ABSTRACT

SHARPLES, RUSSELL HORTON. The Importance of Leadership Competencies: Perceptions of North Carolina Community College Presidents. (Under the direction of George A. Baker III)

This research investigated the relationship between certain institutional characteristics and perceptions of North Carolina community college presidents about the importance of leadership roles, values and emotions, and skills. Those characteristics were the size of the institution, the growth rate of the institution, and the geographic setting of the institution. The literature on the growth of the community college movement was discussed, and a review of the literature pertaining to the development of current thought on leadership was presented. The study reviewed the existing research on the effect that an institution’s size, growth rate and geographic setting had upon presidential leadership styles.

The perceptions of three groups of presidents were studied. One group consisted of the presidents of large community colleges and the presidents of small community colleges. The second group consisted of the presidents of high enrollment growth colleges and the presidents of low enrollment growth colleges. The final group was comprised of presidents of urban community colleges and rural community colleges. Fifty-one of the 58 presidents participated in the study, a participation rate of 87.93 percent. The participants completed the Leadership Competencies Assessment Instrument, responding to 30 specific leadership competencies by estimating the degree of energy they expended in addressing each competency, and by estimating their effectiveness in addressing that competency. The means of responses from the first set of presidents in each group was compared to the means of responses from the second
set of presidents in each group using the t-test for the difference between means. It was hypothesized that, for each of the three groups, there were no differences in perceptions about the importance of leadership roles, leadership values and emotions, or leadership skills. The results of the tests indicated that:

1. There are no differences in the perceptions of presidents of large North Carolina community colleges and the presidents of small North Carolina community colleges about which leadership roles, values and emotions, and skills are most important.

2. There are no differences in the perceptions of presidents of high enrollment growth North Carolina community colleges and the presidents of low enrollment growth North Carolina community colleges about which leadership roles, values and emotions, and skills are most important.

3. There are no differences in the perceptions of presidents of urban North Carolina community colleges and the presidents of rural North Carolina community colleges about which leadership roles, values and emotions, and skills are most important.

Significant differences in presidential perceptions were detected in several individual competencies, suggesting that size, enrollment growth and geographic location may indeed have an influence upon the perceptions of presidents about the importance of certain leadership competencies. The competencies for which differences were detected between large and small college presidents were the Motivator, Advocate, Accomplishment, Fulfillment, Resolving dilemmas, Self-esteem, Self-regulation and Thinking competencies. Differences in perceptions of high growth and low growth college presidents included the Disseminator competency. For presidents
of urban and rural colleges, differences in leadership perceptions were noted for the Advocate, Change Agent, Social Skills, and Communication Skills competencies.

Recommendations for practice included adding to the system’s ongoing leadership training endeavors a component on the impact a college’s size, growth and location might have on presidential leadership. It was recommended that future research address expanding the study population to include other community college systems; conducting future studies using different methodologies, in order to increase validity; and additional study of individual leadership competencies and how they affect presidential leadership perceptions.
THE IMPORTANCE OF LEADERSHIP COMPETENCIES:

PERCEPTIONS OF NORTH CAROLINA
COMMUNITY COLLEGE PRESIDENTS

by
Russell H. Sharples

A Dissertation Submitted to the Graduate Faculty
of North Carolina State University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

ADULT AND COMMUNITY COLLEGE EDUCATION

Raleigh, North Carolina

2002

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Biography

Russ Sharples was born in Thomasville, Georgia on February 16, 1953, the son of Russell and Ruth Sharples. He received an undergraduate degree in History from Pfeiffer College in Misenheimer, North Carolina in 1975 and an MA in History from the University of North Carolina-Greensboro in 1977.

After graduating from UNC Greensboro, he began his career in the North Carolina Community College System by accepting a position as an Admissions Counselor at Stanly Community College in Albemarle, North Carolina. He subsequently held positions as the college’s Financial Aid Director, Director of Development, Director of Occupational Education, Assistant Dean of the college’s Union County branch campus, and Dean of Administration. He has served as the college’s Dean of Students since 1997.

Russ has assumed various leadership roles throughout his career, including chairing the Stanly County Managers Association, the North Carolina Community College Association of Adult Educators, and the North Carolina Community College Student Development Administrators Association. He attended the Community College Executive Management and Leadership Institute and the Community College Leadership Institute.

Russ is married to Susan Ingram Sharples, who is employed with the Stanly County Schools. They have two daughters, Stephanie Katherine and Emily Clare, and reside in Albemarle.
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Chapter One

Introduction

The North Carolina Community College System consists of 58 comprehensive institutions. These schools are charged with providing comprehensive learning opportunities to an educationally diverse population. The system’s “student body” includes those who are functionally illiterate; the traditional college age individual intending to obtain an Associate in Arts, Associate in Science or Associate in Applied Science degree; adults preparing to enter or re-enter the workforce; senior citizens enrolling for avocational or recreational courses; highly trained professionals seeking to upgrade their technological expertise; and protective service personnel pursuing advanced skills. North Carolina’s community colleges are also positioning themselves to be integral components of the state’s globalization efforts.

The current system began as the North Carolina Department of Community Colleges, and was authorized by the state’s General Assembly in the summer of 1963 under the "Act to Promote and Encourage Education Beyond the High School" (generally referred to as the "Education Omnibus Act of 1963"). Prior to 1963, “community college education” in North Carolina consisted of 20 Industrial Education Centers under the administration of the State Board of Education; five state-supported junior colleges; and one technical institute (Segner, 1974). The General Assembly’s creation of the Department of Community Colleges culminated four
decades of effort by some of the state’s most influential political and educational leaders (Wiggs, 1989).

The schools were originally intended to provide skilled workers for a rapidly expanding and diversifying economy. While workforce development is still a primary function of the system, the colleges have also evolved into the foremost delivery agency for adult basic skills and literacy training. Additionally, each year thousands of law enforcement, fire science and emergency medical service professionals enroll in the community college system. In 2000-2001, over 50 percent of freshmen students in North Carolina were enrolled in a community college.

The community colleges throughout North Carolina are as diverse as are the students attending them. The schools range in size from Charlotte’s Central Piedmont Community College, with over 62,000 students, to tiny Pamlico Community College in the eastern part of the state, which enrolls less than 2,000 students. Curricula offered by NCCCS institutions vary from programs specifically tailored to meet local workforce development needs to programs that are truly international in scope. The colleges have, to varying degrees, assumed significant educational, social and economic roles within the communities they serve. Though the North Carolina Community College System provides centralized planning, budget preparation and other administrative functions, each college retains a substantial measure of independence and autonomy.

Presidents of North Carolina’s community colleges are facing tremendous challenges as they prepare to lead their institutions into the 21st century. Uncertain economic conditions demand that presidents exercise fiscal restraint and utilize funds wisely. External demands for quality, accountability and accessibility continue to
increase dramatically. Internally, leaders must convince an often-skeptical faculty and staff that old educational paradigms, be they instructional, administrative or philosophical, are no longer acceptable or valid due to the constantly changing needs of learners. Rapidly changing technology, bearing both great promise and significant challenges, is a major issue on every campus. Today's North Carolina community college president faces tremendous leadership issues and concerns.

**Problem Statement**

While North Carolina’s community college presidents face many mutual leadership issues and concerns, each must also confront significant challenges created by the environment and circumstances surrounding his or her individual school. This study investigates three specific institutional characteristics and their relationship to presidential perceptions about leadership.

The first aspect is the enrollment of the institution. Although every one of the 58 colleges has experienced enrollment growth over the past 35 years, the largest schools have expanded at a phenomenal rate. These schools now bear scant resemblance, either in size or in scope of services, to the system’s smaller institutions. The second issue examined is the relationship of a college's enrollment growth rate during the past decade and perceptions of leadership styles. The final factor explored is the relationship of a college's urban or rural geographic setting and the president's perceptions regarding leadership competencies.
There is general agreement that quality leadership competencies are of crucial importance to those who will shepherd the North Carolina Community College system into the 21st century. However, there appears to be little investigation into or awareness of the role the three factors noted above play in determining the specific leadership roles, values and emotions, and skills exhibited by a president. While there is significant research addressing leadership theories, concepts and practices within many different contexts, there exists scant literature addressing the impact an institution's enrollment, urban or rural nature, or rates of enrollment growth have upon the president's application of leadership roles, values and emotions, and skills. This study is designed to investigate the relationship between these factors and the perceptions of North Carolina community college presidents regarding leadership.

**Purpose of Study**

Little research exists concentrating on whether a college's enrollment size, rate of enrollment growth, or urban or rural nature influence competencies necessary for effective leadership. The purpose of this study is to determine if the presidents of large, high enrollment growth, and urban North Carolina community colleges have different perceptions about the relative importance of leadership competencies than do the presidents of small, low enrollment growth and rural North Carolina community colleges. The objectives of the study are:

1. To review the pertinent literature on leadership;
2. To survey the presidents of the North Carolina community colleges to ascertain which leadership roles, skills and values they perceive to be most important;

3. To use the data collected to determine if the perceptions of leadership styles of large enrollment community college presidents differ from the perceptions of leadership styles of small enrollment community college presidents.

4. To use the data collected to determine if the perceptions of leadership styles of high enrollment growth community college presidents differ from the perceptions of leadership styles of low enrollment growth community colleges presidents.

5. To use the data collected to determine if the perceptions of leadership styles of urban community college presidents differ from the perceptions of leadership styles of rural community college presidents.

**Research Questions**

To achieve the study’s objectives, the following research questions were developed:

1. Do the perceptions of large enrollment North Carolina community college presidents about which leadership roles are most important differ from the perceptions of small enrollment North Carolina community college presidents?

2. Do the perceptions of large enrollment North Carolina community college presidents about which leadership values and emotions are most important
differ from the perceptions of small enrollment North Carolina community college presidents?

