only after all local funds appropriated for maintenance of plant have been expended.

(1999-237, s. 9.2(a); 2000-67, s. 9.7; 2001-186, s. 1; 2006-66, s. 8.9(a).)

APPENDIX B: North Carolina Community College System Strategic Plan

<http://www.ncccs.cc.nc.us/Publications/docs/Publications/fb2008.pdf>

Section I – Introduction

STATE-LEVEL STRATEGIC PLANNING

The North Carolina Community College System maintains a biennial system-level strategic plan, approved by the State Board of Community Colleges and developed with comprehensive environmental data and substantive stakeholder input.

The NCCCS state-level plan sets the strategic direction for the System, supports the ongoing effectiveness of individual NCCCS institutions, provides a framework for legislative budget requests, and is designed to achieve several key purposes:

1. Identifying specific and critical issues and trends that have the potential to either prevent or permit effective achievement of the NCCCS mission.
2. Developing conceptual and technical solutions to address the impact of identified critical issues.
3. Acquiring adequate resources to support developed solutions.

After a review of past and current planning processes, the NCCCS initiated several changes aimed at improving the utility and timeliness of its planning efforts in 2005. Environmental scanning was broadened to include representatives from all internal as well as external stakeholder groups, the planning calendar was adjusted and synchronized to take better advantage of the Legislature's budgeting cycle, and a formal review cycle was instituted.

2007-09 Strategic Plan: Approved by the State Board of Community Colleges in April 2006, the primary components of the 2007-09 NCCCS Strategic Plan include a set of Critical Issues gleaned from a comprehensive set of planning assumptions. These components are described below and are accessible at the URLs provided:

Planning Assumptions: Developed after a comprehensive literature review of environmental trends combined with input from internal and external experts-in-field, the Planning Assumptions provide context and set the tone for the 2007-09 Strategic Plan by projecting what future trends and issues NCCCS institutions can expect.

http://www.ncccommunitycolleges.edu/Planning/docs/strategic_plan_docs/Planning_assumptions_final.pdf

Critical Issues: Culled from the Planning Assumptions by a representative Planning Council of key internal and external stakeholders, the 2007-09 Strategic Plan identifies five Critical Issues that have potential for affecting the ability of the System Office and

NCCCS institutions to achieve effectively their collective missions: Changing Demographics, Fiscal Resources, Human Resources, Technology, and Increasingly Competitive Market.

http://www.ncccommunitycolleges.edu/Planning/docs/strategic_plan_docs/2007_09_draft_NCCCSplan.pdf

2009-11 Strategic Plan: Preparation of the 2009-2011 Strategic Plan is slated to commence pending an organizational review by incoming NCCCS President, Dr. Scott Ralls.

COLLEGE-LEVEL PLANNING

While state-level planning supports the collective mission of all 58 NCCCS institutions, individual colleges are responsible for developing planning and evaluation systems that support local interests and comply with requirements established by the North Carolina General Assembly, the Southern Association of Colleges and Schools (SACS), and the State Board of Community Colleges, which include the following:

Institutional Effectiveness Plan Mandate – North Carolina General Assembly: In its 1989 session, the North Carolina General Assembly adopted a provision (S.L.1989; C.752; S.80) which mandates that, each college shall develop an institutional effectiveness plan, tailored to the specific mission of the college. This plan shall be consistent with the Southern Association of Colleges and Schools criteria and provide for collection of data as required by the 'Critical Success Factors' list.

Principles of Accreditation – Commission on Colleges, Southern Association of Colleges & Schools: Core Requirement 2.5 of the COC Principles of Accreditation stipulates that colleges are to engage in ongoing, integrated, and institution-wide research-based planning and evaluation process that (a) results in continuing improvement and (b) demonstrates that the institution is effectively accomplishing its mission.

□ In addition, Core Requirement 2.12 requires that all colleges seeking Reaffirmation of Accreditation must engage in developing a Quality Enhancement Plan (QEP), which is to be a course of action for institutional improvement that addresses an issue critical to enhancing educational quality and directly related to student learning and which is part of ongoing planning and evaluation processes.

(Specific information on SACS Principles/Philosophy of Accreditation, Core Requirements and

Comprehensive Standards is located at <http://www.sacscoc.org>. Additional SACS-related information is also available on the System Office Web site at the following URL: <http://www.ncccs.cc.nc.us/SACS/>.)