3. Do the perceptions of large enrollment North Carolina community college presidents about which leadership skills are most important differ from the perceptions of small enrollment North Carolina community college presidents?

4. Do the perceptions of high enrollment growth North Carolina community college presidents about which leadership roles are most important differ from the perceptions of low enrollment growth North Carolina community college presidents?

5. Do the perceptions of high enrollment growth North Carolina community college presidents about which leadership values and emotions are most important differ from the perceptions of low enrollment growth North Carolina community college presidents?

6. Do the perceptions of high enrollment growth North Carolina community college presidents about which leadership skills are most important differ from the perceptions of small enrollment North Carolina community college presidents?

7. Do the perceptions of urban North Carolina community college presidents about which leadership roles are most important differ from the perceptions of rural North Carolina community college presidents?
8. Do the perceptions of urban North Carolina community college presidents about which leadership values and emotions are most important differ from the perceptions of rural North Carolina community college presidents?

9. Do the perceptions of urban North Carolina community college presidents about which leadership skills are most important differ from the perceptions of rural North Carolina community college presidents?

**Null Hypotheses**

The following null hypotheses will be tested in the study:

1. There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership roles are most important.

2. There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership values and emotions are most important.

3. There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership skills are most important.
4. There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership roles are most important.

5. There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership values and emotions are most important.

6. There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership skills are most important.

7. There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership roles are most important.

8. There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership values and emotions are most important.
There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership skills are most important.

Conceptual Framework

This study proposes to collect data from the presidents of the colleges comprising the North Carolina Community College System. The instrument used for data collection in this study is the Leadership Competencies Assessment Instrument (LCAI). The LCAI was developed by Baker and others, and will be utilized to ascertain the presidents' perceptions of their leadership behavior in three broad categories: leadership roles, leadership values and emotions, and leadership skills. The LCAI is found as Appendix A.

Leadership roles are the various behaviors a leader displays while functioning within an organization (Plunkett and Attner, 1989). As the leader interacts with individuals within and without the organization, leadership role requirements will constantly shift in accordance with the demands and desires of peers, subordinates and superiors.

Leadership values are the leader’s disposition toward basic questions of right and wrong, fairness and unfairness, morality and immorality (Yukl, 1998). Values play a crucial role in how a leader perceives a particular situation, and thus influence how the leader will react in that situation.
Leadership skills are those abilities brought to bear on a routine, constant, consistent basis within the organization. Baker (1999) states that these skills are a joint result of training and heredity. Though the existence of certain traits in a leader does not guarantee successful leadership, it is apparent that the presence of certain traits, including intelligence, organizational and administrative ability, excellent communication skills, persuasiveness and sound thinking and judgment do enhance the leader’s likelihood for success (Yukl, 1998).

Each of these three behaviors is further broken down into competencies specific to that behavior. There are a total of 30 competencies, and these are explored more fully in chapter two.

Baker uses Robert House's Path-goal theory as a scoring mechanism and conceptual underpinning for the LCAI, in that it considers the leader, the follower and the situation. House’s theory (1971) holds that a leader can facilitate employees’ job performance by demonstrating how that performance directly affects the employees’ receipt of desired rewards. House relied heavily upon the expectancy theory developed by Vroom (1964) and others. Expectancy theory explains why people behave in certain ways in terms of an individual’s goals and choices and the expectations of achieving objectives. Leaders must create an environment in which workers understand and believe in the causal relationship between effort, performance, satisfaction and reward. Organizations must establish "climates of expectancies" which support the motivation to perform (Hampton, Summer and Webber, 1987).

According to the Path-goal approach, the leader’s style facilitates the accomplishment of a particular objective by clarifying the path to that objective in the
mind of the employee (Mondy and Premeux, 1993). To accomplish this, leaders use directive leadership (specific instructions with no employee participation), supportive leadership (consideration for the employee’s welfare), participative leadership (active employee involvement) and achievement orientation leadership (challenging goals accompanied by the confidence to achieve them). These leadership styles are used situationally, and are based on two primary factors. The first is the personal characteristics of the follower, including the person’s ability, self-confidence, and personal needs. Combined, these elements describe the follower’s performance level and the degree of confidence in performing the task. The second variable is the environmental factors and demands with which the follower must cope. The work group, the nature of the task and the organizational authority system are examples of environmental factors that can influence a follower’s ability to perform the task (Plunkett and Attner, 1989). The Path-goal theory is graphically illustrated below (adapted from House, 1971):
The leader's behaviors— the application of roles, values and emotions, and skills—are implemented situationally. The environmental contingency factors interact with the subordinate contingency factors, and essentially act as multipliers of each other. The outcomes are the leader's perception of the performance and satisfaction of the group in meeting the expectations of the leader (Greenberg and Baron, 1993).

In this study, the first component of the diagram shown above, leader behavior, will be measured as the presidents complete the "Competency Level Exerted" section of the LCAI. This section measures the relative degree of energy presidents devote to implementing the competencies comprising leadership roles, values and emotions, and skills. The LCAI's second section, "Estimated Effectiveness", addresses the outcomes component of the diagram, and measures the leader's perception of relative success of his or her efforts. The leader will influence these subordinate outcomes by application of expectancy theory, the process motivation theory stating that leaders should clarify performance expectations and link those expectations to valued rewards. The leader will accomplish this by addressing the environmental contingencies and the subordinate contingencies shown in the diagram.

The Path-goal theory is used as a scoring mechanism and conceptual underpinning for the LCAI in that it considers the leader, the follower and the situation. The theory describes the causal relationship that exists between followers and leaders. The leader’s efforts contribute to and occur within the context of the particular situation. Follower characteristics are the locus of control, experience, and perceived ability. Personal characteristics of subordinates determine how the environment and leader are interpreted. Effective leaders clarify the path to help their followers achieve their goals
and make the journey easier by reducing obstacles and pitfalls, and employee performance and satisfaction are positively influenced when the leader compensates for the shortcomings in either the employee or the work setting (House, 1971). House's model concentrates on the interaction of the leader and the follower within specific situations. The combination of leader behavior and follower response, considered situationally, provides an excellent framework for the study.

**Key Terms and Definitions**

The following key terms and definitions will be used in this study:

**North Carolina Community Colleges:**
58 comprehensive community colleges within the North Carolina Community College System. As the North Carolina Center for Applied Technology is dedicated solely to the field of textile technology and does not espouse a comprehensive community college mission, it is not included in this study.

**Large Enrollment Community College:**
A North Carolina community college with 3000 or more annual FTE.

**Small Enrollment Community College:**
A North Carolina community college with 1500 or less annual FTE.

**High Enrollment Growth Community College:**
A North Carolina community college that experienced an enrollment growth of 28.10 percent or greater for the period of 1991-1992 through 2000-2001. This rate of 28.10 percent exceeds the North Carolina Community College System’s
75 percent.

**Low Enrollment Growth Community College:**

A North Carolina community college that experienced an enrollment growth of
4.01 percent or less for the period of 1991-1992 through 2000-2001. The rate of
4.01 percent is 75 percent lower than the North Carolina Community College
System’s growth rate of 16.06 percent for the period of 1991-1992 through

**Urban Community College:**

A North Carolina community college located in a Metropolitan Statistical Area
(MSA).

**Rural Community College:**

A North Carolina Community College not located in a MSA.

**Metropolitan Statistical Area:**

As defined by the United States Office of Management and Budget, any county
or group of adjoining counties containing at least one urbanized area of 50,000
or more inhabitants.

**Summary and Overview of the Dissertation**

The North Carolina Community College System has grown significantly since
its inception in 1963. Over the past four decades, North Carolina community colleges
have experienced the advent of technology, the explosive growth of the state’s urban
areas, and a rapidly expanding and diversified economy. While the 58 North Carolina community colleges have much in common, they also possess marked differences.

This study investigates the leadership competency perceptions of North Carolina community college presidents in three areas. It compares the perceptions of presidents of large enrollment community colleges with those of presidents of small enrollment colleges; the perceptions of presidents of high enrollment growth community colleges with those of presidents of low enrollment growth community colleges; and the perceptions of urban community college presidents with those of rural community college presidents. The study examines which leadership roles, values and emotions, and skills the first set of presidents in each group perceive to be important and compares those perceptions with the perceptions of the second set of presidents in each group about which leadership roles, values and emotions, and skills they deem most important.

The study will use the Leadership Competencies Assessment Instrument (LCAI) to gather the data. The LCAI is based on Robert House's Path-goal theory, an expectancy process motivation theory. The Path-goal theory states that a leader facilitates subordinates' task and goal accomplishments by creating a climate of expectancy supporting the motivation of followers to perform. In making decisions, the leader must consider the contingent variables of the environment and follower characteristics, and then clarify the path subordinates should follow to attain the organization's goals.

Chapter one of this study details the problem to be studied, the purpose of the study, sets forth the research questions and the null hypotheses to be tested, and
establishes a conceptual framework for the study. Chapter one also contains key terms and definitions used in the study.

Chapter two is a review of the pertinent literature on leadership, and begins by establishing an historical context for the development of leadership theory as it specifically pertains to the American community college. Chapter two addresses the development of the American community college concept and the beginning of the North Carolina Community College System. Research on small, rural and low enrollment growth community colleges is reviewed, along with the literature on large, urban, and high enrollment growth community colleges. The evolution of modern leadership thought is discussed, and leadership is differentiated from management. The development of the Leadership Competencies Assessment Instrument is presented in Chapter two.

Chapter three discusses the study's methodology. The study's research questions and null hypotheses are presented. The setting and population of the study are defined, and the research design and instrumentation are explained. Delimitations and limitations of the study are examined. Questions of internal, external and content validity are addressed in chapter three. The procedures by which the data to conduct the study were collected are detailed. Chapter three also describes how the data were analyzed.

Chapter four reports the results of the data analysis in narrative and tabular format. The rate for participation in the study is discussed, and the results of the testing of the study’s hypotheses are detailed. Chapter five summarizes the findings of the
study. Conclusions are presented, as are the study’s implications and recommendations for practitioners and recommendations for future research.
CHAPTER TWO

Review of the Literature

Introduction

The literature review presents an examination of leadership theory. The application of leadership theory is placed within the specific context of the origins and growth of the American community college system. The evolution of the community college in America is presented, with specific emphasis on the advent of the North Carolina Community College system. The existing research on the relationship between leadership and a college’s enrollment size, enrollment growth and urban or rural setting is examined. Also presented is how leadership skills and functions have changed to meet specific needs.

This chapter presents a discussion of leadership theory, and details major theories, including trait theory, behavioral theory, situational/contingency theory, charismatic theory and transformational theory. The development of current leadership thought and theory, and how they evolved from studies of management theory, are discussed. Chapter two also examines the development of the Leadership Competencies Assessment Instrument (LCAI) within the context of leadership roles, values and emotions, and skills.
The Development of the American Community College

The advent of the community college has been the most significant development in postsecondary education in the United States in the last 100 years. Though William Rainey Harper coined the phrase “junior college” in 1896, community colleges are essentially a 20th century phenomenon. From inauspicious beginnings, America’s community colleges have grown into educational institutions that are vital not only within their immediate community, but also to the economic, social and intellectual development of states, regions, the nation and the world. More than 50 percent of the country’s college students are enrolled at community colleges (National Profile of Community Colleges: Trends and Statistics, 1998). These students attend for disparate reasons and seek to attain diverse goals.

Educational Antecedents

A basic principle of current community college philosophy is that everyone is entitled to a college education. This concept that higher education opportunities should be afforded universally would have been completely foreign to educational leaders in colonial America. Then, the primary focus of the university was to prepare the sons of the elite for careers in law, the church and medicine (Cremin, 1970). Harvard College, established in 1636 as the first institution of higher learning in the colonies, enrolled white males of intellectual ability and financial wherewithal. Like Harvard, the College of William and Mary (founded 1693), Yale (1701), the College of Philadelphia (1740, later to become the University of Pennsylvania), the College of New Jersey (1776, later
Princeton), Columbia (1754), Brown (1764), Rutgers (1766), and Dartmouth (1769) also concentrated upon providing meeting the pastoral and missionary demands within their communities (Goodchild, 1989). The major purpose of these elite institutions was to prepare wealthy young men for the professions and their place as leaders in colonial society (Witt, et. al. 1994).

The 1800’s witnessed a significant growth in institutions of higher learning. Although religiously affiliated institutions continued to proliferate, publicly supported universities became increasingly important (Domonkos, 1977). The Morrill Acts of 1862 and 1890 provided significant impetus for the establishment of publicly supported schools in each state. These land-grant institutions, primarily teacher training or agricultural colleges, pioneered the concept of community service and provided alternatives to costly private universities (Cohen and Brawer, 1987). As they responded to the needs and demands of a growing and increasingly diverse population, these colleges altered forever the nature of higher education in America.

**The Origin and Growth of the Two Year Institution: 1900-1930**

Deegan and Tillery (1985) devised a “framework of four generations” to examine the development of the community college movement (p. 4). They assert that these stages of development can be divided into the periods of 1900-1930; 1930-1950; 1950-70; and 1970-the mid 80’s. Other scholars of the community college substantiate this framework.
While they indicate that the first community college generation spanned the period of 1900-1930, Deegan and Tillery readily acknowledge that it was actually in the latter part of the 19th century, in an era of increasing educational diversity and democratization, that the community college concept was first conceived. Ironically, efforts to render universities *more* exclusive actually led to the establishment of what would ultimately come to be the “University of the Common Man”. During the last half of the 19th century, a national emphasis on expanded access to secondary education led to a substantial increase in the high school completion rate. The universities were faced with an explosion in the number of students, as college enrollment increased from 52,000 in 1870 to almost 240,000 in 1900, representing an increase of 460 percent (Zoglin, 1976).

Influential university presidents decried the unpreparedness of students entering their institutions, and advocated that the first two years of postsecondary education be spent in readying the student for the more rigorous efforts of advanced studies and research at the university level. Presidents Henry Tappan of the University of Michigan and William Folwell at the University of Minnesota were two early advocates of the “junior college” idea (Brubacher and Rudy, 1956; Palinchak, 1973). These educators sought to bring greater structure and organization to higher education. They were steeped in the traditions of the German University system, which sharply distinguished between the first two and the latter two years of collegiate study.

William Rainey Harper, founding president of the University of Chicago, shared this view. Unlike Tappan and Folwell, though, Harper was successful in separating the university into upper and lower divisions. Additionally, he proposed the creation of a
system of two year colleges, consisting either of new schools or of existing colleges that would drop their last two years. Many small liberal arts colleges were failing in the 1890’s, due to increased competition from the public university systems, and thus were quite willing to modify their curricula as Harper suggested (Witt, et. al., 1994). Harper is rightly credited with revolutionizing American higher education:

...the elitist forces [led by Harper] seeking to close the universities to the masses and the democratic forces seeking to open higher education to them join[ed] together to promote the community colleges. ...Harper et. al. set about helping found community colleges, guaranteeing the transferability of their courses, spreading the word about their advantages, and even persuading state legislatures to pass law encouraging their growth...(Zoglin, 1976, p. 4).

There is some disagreement about which institution can claim the title of the first junior college in America. Walter Crosby Eells (1941) held that the Lasell Female Seminary, established in 1851, deserved the honor. William Ferrier (1937) championed Lewis Institute, founded in 1896, as the first junior college. However, as noted by Koos (1925):

A small number of (two year schools) were reported to have been in existence before or at the opening of the century, but it is unlikely that they were established with anything like a consciousness of the relationship of such establishment to a junior-college movement (p. 8).
These institutions notwithstanding, most scholars of the community college movement agree that Joliet College in Illinois, founded in 1901, was the first continuously operating junior college (Hillway, 1958; Vaughan, 1982; Deegan and Tillery, 1985; Witt, et. al., 1994).

The state of Missouri was an early leader in the junior college movement. The state had many religiously affiliated private four-year schools offering education of uneven quality. Ross Hill, president of the University of Missouri and a close friend of William Rainey Harper, convinced many of these institutions to convert to two year status. In return, the University would grant them accreditation and guarantee admission to their graduates (Eells, 1931). In 1914, the Missouri Junior College Union, the nation’s first junior college state association, was formed (Witt et. al., 1994).

In California, the junior college movement grew quickly. The state did not have an extensive senior institution system, with but two universities, both near San Francisco. Its geographic vastness meant that its citizens had little access to postsecondary education. Legislation passed in 1907 permitted high schools to offer the 13th and 14th years of education; these years were considered to be the equivalent of the freshman and sophomore college years. This legislation was the first in the nation authorizing local junior colleges (Palinchak, 1973). Subsequent legislation in 1917 and 1921 provided for state funding for junior colleges and the creation of locally governed junior college districts. According to Vaughan (1982), these laws provided the model for legislation in other states. By 1918, junior colleges had been established in

Deegan and Tillery (1985) termed this first generation of the development of the two year institution the “extension of high school” phase. High school facilities were often utilized by junior colleges, and generally the junior college administration was supervised by the local Board of Education. During this period of 1900-1930, the most popular junior college curriculum was college transfer, although adult and continuing education courses were also prevalent (Witt, et.al., 1994). Vocational programs also became important to the development of local business and industry. Students, for the most part, were recent high school graduates who did not possess the financial or academic ability to progress immediately to a senior institution.

The initial phase of the junior college movement saw the beginning of the shift from private to public control of institutions. In 1900, there were 8 junior colleges, all of which were private. Over the next three decades, the percentage of public junior colleges began to gradually increase. In 1929, 436 two year colleges were in existence, of which 178, or 41 percent, were public (National Profile of Community Colleges: Trends and Statistics, 1997-1998).

The final important development of the “first generation” was the 1920 conference, held in St. Louis, which led to the establishment of the American Association of Junior Colleges (AAJC). Though dominated by representatives of private institutions and quite rancorous at times, the conference brought together for the first time the diverse institutions that constituted the burgeoning junior college movement. In these early days, the question of what form junior college education
should take was hotly debated. In 1922, the American Association of Junior Colleges defined *junior college* as "an institution offering two years of instruction of strictly collegiate grade" (Cohen & Brawer, 1987, p. 4). Shortly thereafter, however, the AAJC, recognizing the need for a revised definition; proposed that "The Junior College may, and is likely to, develop a different type of curriculum suited to the larger and ever-changing civic, religious, and vocational needs of the entire community..." (Gleazer, 1994, p. 17). The AAJC provided legitimacy and recognition for two year colleges in a time of great uncertainty. With the advent of the AAJC, by 1930 “the junior college had clearly become a recognized component of America’s educational system” (Witt, et.al., 1994, p. 93).