INSTITUTIONAL EFFECTIVENESS PLAN GUIDELINES

In 1999, the State Board approved Institutional Effectiveness Plan Guidelines establishing minimum conditions for meeting the state and federal requirements outlined above. College compliance with these approved guidelines is monitored by NCCCS Audit Services staff in conjunction with the annual audit process. Auditors review college plans for general currency and to ensure that any special General Assembly and State Board planning mandates are being observed. College plans are not evaluated for total

quality or content, responsibilities that instead are entrusted to individual colleges and the Southern Association of Colleges and Schools.

The following Institutional Effectiveness Plan Guidelines outline the minimum requirements deemed necessary by the State Board of Community Colleges to meet required state and federal mandates. Please note that guidelines are intentionally general in order to allow maximum flexibility for colleges to develop plans best suited for individual institutional situations. Likewise, colleges are encouraged to expand and build upon these guidelines.

1. All colleges must develop and implement an annual planning process that results in an institutional effectiveness plan. Colleges have the flexibility to develop biennial plans as long as a process of annual review and revision is in place. It is expected that each college will follow the principles of good planning.
2. College plans should address, where appropriate, System identified critical issues, goals and objectives as set forth in the NCCCS Strategic Plan. Information about the most recent System-level Plan is available at <http://www.nccommunitycolleges.edu/Planning/index.html>.
3. Colleges must address any special planning mandates of the General Assembly or the State Board of Community Colleges in their plan unless other processes are developed by the System Office to meet those mandates. Currently planning mandates are in place for Technology and Diversity Plans.
4. Compliance with the institutional effectiveness plan mandate will be determined by the Audit Services staff as part of the annual audit process. The audit staff will determine the currency of the college's plan and that colleges are responding to any special planning mandates of the General Assembly and the State Board of Community Colleges. The role of the audit staff will be to determine if the college has an ongoing planning process in place and has addressed state mandates where required. The audit staff will not analyze the plans for content or principles of good planning. This responsibility lies with the college and with the Southern Association of Colleges and Schools. Colleges will no longer be required to submit an institutional effectiveness plan to the System Office.
5. The Planning and Research Section of the North Carolina Community College System Office will continue to provide technical assistance to the colleges in the area of planning when requested.
6. These guidelines will be implemented in the 1999-2000 academic year.

CRITICAL SUCCESS FACTORS

The State Board of Community Colleges has adopted a set of five Critical Success Factors with 42 related performance measures, which assess the overall performance of the System. The 1989 General Assembly mandate requiring Institutional Effectiveness Plans stipulates that colleges develop plans that provide for collection of Critical Success Factors data.

Core Indicators of Student Success
Workforce Development
Diverse Populations Learning Needs
Resources
Technology

System and college-level data are collected on 42 measures of progress toward success as indicated by the factors. An initial report, presenting five years of data, was presented to the State Board of Community Colleges and the General Assembly in April 1990. The current Critical Success Factors report can be found at the following URL:
<http://www.nccommunitycolleges.edu/Publications/docs/Publications/csf2006.pdf>.

APPENDIX C: North Carolina Community College System Critical Success Factors

<http://www.ncccs.cc.nc.us/Publications/docs/Publications/csf2010.pdf>

CRITICAL SUCCESS FACTORS FOR THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Twenty First Annual Report

INTRODUCTION

First mandated by the North Carolina General Assembly in 1989 (S.L. 1989; C. 752; S. 80), the Critical Success Factors report has evolved into the major accountability document for the North Carolina Community College System. This twenty first annual report on the critical success factors is the result of a process undertaken to streamline and simplify accountability reporting by the community college system. The purpose of this report is twofold. First, this document is the means by which the community college system reports on performance measures, referred to as core indicators of success, for purposes of accountability and performance funding. Second, this document serves as an evaluation instrument for the System Strategic Plan.

Core Indicators of Success

In February 1999, the North Carolina State Board of Community Colleges adopted 12 performance measures for accountability. This action was taken in response to a mandate from the North Carolina General Assembly to review past performance measures and define standards of performance to ensure programs and services offered by community colleges in North Carolina were of sufficient quality. In the 2007 Session, the General Assembly approved modification to the North Carolina Performance Measures and Standards as adopted by the State Board of Community Colleges on March 16, 2007. As a result, the number of performance measures was reduced to 8.

System Strategic Plan

Under the leadership of former President H. Martin Lancaster, the North Carolina Community College System embarked on a strategic planning process in January 1998. The purpose of the process was to develop a strategic plan that would focus the efforts of the system on a set of strategic initiatives. The strategic plan is the vehicle that sets the strategic direction for the System and guides the development of the biennial budget requests.

The purpose of factors two through five of the Critical Success Factors is to monitor the progress of the system in achieving the objectives in the strategic plan and to report those achievements. The measures that comprise these factors are the evaluation of the strategic plan objectives. Unlike the measures comprising factor one, the measures included in factors two through five will change more frequently as new strategic plan objectives are developed. In addition, the measures in factors two through five are meant to be System

measures, rather than individual college measures. When available, individual college data will be presented, but the intended focus of these measures is the success of the System in achieving some predefined level of achievement.

APPENDIX D: NCCCS CSF – Factor I. Core Indicators of Student Success

CRITICAL SUCCESS FACTOR I: CORE INDICATORS OF STUDENT SUCCESS

In 1993, the State Board of Community Colleges began monitoring performance data on specific measures identified in the Critical Success Factors report and in the Annual Program Review report. Standards of performance were established for measures that were identified as being critical to ensure public accountability for programs and services.

In 1998, the North Carolina General Assembly directed the State Board of Community Colleges to undertake a review of all performance measures and standards with the intent of ensuring stronger public accountability. Concurrently, the General Assembly directed the State Board of Community Colleges to develop a plan for the implementation of performance funding.

As a result of efforts undertaken by the community college system, a set of 12 performance measures of accountability was adopted in February 1999. Recognizing the importance of these measures in the System's public accountability efforts, the System Planning Council decided to designate the 12 measures as the core indicators of student success and include them as the first factor of the Critical Success Factors report. In the 2007 Session, the North Carolina General Assembly approved modifications to the North Carolina Community College Performance Measures as adopted by the State Board of Community Colleges on March 16, 2007. As a result, the number of performance measures was reduced to eight (8). System summary data on each measure are presented in the report along with individual college's performance data. A table is presented at the end of the text section that summarizes, by measure, whether or not colleges met the performance standard. Any college not meeting a standard is required to submit to the State Board of Community Colleges an action plan for improving performance.

The Core Indicators of Student Success are:

- A. Progress of Basic Skills Students
- B. Passing Rates on Licensure and Certification Examinations
- C. Performance of College Transfer Students
- D. Passing Rates of Students in Developmental Courses
- E. Success Rates of Developmental Students in Subsequent College-Level Courses
- F. Satisfaction of Program Completers and Non-Completers
- G. Curriculum Student Retention, Graduation, and Transfer
- H. Client Satisfaction with Customized Training

APPENDIX E: Permission to use LCAI Letter

MEMORANDUM

TO: George Baker, Ph.D

FR: Jim Killacky, Director & John Hauser, Doctoral Student

RE: Permission to use the Leadership Competencies Assessment Instrument (LCAI)

DATE: November 23, 2009

George, greetings from ASU and Boone. We are working together to create a dissertation project for John in which he plans to use the LCAI to assess leadership competencies of community college presidents in North Carolina; data gathered from the assessment along with the college's Core Indicator for Success ratings, will provide the basis for a set of in-depth interviews with selected presidents on the linkages between their leadership styles and their CISS ratings.

We are requesting your permission to utilize the LCAI in this study. We do not anticipate making any changes in the instrument as it currently exists. We will, of course, be delighted to share a copy of the completed dissertation with you. At your convenience if you will be kind enough to respond to the request by email (john.hauser@wilkescc.edu; killackycj@appstate.edu) we will be most grateful.

TO: Jim Killacky, Director & John Hauser, Doctoral Student

FR: George Baker, Ph.D

RE: Permission to use the Leadership Competencies Assessment Instrument (LCAI)

DATE: November 23, 2009

Permission is granted to John Hauser, under the direct supervision of Dr. Jim Killacky to utilize my copyrighted instrument, the Leadership Competency Assessment Instrument, (LCAI) in a dissertation sponsored by Appalachian State University.

/S/ George A. Baker III

Effective: December 1, 2009.