The first generation of what was to become the community college saw an explosion in the number of two year colleges. This growth was not national in scope, however, centering primarily in the Midwest, the south, and California (Eells, 1931). Though originally envisioned by early proponents as a means for underprepared students to gain prerequisite academic skills prior to enrolling in senior institutions (and thus freeing those senior institutions to concentrate on scholarly research and advanced study), these junior colleges quickly began to adapt their curricula to meet the immediate needs of their local communities. Two year terminal degrees and vocational training began to assume a level of importance that, while perhaps not equal in stature to the traditional transfer curricula, provided significant occupational education opportunities for students. Also, the American Association of Junior Colleges became a national organization dedicated to the furtherance of the two year college philosophy and mission.
The Second Generation: The Junior College, 1930-1950

The 1930’s saw a significant increase in enrollment in the nation’s junior colleges. According to Eells (1940), enrollment in public junior colleges during the decade increased over threefold, and private two year college enrollment almost doubled. This increase is directly attributable to the horrendous economic conditions imposed by the Great Depression. Flexible class scheduling allowed those fortunate enough to be employed the opportunity to pursue their education in the evening. Vocational education assumed greater importance as the unemployed eagerly sought short term training to quickly reenter the workforce. By 1939, about 10 percent of the nation’s college students were enrolled in junior colleges (Brint and Karabel, 1989).

The Second World War had a severe impact on junior college enrollment, particularly private institutions (Eells, 1945). However, the end of the war, coupled with the implementation of the GI Bill, sent college enrollments at all institutions soaring. Called “one of the most successful social programs in America’s history” (Witt, et.al., 1994), the GI Bill provided funds for returning servicemen and women to pursue higher education. As importantly, it emphasized the concept that higher education was no longer the exclusive property of the wealthy and privileged (Vaughan, 1982). Enrollment at two year colleges more than doubled between 1944 and 1947 (National Profile of Community Colleges: Trends and Statistics, 1997-1998).

If the GI Bill gave an immediate boost to enrollments at two year colleges, the publication by the President’s Commission on Higher Education of Higher Education for American Democracy in 1948 positioned them as an integral component of a
national priority to provide universal higher education for all. The report stated that the failure of America to provide increased educational opportunities for its citizens represented:

...a sobering failure to reach the educational goals implicit in the democratic creed, and...are indefensible in a society so richly endowed with material resources as our own. We cannot allow so many of our people to remain so ill equipped either as human beings or as citizens of a democracy. (Report of the President’s Commission on Higher Education for Democracy; in ASHE Reader on the History of Higher Education, 1989, p. 638).

The Commission also saw expanded education as an important means of confronting economic, racial and religious inequities. To this end, the Commission specifically recommended that:

...tuition-free education should be available in public institutions to all youth for the traditional freshman and sophomore years... To achieve this, it will be necessary to develop much more extensively than at present such opportunities as are now provided in local communities...The name [of the type of institution] does not matter, though community college seems to describe these schools best; the important thing is that the services they perform be recognized and vastly extended (Report of the President’s Commission on Higher Education for

Without question, the prevailing theme of this period was the advent of the federal government’s assistance to education. Literally millions of returning World War II veterans were afforded the opportunity to obtain a college education through the GI Bill, a program that would have been unthinkable 20 years earlier. Also, the Truman Commission’s Report strongly emphasized the role of what it called the “community college” in insuring that the promise of democracy was attainable, through universal access to education, by all.

The Third Generation: The Community College, 1950-1970

The third epoch of community college development was a period of substantial growth and transformation. The number of two year schools increased from 594 in 1952 to 1091 in 1970. During this same period, enrollment in two year institutions increased from around 500,000 to over two million (Deegan and Tillery, et.al., 1985; Cohen and Brawer, 1987; National Profile of Community Colleges: Trends and Statistics, 1997-1998).

Significantly, this growth was occurring almost exclusively in the public arena. The high water mark for private junior colleges was 1949, when 322 privately controlled schools existed, accounting for approximately one half of all two year colleges. Over the next two decades, the number of private schools declined slowly but steadily; by 1970,
there were but 244. Conversely, the number of public schools grew from 328 in 1949 to 847 in 1970, an increase of over 150 percent (Cohen and Brawer, 1987).

In the 1950’s, community colleges broadened their missions to address other important community needs. As noted earlier, in the 1930’s vocational and occupational training began to take their place along side the transfer function in two year institutions, and this trend accelerated during the 1950’s. Adult and continuing education programs also began to expand. Individual states were enlarging and expanding their community colleges; by doing so, they offered immediate access to higher education to millions of first generation college students. As Cohen and Brawer state (1987):

More than any other single factor, access depends on proximity. ...Hence, the advent of the community college as a neighborhood institution did more to open higher education to broader segments of the population than did its policy of accepting even those students who had not done well in high school. During the 1950’s and 1960’s, whenever a community college was established in a locale where there had been no publicly supported college, the proportion of high school graduates in that area who began college immediately increased, sometimes by as much as 50 percent (p 10-11).

Community college enrollment growth continued in the 1960’s. The first wave of the “baby boomers”-the generation born between 1945 and 1964-began to enter college. Adding to this natural population increase was the fact that young men of draft age could receive a draft deferment, and thus avoid the Vietnam War, by enrolling in college. And
whereas initially most community colleges were in rural areas, new community colleges were built in large urban areas, serving a heretofore under-served populace. These urban schools proved to be harbingers of the community college of the late 20th century as they

...found they were serving the total range of urban populations: affluent and poor, academically talented and deficient, minorities and immigrants, and citizens of all ages. No institutions of higher education had ever tried to serve such diversity. There were no models. Community college...faculty were forced to be pioneers in the creation of new systems of student services and instructional programs (Witt, et.al., 1994, pp. 184-185).

A final development contributing to the massive enrollment increase during the 1960’s was the advent of the “open door policy”, which held that “any high school graduate, or any person over 18 years of age who seems capable of profiting from instruction, is eligible for admission” (Thornton, 1972, p. 25).

The 1950’s and 1960’s can indeed be termed the “community college era”, as public two year schools began adapting to and meeting the increasingly diverse needs of many different groups. Colleges started outreach programs for under-served populations, particularly minorities and the poor. The adult, part-time learner assumed greater importance and attention than ever before; in California, for example, in 1958 well over two-thirds of community college students were enrolled part-time or in adult education programs (Witt, et.al., 1994). The era also saw the decline in importance of the private junior college concept.
The Fourth Generation: The Comprehensive Community College

The comprehensive community college, which traces its roots to the 1930’s, came into full bloom in the 1970’s and 1980’s, as the community service and continuing education functions assumed a level of importance equal to that of the transfer and occupational education functions. Edmund Gleazer, a noted leader of the community college movement and president of the American Association of Community and Junior Colleges from 1958-1981, was the principal advocate of expanded community service efforts. Gleazer (1973) explained that community colleges differed from junior colleges precisely because the former embraced courses and activities for credit and non-credit, nontraditional programs, and cultural and recreational offerings, all specifically designed to meet the needs of the surrounding community. He believed that these colleges should become more involved in addressing social problems within the community (Vaughan, 1982).

In the 1960’s community colleges assumed the role of first, and often only, choice for under-served populations. This trend continued in the 1970’s and 1980’s, as minorities, women, and first generation college students enrolled in increasing numbers. In 1988, over half of the Hispanics pursuing higher education did so at a community college; for Asians, the figure was 40 percent. (Padron, in Baker, 1993). Women also began to enroll in greater numbers (National Profile of Community Colleges: Trends and Statistics, 1997-1998). As usual, enrollment trends were in direct inverse proportion to the national economy. When the economy was performing well, community college
enrollment declined; when the economy slowed and unemployment rose, enrollments increased (Gernhardt, 1981).

By far the most important development on the community college front was the concept of institutional effectiveness. Alfred and Kreider (1991) defined institutional effectiveness as the ability of an institution to produce desired outcomes. Ewell (1984) described it as the fit between institutional purpose and performance. Most importantly for North Carolina's burgeoning community college system, The Southern Association of Colleges and Schools (1996) defined institutional effectiveness as a comprehensive system of assessment, planning and evaluation showing how effective the institution has been in accomplishing its goals. Inherent in all definitions is the notion that institutions will use this assessment, planning and evaluation model as a process rather than an event. This idea of continuous improvement is the very heart of the institutional effectiveness paradigm.

Several factors converged in the late 1970s and early 1980s to stimulate the move toward assessing educational quality. The economic downturn of the late 1970s, coupled with the Reagan Administration's efforts to reduce federal spending, placed more of the burden of educational funding upon individual states. Faced with increased demands by colleges for state tax dollars, legislatures and governors began to demand something in return: an assurance that the colleges were delivering quality, accompanied by documented evidence of that quality.

It is notable, though, that the move toward quality in education was profoundly influenced by the private sector as well. During this period, U.S. corporations began to search for ways to compete with foreign competition. The Japanese auto industry had
gained notoriety for its quality products. Japan and other Asian countries were also noted for the exceptionally high quality of the consumer products they produced. Their entire manufacturing culture centered on ever increasing quality.

As business leaders were examining ways to insure the viability of their enterprises, they also began to cast critical glances at education. Business graduate schools were emphasizing "rational management", which involved setting goals, allocating resources, both financial and human, toward those goals, and assessing the extent to which those goals were achieved. This final assessment was crucial to the success of this paradigm, for it provided the information imperative for future planning and goal refinement and revision (Folger and Harris, 1989).

Business leaders, ever mindful that their companies were substantial contributors to the tax base, began to question why these same principles were not being used in the educational arena. "Many business and government leaders [began] looking at higher education from this perspective, and they [saw] that some of the elements, as they defined it, [were] missing in the higher education scene. Institutional goals [were] frequently not clear. There [was] little systematic assessment information, and the outcomes of the process [were] often ambiguous" (Folger and Harris, 1989, p. 2).

The initial response from educators was predictable. They argued that learning and teaching were as much art as they were science. The nature of higher education precluded the implementation of external accountability measures, they stated (Ewell, 1984). They contended that educational institutions were fundamentally different from business; the intellectual development process was based on a complex interaction between student and mentor, and simply could not be quantifiably measured. And, they
continued, there was already an assessment process in place in the form of regional accrediting agencies (Folger and Harris, 1989; Doucette and Hughes, 1994; Nichols, 1991). These arguments were quickly and easily rebutted, and "institutional effectiveness" became an integral part of the educational lexicon.

The 1970’s and 1980’s comprised an era in which the community college became truly comprehensive, as the community service function achieved greater importance. The community college mission of addressing the needs of the educationally underserved was significantly expanded during this period as well. As community colleges sought to be more responsive to the needs within their service areas, they also faced increasingly strict standards of accountability. These three developments occurred in a time of shrinking resources as the federal government assumed a lesser role in funding higher education.

The 1990s and the New Century

Without question, the advent of technology and its impact upon the mission of the community college was the most important development of the 1990’s. Over the past decade, technology has become an integral component of American culture, and community colleges have restructured their missions and their educational delivery methods to accommodate what seems to be an insatiable demand for technological education. Of particular importance has been the redefinition of “workforce development” as a primary function of the community college.
In the past, the task of the community college had been to provide training, rather than education, to industry. The differentiation here is of the utmost importance to the community college of the 21st century. Training consisted of fulfilling a specific need of a business; for example, a company purchased a new Computer Numerically Controlled lathe, and the college supplied an instructor to train the company's employees to use the machine. While this type of service remained a vital part of the college's mission, it was no longer the only, or even predominant, effort.

The community college found itself in the forefront in the creation of the "knowledge worker", those employees who fill positions that "require a great deal of formal education and the ability to acquire and apply theoretical and analytical knowledge….The education that is required...for knowledge work can be acquired only through formal schooling. It cannot be acquired through apprenticeship" (Drucker, 1994, pp. 62-65).

Coupled with the impending ascendancy of the knowledge worker is "downsizing" in business and industry; many companies reduced their workforce, particularly in the areas of training. Phelan says that:

Today, companies continue to show an increased reliance on community college training and economic development services. The need for these services is the consequence of companies downsizing (including the elimination or minimalization of training departments) in an attempt to remain globally competitive (1994, pp. 606-607).
Thus, while business and industry were faced with a tumultuous transformation of
the workplace and the worker, they found themselves understaffed and financially ill
equipped to deal with the ramifications of that transformation. The community college
was uniquely suited to address this problem, combining technical skills education and
instruction in problem solving skills, preparing an employee both for his current
responsibilities and giving him the ability to effectively adapt to new employment
challenges. Indeed, Zeiss (1994) indicated that through such initiatives as (1) redesigning
structures in the workplace to encourage specialization, flexibility, and greater employee
involvement; (2) training and retraining the existing workforce to keep pace with rapid
technological changes; (3) providing new workers with the education and job skills needed
to adapt to changing marketplace requirement; and (4) giving employees the support they
need to manage the challenges of both work and family life, the applied mission of the
community college and the needs of business and industry were becoming inextricably
intertwined.

The development of America's community college system and an examination of
the accompanying national issues and challenges provide an excellent framework within
which to examine the beginnings of the North Carolina Community College System, one
of the youngest in the country. North Carolina's educational leaders have benefited from
the knowledge and application of leadership principles gleaned from earlier, more
established systems. The following assessment of the common antecedents of the
institutions comprising the North Carolina system is provided to create an understanding
and appreciation of its increasing diversity.
The Development of the North Carolina Community College System

The educators and political leaders who were instrumental in the development of community colleges in North Carolina would no doubt be hard pressed to recognize their creations in 2001. Today, the North Carolina Community College System consists of 58 comprehensive institutions, and is one of the largest in the nation. According to the 2000-2001 Annual Statistical Report, there were 757,745 total unduplicated enrollments during the 1999-2000 academic year. Full Time Equivalent (FTE) enrollment was 160,748. While the System's emphases have changed over the past four decades, its primary mission of providing a variety of opportunities for North Carolina citizens to obtain education and training in order to acquire and increase employment skills has remained constant. The institutions that comprise the Community College System play integral roles in the educational, social, cultural and economic lives of the citizens of North Carolina.

The North Carolina Department of Community Colleges, the precursor of the current North Carolina Community College System, was authorized by the General Assembly in the summer of 1963 under the "Act to Promote and Encourage Education Beyond the High School". Prior to 1963, there were 20 Industrial Education Centers under the administration of the State Board of Education; there were also five junior colleges and one technical institute (Segner, 1974). With the passage of the Omnibus Act, these institutions fell under the administrative authority of the Department of Community Colleges, which operated under the authority and control of the State Board of Education.

However, the Community College concept in North Carolina predates the Omnibus Act by almost 40 years. Buncombe County Junior College (BCJC), which
opened in 1927 in Asheville, was the first "community college" in North Carolina. While BCJC offered the traditional freshman and sophomore courses that were transferable to senior institutions, the school also had terminal curricula in nursing, industrial arts, secretarial science, home economics and pre-aviation (Segner, 1974, p. 2). Buncombe County Junior College also pioneered the low tuition concept that became a guiding principle of the North Carolina community college philosophy. In fact, for the first three years of its existence, all curricula at BCJC were tuition-free.

The G.I. Bill of Rights of 1944 propelled millions of World War II veterans into America's colleges, and North Carolina was no exception. To meet the challenge of extremely overcrowded institutions, a committee of the state's leading educators, appointed by the governor, recommended the establishment of twelve off-campus "University Extension Centers" designed to offer freshman-level classes beginning in 1946. These centers were located in Albemarle, Burlington, Burnsville, Charlotte, Fayetteville, Gastonia, Goldsboro, Greensboro, Hendersonville, Murphy, Rocky Mount and Wilmington. The following year, the need to add sophomore level courses became evident. By 1948, the committee felt that the purpose of the off-campus centers had been met, and they were discontinued (University of North Carolina Extension Bulletin, March 1949, pp. 5-30).

Though the off-campus center initiative was short lived, it provided the impetus for the establishment of junior colleges in Wilmington, Greensboro, and Charlotte. Local support for these institutions was high; at the Greensboro site, which was located on the campus of the privately affiliated Guilford College, enrollment in the evening program was twice as large as the traditional residential student body. Initially all three colleges were
locally funded and were under the jurisdiction of the local board of education. None of these institutions received state funds; they were financed through either bond issues, as was the case in Charlotte, or through special local tax levies specifically designated to support the Wilmington and Greensboro campuses. Not until 1953 did the General Assembly vote to allocate any state funds, and then only in the amount of $39,000 for the biennium (Segner, p. 14).

Nationally, as previously discussed, the belief that universal education was in the country's best interest was becoming more prevalent. This rising national sentiment for universal education, coupled with the massive influx of new students immediately following the war, stimulated many North Carolina educators to support the establishment of community colleges within the state. Foremost was Dr. Clyde Irwin, State Superintendent of Public Instruction from 1934 to 1952 and a prominent national educational leader. In December 1946 Dr. Irwin asked that the State Board of Education consider the establishment of community colleges. Dr. Irwin's support for community colleges was stimulated primarily by the overcrowded conditions in the state's existing senior and junior colleges (Segner, 1974, pp. 28-29).

In 1947 the General Assembly created the State Education Commission, which was charged with studying all aspects of the public educational endeavors and making recommendations to the 1949 legislature. Statewide support for the creation of community colleges was strong enough to stimulate the introduction of two bills into the 1949 legislative session. Both bills authorized the creation of study groups that were to determine the need for community colleges, to describe the purposes of these schools and to promulgate criteria for their creation. While neither bill progressed beyond the
committee phase, the legislature did authorize a community college study commission under the direction of the Superintendent of Public Instruction. The resulting report, the Community College Study, advocated a state-wide system of tuition-free, comprehensive community colleges. Specific recommendations of the commission included:

1. **Low Cost to Pupils:** the Commission viewed community colleges as an extension of the public schools system, and as such should be tuition free.

2. **Location:** citing studies that indicated that proximity was a major influence on college attendance, the study advocated that the colleges be located within easy commuting distance of the students.

3. **Local Initiative:** the Commission saw local interest, responsibility and control as imperative to the success of the schools.

4. **State Responsibility:** state supervision to assure quality and leadership, along with proper financial support, was seen as vital.

5. **Curricula:** the commission encouraged the creation of comprehensive colleges; to this end it recommended curricula in two year college transfer and general education programs; terminal courses for vocational, technical and semi-professional training; in-service training to aid those already employed; avocational educational offerings and services; and training for "drop-outs" to help them overcome their educational deficiencies (Segner, 1974, pp. 41-46).

Armed with this study, community college proponents introduced legislation in the 1953 General Assembly to:
authorize the creation, establishment and operation of community colleges under the supervision of the State Board of Education, to permit school administrative units or parts thereof to consolidate for the purpose of establishing and operating such colleges and to permit the levy of special taxes for the maintenance thereof after the approval by the voters of the district to be served (Journal of the House of Representatives of the General Assembly of the State of North Carolina, Session 1953, p. 489).

Opposition to the bill quickly surfaced, as supporters of the state's private junior colleges, fearful of the bill's effect upon those institutions, moved to defeat it. This group put forth several arguments against the bill, including the specter of a dual system of community colleges, one for whites and one for blacks. They also argued that the bill would divert badly needed funds from the public school system. Their arguments carried the day as the bill was defeated in committee (Journal of the House of Representatives of the General Assembly of the State of North Carolina, Session 1953, p. 900).

Supporters of the community college concept, having suffered two setbacks in the legislature, tried a different approach. Rather than emphasize the academic and college transfer aspects of a community college, they proposed the creation of Industrial Education Centers, or IECs. Their idea was to demonstrate the effectiveness of vocational and technical training centers located throughout the state, and then to later add the academic component. Crucial to the success of this plan was the support of Governor Luther Hodges, who saw highly trained and skilled workers as critical to attracting new industry
into the state. Hodges was a strong and forceful advocate of an expanded program of vocational and technical training (Hodges, 1962, pp. 186-190).