APPENDIX F: Appalachian State University IRB Approval Letter

To: Jonathan Hauser CAMPUS MAIL

From: Dr. Timothy Ludwig, Institutional Review Board

Date: 4/28/2010

RE: Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)

Study #: 10-0240

Study Title: THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM
CRITICAL SUCCESS FACTOR 1 AND THE ASSOCIATION TO LEADERSHIP
STYLES PRACTICED BY NORTH CAROLINA COMMUNITY COLLEGE
PRESIDENTS

Submission Type: Initial

Expedited Category: (6) Collection of Data from Recordings made for Research
Purposes,(7) Research on Group Characteristics or Behavior, or Surveys, Interviews,
etc.,(5) Research Involving Pre-existing Data, or Materials To Be Collected Solely for
Nonresearch Purposes

Approval Date: 4/28/2010

Expiration Date of Approval: 4/27/2011

This submission has been approved by the Institutional Review Board for the period indicated. It has been determined that the risk involved in this research is no more than minimal.

Investigator's Responsibilities:

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator's responsibility to submit for renewal and obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study on the expiration date.

You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented. Should any adverse event or unanticipated problem involving risks to subjects occur it must be reported immediately to the IRB.

CC:

Cecil Killacky, Leadership And Edu Studies

APPENDIX G: President Interview Questions

Interview questions for presidents in North Carolina community colleges

- I. *Leadership Style (directive, supportive, participative, achievement oriented)*
 - a. What elements of leadership are valued and needed in your role as president?
 - i. Can you give me 3 or 4 adjectives that would describe that?
 - ii. Can you think back to when your college made a *change* that was influenced by the leadership style of the college?
 - a. -when was that?
 - b. -why did you make the change?
 - c. -how did you personally get involved?
 - d. -what did you expect?
 - e. -what do you think the Board of Trustees expected?
- II. *Subordinate Characteristics (abilities, needs, work experience)*
 - a. Describe your leadership strategy for your college to involve others.
 - i. What skills or abilities are noteworthy for leadership success involving others to meet strategic plans?
 - ii. What are the needs of leaders to meet college strategies (i.e., Core Indicators of Student Success)?
 - iii. Are there stages or phases in a leader's work experience that can be identified regarding as valuable to leadership development?
- III. *Characteristics of the Work Environment (organizational design, job tasks, work group)*
 - a. Generally speaking, what do you see as the president's main role in the characteristics of the work environment?
 - i. What skills did you use in creating the work environment at your college?
 - ii. Do you think your skills and strengths have changed since leading this college? Was that change for the better?
- IV. *Motivational Processes (expectancy, valance, instrumentality)*
 - a. What would you say are the necessary ingredients of success in motivating employees for the college to be successful in meeting the CISS? Specifically, what recommendations do you have for how community colleges work to meet the CISS and what leadership style would you recommend.

- V. *Outcomes (effort, performance)*
 - a. I'm interested in the CISS's results. For (1) you, (2) others, and (3) the college:
 - i. What results have occurred? If your college has met or not met the CISS.
 - ii. Why do you think these results happened?

- VI. Do you have anything else to add?

APPENDIX H: Letter for Participation in Survey

Dear Potential Research Participant:

I am engaged in a mixed method research project to determine the relationship between leadership styles of North Carolina Community College Presidents and Factor 1 - Critical Success Factors. This research is in partial fulfillment of the requirements for the degree of Doctor of Education through Appalachian State University. This correspondence is to invite you to be a participant in the study. The link below will direct you to the online survey. It is my goal to have all 58 surveys completed and submitted before 5:00 p.m. on June 4, 2010.

<http://www.surveymonkey.com/s/M96QLBQ>

Participation in the study will involve responding to items of the Leadership Competencies Assessment Instrument (LCAI). It is anticipated that you will be able to complete the LCAI in twenty minutes or less. The advantages of your participation are threefold: 1) you will have the satisfaction of helping contribute to the body of research related to community college leadership; 2) you will receive an individual report of your scores on the LCAI with a breakdown of how your scores compare with other college presidents who participate in this study; and 3) you will receive an abstract of the study.

Your responses and the responses of all participants in this research project will be treated with strict confidentiality. Your responses will only be available to the researchers involved with this study and no data from individual participants will be shared without your personal permission.

A high response rate of survey instruments add to the validity of the findings of a research project and enable a researcher to more accurately relate the findings of the study to the larger population. Your assistance in this research effort is greatly appreciated.