Another individual instrumental in the establishment of the IECs was W. Dallas Herring, who was appointed to the State Board of Education in 1955 and became its Chairman in 1957. Under Herring's leadership, and with the political assistance of the governor, the State Board of Education was allocated $500,000 for the purchase of equipment for seven IECs. Eleven other sites were approved and were to be funded in the following legislative session. The seven initial sites were Burlington, Durham, Goldsboro, Greensboro-High Point, Leaksville, Wilmington and Wilson, while the eleven additional IECs were to be located in Asheboro, Asheville, Charlotte, Fayetteville, Gastonia, Kinston, Lexington-Thomasville, Newton-Hickory, Raleigh, Sanford and Winston-Salem (Mayberry, 1972, pp. 38-41). The success of the IECs was immediate and overwhelming. By 1963, the final year of the IECs, over 34,000 students were enrolled in 20 Industrial Education Centers (Segner, 1974, pp. 59-83).

Just as Governor Hodges had been essential to the success of the establishment of the IECs, Governor Terry Sanford assumed a vital role in the development of comprehensive community colleges. Citing concern over the state's low rate of college enrollment and the need for long-range planning regarding the IECs and their relationship with the existing public junior colleges, Governor Sanford created the Governor's Commission on Education Beyond the High School, commonly referred to as the Carlyle Commission, after its chairman, Irving Carlyle. The governor charged the commission with creating a blueprint for coordination and planning in the state's system of higher education. In June 1962 the subcommittee dealing with the community college issue, the
College Survey Committee, recommended to the full commission that a system of low-cost, comprehensive community colleges be created (The Report of the Governor's Commission on Education Beyond the High School, pp. 65-76).

As in 1953, opposition to the community college concept again arose, this time from an unexpected source: the senior institutions, which feared that the two year schools would inadequately prepare their students for the academic rigors of the four year colleges. Also, the private junior colleges were again voicing their disapproval of the proposal. Despite the opposition of these groups, the Carlyle Commission's recommendation for the creation of a Department of Community Colleges, under the supervision of the State Board of Education, was incorporated into the Education Omnibus Act of 1963. On July 1 of that year, a comprehensive community college system in North Carolina became a reality.

Two primary issues permeated the first 20 years of the Department of Community Colleges: exceptional growth and the struggle for control of the system. The first years of the Department were marked by rapid expansion and change. Within 18 months, the system grew from 25 units, (23 of which were IECs or extension sites), to 34 institutions, eleven of which were comprehensive colleges. As the IECs were phased out, community colleges or technical institutes replaced them. Enrollment at the schools had increased by over ten percent by the end of 1964.

The challenges facing the leaders of the new department were many. The schools comprising the department included comprehensive community colleges, which offered the curricula envisioned in the Community College Study of a decade earlier. There were also technical institutes, which concentrated their educational efforts solely on vocational, technical and pre-professional areas. Finally, there were extension units, which operated
under the auspices of existing institutions, and were in many cases larger than the home
campus. The State Board of Education, charged with coordinating the efforts of these
diverse institutions, was inundated with requests for new curricula, for new institutions,
and most importantly, for additional funding. Fortunately for the fledgling department,
substantial amounts of federal aid became available. By early 1965, the department had
received federal funds equal to 38 percent of its original appropriation by the General
Assembly. These funds were allocated for academic and job training through the
Manpower Development and Training Act (Wiggs, pp. 18-36).

The second major issue facing the department during this period was the question
of ultimate control and authority over the institutions. If one phrase can best characterize
the leadership philosophy of the community college presidents from 1963-1979, it would
be "local autonomy". This philosophy held that local educational decisions were best
made by local boards of trustees. The State Board of Education approved accreditation
procedures, contracts between licensing agencies and individual schools, and acted as a
liaison with the legislature. But the real power lay in the institutional boards of trustees,
which often used political ties to induce the introduction of legislation beneficial to their
individual institutions, with little regard given to system wide planning or needs. The
boards of trustees, often encouraged by their presidents, jealously guarded their control and
autonomy. Several allegations of misuse of funds at individual schools were made.
Charges of enrollment padding to secure increased funding were made. Despite these
allegations, the State Board exercised little control over individual institutions. In 1975, 12
years after the system began, less than 50 percent of the 57 institutions had been audited;
one newspaper termed the Department of Community Colleges a "loose operation" (Wiggs, 162).

In 1977, vocal demands for greater control of the system by the state president began to surface. Governor Jim Hunt stated that the president should exercise "more involvement in assuring that state policies and good fiscal policies are followed" (Raleigh News and Observer, 5-12-77, p. 37). The president of the system replied that he had no control over local budgets or finances, and had no auditing staff. His responsibilities were those of establishing and revising educational programs; fiscal authority and responsibility for the system lay with controller of the State Board of Education (Wiggs, p. 181).

The move toward greater state control of the system accelerated in 1979 when legislation creating a separate State Board of Community Colleges, to take effect in January, 1981 was passed. The system president moved to reorganize the state department and to redefine the system's role and mission. The early 1980's witnessed improved accountability and credibility, along with the increased delineation of the roles of the State Board and the local boards of trustees.

Former governor Bob Scott assumed the system presidency in March 1983. Scott was tasked at once with "unifying the system into a major educational and economic source." This charge came at a time when the community college system was one of the least recognized and understood systems in the state (NCCCS, 1994, p. 2).

In 1989, the Commission on the Future of the North Carolina Community College System released *Gaining the Competitive Edge: The Challenge to North Carolina's Community Colleges*. This report, the result of a study led by a panel of business, civic and legislative leaders, reported that the community college system would have to be
strengthened if the state was to fulfill the need for a stronger work force. The General Assembly embraced the report, but could not increase funding for the system right away. In 1991, the Commission's funding formula was adopted, and two years later the $250 million capital construction bond passed in the House and the Senate.

The changing economy in North Carolina to a service oriented/technological industry accelerated the demands on the community colleges. More than half of the country's Fortune 500 companies had a manufacturing facility in North Carolina. Enrollment increased by 24 percent, and more than 70 new programs and courses of study were added to the curricula statewide. However, tuition has increased dramatically at the same time, from $3.35 per credit hour in 1983 to $31.00 in 2001 (A Matter of Facts, 2001).

**Leadership Issues Confronting North Carolina Community College Presidents**

Deegan and Tillery (1985) have documented the leadership roles extant during their four historical eras. During the “expansion of the high school” period of 1900-1930, the role of the executive was essentially that of a high school principal. This junior college of this time was not generally regarded as an institution of higher education, as it was often controlled by the local board of education, the same governing board of the elementary and secondary schools. Administrators were afforded little status as educational leaders (pp. 6, 26).

During the “Junior College” period of 1930-1950, two-year institutions began to assume their position in the higher education community. Comprehensive and academically sound curricula were established, primarily to meet the needs of the local community. The colleges remained under local control, but this control shifted from public
school boards to college boards of trustees. Leaders of these institutions initiated efforts to build campuses and to expand opportunities. The collegiate model emerged to replace the old high school extension model (Deegan and Tillery, pp. 9-10, 26).

The third period of evolution, 1950-1970, was the “community college” period. During this time, community college enrollments increased substantially. A primary function of leaders during this era was that of building and strengthening their college and its curricula. Federally based funding was relatively abundant, and leaders assumed the task of managing these funds for the greatest benefit for the greatest number of students.

The fourth era is the “comprehensive community college”, spanning 1970-the mid 80’s. During this time resources that were so plentiful just a decade or two before started to become exceedingly scarce. Leaders struggled to expand their commitment to historically underserved populations in a time of fewer dollars and increasing demands for accountability on how those dollars were spent. It was during this period that the need for leaders with sophisticated skills began to emerge (Deegan and Tillery, 1985).

The leadership issues and challenges cited above also applied to the North Carolina Community College System, albeit within a compressed time frame. North Carolina's community college presidents have faced very similar problems, though the system is relatively young. In its first years the system struggled to attain credibility, trying to escape the "expansion of high school" perception described above. This perception was heightened by the fact that until 1981, the community colleges were actually under the control and administration of the state's Board of Education.

The development of North Carolina's community colleges during the period of 1981 to the present is reflective of Deegan and Tillery's (1985) "Junior College", 
"Community College" and "Comprehensive Community College" eras. Control of the system passed to the State Board of Community Colleges, and individual institutions enhanced the quality and number of curricula offered. The 1980's were also a period of significant enrollment increases, with funding relatively plentiful. However, the advent of the 1990's witnessed a statewide recession and the demand by the taxpayer that public organizations utilize their funds wisely, and be prepared to account for the expenditure of those funds. Too, the private sector began to demand that community colleges produce quantifiable, documented outcomes.

As North Carolina's community colleges entered the 21st century, their leaders faced substantial and daunting leadership challenges. Students viewed themselves as consumers, and expected their education to be of high quality and rendered in a fashion timely and convenient to them. Private, for profit enterprises challenged the traditional ideas of how education should be delivered. Business and industry relied increasingly upon community colleges to provide both remedial and state of the art technological education for employees. Throughout the country, a majority of community college faculty is rapidly approaching retirement age, pointing to the need to replace significant numbers of experienced instructors. All of these challenges must be placed with the context of a conservative political climate, which dictated that community college leaders could not rely upon increases in public funding, but certainly saw increased public scrutiny of their efforts.

While the state's community college presidents had these and other leadership issues in common, they had to approach issues differently-situationally-and take into
account the unique circumstances that surround their individual institutions if they were to be successful leaders.