Sincerely,

John D. Hauser, Researcher
Doctoral Candidate Appalachian State University
Tel: 336-838-6149
Email: john.hauser@wilkescc.edu

Appendix I: Participant Introductory Letter for Interviews

Dear Potential Research Participant:

I am a doctoral student at Appalachian State University and am currently pursuing an EdD in Educational Leadership. After your first response to the Leadership Competencies Assessment Instrument (LCAI) you are now in the group with whom I would like to do follow-up interviews.

I am in the process of conducting research to investigate leadership styles amongst community college presidents. The outcomes from this study will be used to assist community colleges and the communities they serve in understanding practiced leadership styles. You are invited to participate in this research study that is a part of my program as a doctoral student at Appalachian State University.

I am asking you to participate because I believe that your ideas, experience and knowledge about leadership would help me to better understand presidents' practiced leadership styles. Anytime I use the information you give me, I will always identify you with a fake name. When I interview you I would like your permission to tape-record our interviews and also take notes to remind me about what we talked about. I will be the only one who gets to listen to the tapes and notes, and when I am not using them they will be kept in a secured file.

I will be scheduling times with you upon your approval for this interview to occur. The most important thing for you to remember while you are participating in this study with me is that there are no rights or wrong answers to the questions I ask you. All I am looking for is your opinion or ideas and if I ask you to tell me more, or explain your answer, it is because I want to be really sure I understand what you are telling me. Always remember that in this situation you are the expert and you are explaining to me how your leadership style has affected your community college.

You should also know that you can decide to not participate in this study, or stop doing it at any time after you have started – this is your decision. If you decide to stop doing this study, your decision will not affect any future contact you have with Appalachian State University. I look forward to hearing from you.

Thank you,

John D. Hauser, Researcher

Doctoral Candidate Appalachian State University
Tel: 336-838-6149
Email: john.hauser@wilkescc.edu

APPENDIX J: Informed Consent



Interviewee Consent Form

I agree to participate as an interviewee in this research project, which concerns THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM CRITICAL SUCCESS FACTOR 1 AND THE ASSOCIATION WITH LEADERSHIP STYLES PRACTICED BY NORTH CAROLINA COMMUNITY COLLEGE PRESIDENTS. I understand that my comments will be transcribed, and used for a dissertation study to be conducted by Jonathan David Hauser, doctoral candidate at Appalachian State University. The interview(s) will take place _____. I understand that specify risks of project or state there are no foreseeable risks associated with my participation. I also know that this study may specify any benefit of participation to individual and/or society.

I give Jonathan David Hauser ownership of the tapes and transcripts from the interview(s) s/he conducts with me and understand that transcripts will be kept in the researcher's possession. I understand that information or quotations from transcripts will not specify names or college names. I understand I will receive no compensation for the interview.

I understand that the interview is voluntary and I can end it at any time without consequence. I also understand that if I have questions about this research project, I can call Dr. Jim Killacky at (828) 262-3168 or contact Appalachian State University's Office of Research Protections at (828) 262-7981 or irb@appstate.edu.

I request that my name **not** be used in connection with tapes, transcripts, or publications resulting from this interview.

I request that my name **be used** in connection with tapes, transcripts, or publications resulting from this interview.

Name of Interviewer (printed)
(printed)

Name of Interviewee

Signature of Interviewer

Signature of Interviewee

Date(s) of Interview (s)

BIOGRAPHICAL SKETCH

Jonathan David Hauser is Dean of the Advanced Industrial and Health Technologies Division at Wilkes Community College in Wilkesboro, North Carolina and has served in that capacity since 2006. He earned a B.S. in Engineering Technology from the University of North Carolina at Charlotte, his M.Ed. in Training and Development from North Carolina State University, and his Ed.D. in Educational Leadership from Appalachian State University. He lives in Ararat, N.C., is married to Robin Phillips-Hauser, and has two stepchildren, Logan, 13 and Carter, 11.

He has been involved in a number of projects related to higher education. As Dean at Wilkes Community College (WCC), he was instrumental in securing external grant funding in the development of the Applied Technology Center that involved design of the facility, equipment, and the integration of technology into instruction as well as outreach partnerships with the regions business and industry. He authored seven different grants totaling \$3,156,209 for advanced manufacturing, bio-technology, facility construction, and a research initiative to develop a sustainable economy for rural Northwest North Carolina. Mr. Hauser's publications in *Economic Development America* and the *League for Innovation in Community College – Leadership Abstracts* define his research interests in community college leadership styles.