One of the most striking developments in North Carolina over the past decade is the startling disparity in population growth throughout the state. North Carolina's population grew by over 21 percent from 1990 to 2000, and the majority of that growth occurred with the state's Metropolitan Statistical Areas. The population comprising the state’s MSAs rose from 3,551,146 in 1990 to 5,278,075 in 2000, an increase of over 48 percent (US Census, 2001). The MSAs represent 65.6 percent of the population in North Carolina. This disparate growth has created significant challenges for the state’s community college presidents, as substantive leadership issues have arisen relative to a college’s size, enrollment growth and geographic location. An examination of the literature pertaining to those institutional characteristics comprises the next section of the literature review.

**The Impact of Size, Growth and Location on Community Colleges**

There is general agreement that the mission of a community college is essentially the same, be the college large or small, urban or rural. Regardless of the college's size or geographic location, it is charged with providing transfer and career education; economic development and workforce preparation; addressing the needs of the under educated through remedial and literacy programs; and meeting the avocational, recreational, cultural and social needs of its community through a broad based community education effort (Lorenzo, 1994, pp. 113-118).
However, size and location greatly influence an institution's ability to respond to and effectively address the issues, problems and obstacles with which it is confronted. Small colleges are generally viewed by the communities they serve as having a greater responsibility for comprehensiveness, as these schools are usually the only provider of educational, cultural, social and economic community leadership as well. While large community colleges obviously also provide these vital services, they often have the advantage of partnering with other community resources. Also, large, urban colleges usually have greater fund raising capacities than do their rural counterparts (Sharples, 1988, pp. 1-2; Weiss, 1988, pp. 13-15).

In the 1970's researchers began acknowledging the fact that there are significant differences between small and rural colleges and large and urban community colleges. An important development in this field of research occurred in 1976, when the American Association of Community Colleges (AACC) established the Task Force on Rural Community Colleges. In 1977, the task force evolved into the Commission on Small and/or Rural Community Colleges (Vineyard, 1978, pp. 29-30). The Commission recognized that even though these institutions constituted roughly 50 percent of the nation's community colleges, there was very little research on the needs and challenges facing these schools (McNutt, 1994, pp. 190-191). The formation of the Commission provided the impetus for a growing body of research delving into the unique challenges facing small and rural community colleges.

The effort to provide a comprehensive array of services and opportunities can prove a difficult undertaking for the small or rural school. One factor that hampers these efforts is the lack of adequate financial resources. Finances can be problematic
for the small school, as its enrollment base is generally limited to its service area (Hamrick, 1970; Vineyard, 1976). Without constantly increasing enrollment and the additional funding accompanying that increase, the rural college faces the prospect of being unable to attract or retain a top quality faculty and staff (Knoell and McIntyre, 1974). A dearth of recreational, cultural and social outlets also may hinder a small college's efforts to attract faculty and staff (Butt, 1975). These factors often prevent a small college from offering high cost, specialized curricula, even though the skills taught in that program are in demand within the community (Boyer, 1976).

Local funding is exceptionally important to small and rural colleges, and a weakening local economy often creates a downward economic spiral for the schools and their service areas. A declining local economy invariably means that more students will enroll in order to upgrade or develop skills allowing them to reenter the workforce as soon as practicable. An increase in enrollment, coupled with fewer funds, creates a serious dilemma for all colleges, and especially for small and rural schools. Should the state's economy falter, the financial situation for rural institutions becomes even more difficult (Boyer, 1976; Zeiss, 1994; Hierstein, 1995).

In spite of these financial restrictions, small/rural colleges play important roles in the overall development within their communities. Within the scope of comprehensive community development, a primary function of small/rural schools is economic development. These institutions provide trained employees for existing businesses and industries, and also assist in attracting new business into a community by providing low cost, skill-specific training programs for the company's new employees (Donato, 1988; Hierstein, 1995). Other economic development functions of
the rural community college include retaining the unemployed, career and vocational counseling, labor market information collection and dissemination, and collaboration with other economic development entities (Currin and Sullens, 1988, pp. 38-43).

Cavan (1995) points out that "practically everything [community colleges] do is economic development and will help to improve our communities" (p. 13). He cites the rural college's efforts in continuing education, in-plant training and literacy education as crucial to the overall development of a community, and also includes the provision of community cultural experiences as integral to economic development (p. 13).

Boone (1992) offers his Community Based Programming as a model with which small college leaders can address the myriad needs of their communities. He states that colleges must, through a process of continuous environmental scanning, identify the relevant issues within their service areas. This allows the school to not only be involved in resolving current problems, but also permits it to foresee future issues of importance to the community and to lead in the development of strategic planning efforts designed to address them. Boone's model is extremely important to small colleges, as insufficient staff and inadequate institutional research often hamper long range planning at these institutions. The immediacy of insuring institutional survival by meeting short-term institutional goals and addressing pressing community demands often overshadows long range planning efforts (Shoemaker, 1972).

Closely tied to the strategic planning effort is resource development. Here, again, the small and rural colleges are at a disadvantage. Limited staff and financial resources often hinder the efforts of small schools to secure external funding (Flower, 1988).
While small and rural community colleges are often disadvantaged by their size and location, large and urban colleges also encounter significant challenges in trying to fulfill their missions. Stahl (1986) reiterates that the mission of the urban college is much the same as that of the small, rural school. He emphasizes that general education, transfer education, career education, basic skills, adult education, and corporate and community service programs constitute the core functions of the urban college (pp.1-2).

One of the earliest references to the urban college alluded to the fact that a major concern for the large or urban school is enrollment growth (Reed, 1970). Indeed, the issue of enrollment growth and the many challenges it presents permeate the literature related to large, urban schools. Smith and Vellani (1999) state that in the 1960's and 1970's urban colleges addressed the challenge of providing adequate facilities to accommodate the significant increase in the numbers of students they served. Though proper facilities are still an important consideration, they hold that urban community colleges are now focusing on their role in serving new student populations (p. 8). The community college is viewed as the educational resource of first, and often only, choice for students of color and immigrants. In the 1990's, these segments of the population grew much faster than did the Caucasian population, and much of the growth occurred in America's large urban centers. Rendon and Valadez (1994) report that "…community colleges… serve as the principle gateway to higher education for the nation's new wave students and in many states constitute the primary point of college entry for the great majority of all students…” (p. 576).

Declining funding for the urban college is another important thread in the literature. While the lack of adequate funding is obviously an issue for the small, rural
college as well, for the large urban school it is intertwined with the concepts of equity and access. Stahl (1988), Hungar (1999), and Smith and Vellani (1999) emphasize that, beginning in the 1980's, conservative political leaders began to question the success of the urban community college in providing quality educational services. Reitano (1999) recounts the funding battles surrounding City University of New York's community colleges in the late 1990's, a battle that seriously diminished the colleges' ability to meet the multiple demands of its students. Hungar (1999) speaks of the "increasing conservatism and parsimony of those in power" within the Seattle community college system, which he strongly feels is contributing to a two-tiered urban community college system—one level for the white middle and upper class, and another, lower level for the student of color and the immigrant (p 50). Elliot (1994) posits that the concentration of the poor, undereducated and unemployed within urban centers continues to create immense problems for urban colleges.

Woven throughout the research on large, urban community colleges is the concept that they play an exceptionally important role in insuring that students have access to the benefits of American democracy (Pedersen, 1994). In doing so, these colleges attempt to provide holistic responses to the needs of their students, addressing not only academic but also social and economic issues as well. This approach has led critics to question the effectiveness of the urban school. Temple (cited by Padron in Baker, 1994) is particularly critical of the urban community college, expressing serious doubts about the ability of these schools to adequately address the deterioration of the communities they purport to serve. Weis (1985) writes of the cultural conflicts that exist within urban schools, and the schools' inadequate response to those conflicts.
Pedersen (1994) acknowledges that there is a dearth of literature pertaining to the urban community college. He calls upon urban community college leaders to focus on the issues that are critical to them and to the vitality of their institutions. He advocates the creation of a "body of literature that addresses urban concerns from an urban perspective, offering leadership and guidance for a policy agenda that is sensitive to the unique concerns of urban institutions" (pp. 187-188).

**Leadership Issues Related to an Institution's Size, Growth and Location**

Small and rural community colleges have commanded the attention of scholars and researchers much more so than have the large and urban schools. While most of the literature concentrates on identifying and addressing issues that are specific to an institution's size or location, there is agreement among researchers that the missions of the two are essentially the same. No doubt due to this consensus, there exists very little scholarly work concentrating on whether the presidents of small and rural colleges emphasize different leadership competencies than do their counterparts at large or urban schools. Reichard (1995), president of a rural college in eastern North Carolina, sees the small community college president's role as one of expanding the college's community and economic development roles, increasing resources and revising funding formulas through political action at the local, state and national level, raising external funds through foundation activities,
improving articulation with the public schools and four-year colleges, and improving strategic planning practices (p. 27).

Cavan (1995) states "it is the responsibility of the president to articulate the comprehensive mission of the rural community college and to get congruency of this mission from the local board" (p. 10). There is a distinct similarity between their views and that of Stahl (1988), who writes that the urban community college leader must "accommodate institutional needs in such differing areas as …working with state legislatures and conducting an ongoing program to solicit community support…” (p. 25). These statements speak to universal roles of the community college president. The literature is generally silent on the concept that the president of a large, urban community college might need to exercise different leadership competencies than would the president of a small, rural community college.

Though there exists more research on small and rural colleges, there appears to be little recognition that the leaders of those institutions might need training in specific leadership competencies to be successful. Conversely, two major leadership training initiatives focused on developing leaders for urban institutions. In 1997, the League for Innovation in the Community College, in cooperation with the University of Texas and the Kellogg Foundation, conducted a leadership training effort entitled "Expanding Leadership Diversity". The program encouraged the participation of minorities and those serving urban institutions, and established mentoring relationships and assisted the participants with the development of professional development plans. The program
consisted of seminars, individual projects and an internship (League for Innovation in the Community College, 1997).

Another, ongoing urban community college leadership training initiative is New York University's Center for Urban Community College Leadership. The Center's efforts focus on preparing administrators to fill the leadership gap that will occur within the next decade. A doctoral program is offered through the Center, and courses include "Ethnic Groups in Higher Education", "Race and Class in American Cities", "Labor Relations and Collective Bargaining", "The College Presidency", "Managing Organizational Change", and "Urban Poverty". In addition, students engage in fieldwork and internships (Center for Urban Community College Leadership, 2001). Both the League for Innovation and the Center for Urban Community College Leadership seem to focus on the specific challenges and issues an urban president might face. There appears to be little if any emphasis on developing specific leadership competencies to address those challenges.

There is also an absence of research into what leadership roles, values and emotions and skills would best serve the president of a rapidly growing community college or the president of a college whose enrollment is declining. An early work by Gardner and Brown (1973) touches upon the notion that the president of a college experiencing rapid growth would encounter different problems than would the president of a college with declining enrollment. They do so only tangentially however, and do not discuss whether these presidents would exercise different leadership competencies in addressing these problems.
Though there may be a paucity of research on the impact a college’s size, location or growth rate might have upon presidential leadership styles, the community college president must be aware of, and constantly stay abreast of, the constantly evolving and developing field of leadership theory and thought. An examination of leadership theory and its development comprises the next section of the literature review.

**Leadership Theory and Development**

**Definitions of Leadership**

To properly discuss leadership theory, one must first consider the definition of leadership. This is not a simple undertaking, as varying definitions abound. The word *leader* first appeared around the year 1300; the term *leadership*, however, did not appear until about 1800 (Johnson & Johnson, 1994). Formal research into the phenomenon of leadership is less than a century old. Over that brief time scholars and theorists have defined leadership in terms of individual traits, behaviors, influence over others, role relationships and perceptions of others (Yukl, 1998).

Clearly, there is no one true definition of leadership; theorists define it within the context of their own perceptions and scholarly interest. Simply stated, leadership means different things to different individuals. Roueche and Baker (1989) define leadership as "the ability to influence, shape and embed values, attitudes, beliefs, and behaviors consistent with increased...commitment to the...mission [of the organization]" (p. 18). Robbins (1991) links leadership with management, defining a leader as one
who has the ability "to influence others and who possesses managerial authority" (p. 459). Kouza and Posner (1987) sharply differentiate the terms leadership and management. *Lead,* they say, is derived from the root word "to go", denoting travel, a journey from one place to another. They see leaders as pioneers venturing into uncharted territory and unfamiliar destinations. The root of *manage,* conversely, means “hand”. This connotes "handling" things through control and the maintenance of the status quo, the current situation. "Managers", they conclude, "get other people to do, but leaders get other people to want to do" (p. 27). Covey (1991) states that leaders deal with establishing direction and vision for an effective organization, while managers concentrate on structuring systems to attain maximum efficiency and results within that organization. "Leaders focus on the top line", he states, while "managers focus on the bottom line" (p. (246). Burns (1978) states that "leadership over human beings is exercised when persons with certain motives and purposes mobilize, in competition or conflict with others, institutional, political, psychological, and other resources so as to arouse, engage, and satisfy the motives of followers" (p. 18). According to Marsh (1994), “Leading is the process in which a person with power and influence is able to influence the behavior of others in some desired way” (p.1:15). Considered collectively, these definitions assume that leadership involves a process through which one person intentionally influences another to accomplish the mission and goals of an organization (Yukl, 1998).

Though it is evident that management differs in significant ways from leadership, it is also apparent that much of what is found in current leadership theory evolved from earlier studies of management practice and theory.
Definitions of Management

While there has been substantial diversity of opinion on how to best accomplish management functions, a general agreement on what those functions are has always existed. Balderson et. al. (1992) saw management as the “art and science of organizing, preparing, and directing human effort applied to control of forces and to utilize the materials of nature for the benefit of man” (p. 5). Robbins (1991) defines it as "the process of getting activities completed efficiently with and through other people” (p. 5). Sisk and Williams (1981) define management as “the coordination of all resources through the processes of planning, organizing, leading, and controlling in order to attain stated objectives” (p. 11). Megginson et. al. (1983) state that "Management can be defined as working with people to determine, interpret, and achieve organizational objectives by performing the functions of planning, organizing, staffing, leading, and controlling (p. 19). Marsh (in Hampton, 1994) terms it to be the "art of getting things done through others" (p. 1-15). Plunkett and Attner (1989) define the concept as "the process of setting and achieving goals through the execution of five basic management functions that utilize human, financial and material resources" (p. 33). Wren's (1994) definition is "an activity of that performs certain functions to obtain the effective acquisition, allocation, and utilization of human efforts and physical resources to accomplish some goal" (p. 3). Johns (1996) defines management as “the art of getting things accomplished in organizations through others” (p. 10). In summation, current definitions of management appear to differ very little from that put forth nearly a century ago by Henri Fayol; inherent in each is the concept that managers see that things get done.
The Development of Modern Management Theory

While management is not a new concept (the Chinese had a highly developed concept of management thousands of years ago) the advent of modern management theory emerged with the commencement of the Industrial Revolution in Europe. This epochal, wrenching economic change resulted in three important developments in the development of management theories. First, large corporations began to appear. Because of public ownership of these companies, absentee ownership became possible. This resulted in the second development, the separation of ownership and management. Third, business and management became formal disciplines of study; the Wharton School began serious study of management theory in the 1880s (Marsh, 1994).

It is difficult to overestimate the impact of the Industrial Revolution; simply stated, it was the most important economic, social and cultural development in western civilization in the last 300 years. This massive change in the manner in which manufacturing work was performed occurred over a period of a century and a half, from the early 1700s through the 1850s. Prior to that time, the primary form of industrial organization was the cottage industry, where individuals worked on a piecework basis in their own homes. Under this system, merchants had little concern for working conditions, for they seldom personally encountered those who produced the goods subsequently sold in the marketplace (Megginson, et.al., 1983, pp. 57-58).

The Industrial Revolution entered the 19th century predicated upon management concepts designed to organize, plan and control work. This arrangement changed with the advent of the factory system, which was precipitated by the invention and use of new
manufacturing tools, processes and machines. This system of production relied upon the concept of mass production through the use of assembly lines. Although the factory system of mass production greatly enhanced employees' standards of living, it also introduced many new difficulties into the workplace. Problems such as excessive work hours, employee fatigue, and the possibility of injury became omnipresent. Additionally, psychological concerns began to surface. Workers no longer felt in control of their contribution in the workplace, and lost the feeling of satisfaction through accomplishment.

Charles Babbage (in Megginson, et. al., 1983) formulated the principle of "transfer of skills", in which the extent to which a machine becomes more automatic and is able to produce a large quantity of goods, the attending worker becomes less important to the process. Ultimately, the worker becomes a machine tender rather than a skilled craftsman, losing whatever satisfaction and self-identity he gained from his labor (p. 59).

Mechanization also made possible the introduction of women and children into the workforce; this further exacerbated the Industrial Revolution's assault upon the male ego, as it became evident that females and adolescents could accomplish the same results as could men. Mechanization resulted in the need for new management theories designed to deal with social and motivational forces in the workplace.

Though manufacturing systems changed dramatically in the latter 1800s, management practice and theory did not. Autocratic, imperious techniques were still the rule of the day. Thoughtful business owners, however, began to realize that the gap between workers and management was widening, and sought methods by which to lessen that gap. One of the first important attempts to do so in the United States was the publication of Frederick Taylor's Scientific Management in 1911. Taylor's research
introduced the concept of using scientific methods and processes to determine the one best method of accomplishing a specific work task. Advocates of scientific management introduced time and motion studies, incentive pay and worker specialization. Their ultimate goal was to achieve worker interchangeability to accompany the mechanical interchangeability already extant within the industrial corporation. Advantages of the scientific management approach included increased efficiency due to reduced physical effort by the worker and less waste of material and energy. There were also inherent disadvantages to the approach, particularly in the psychological aspects. The alienation of the industrial worker, already profound, was magnified by the implementation of the scientific method. Workers were considered as little more than cogs in a giant machine, and became even less invested in the future and success of the company (Marsh, 1994, pp. 1-12). Disciples of Taylor included Carl Barth, who furthered Taylor's notions of mathematical efficiency within the workplace; Henry Gantt, who stressed scientific selection of workers, incentive pay, and detailed work instructions, and introduced the Gantt Chart to record a worker's performance; and Frank and Lillian Gilbreth, who pioneered advanced time and motion studies and also stressed the human aspects of work, such as personnel selection, placement and training (Meggison, et.al., 1983, pp. 64-65; Wren, 1994, pp. 133-149).

Henri Fayol, a French industrialist, is credited with formulating the first theory of management. While Taylor's efforts were concentrated on enhancing the efficiency of the worker, Fayol focused on the role of management from the chief executive's point of view (Meggison et.al., 1983, p. 63). The crux of Fayol's philosophy was that (1) principles of management were universal and applicable to any organization; (2) managerial ability
became more important as a person moved up in an organization's hierarchy; and (3) management principles could be taught (Wren, 1994, p. 184).

Fayol based his theory upon his experience as the chief executive of an important mining and iron working concern. He observed that managerial abilities were separate and distinct from technical knowledge. He proposed that an organization's success depended more upon the managerial skills than the technical proficiency of its leaders (note here Fayol's interchangeable use of "leader" and "manager"). Fayol concluded that "a leader who is a good administrator but technically mediocre is generally much more useful to the enterprise than if he were a brilliant technician but a mediocre administrator" (in Wren, 1994, p. 181). Fayol is credited with introducing the elements of management; these elements constitute the cornerstone of most modern management textbooks used today, and include planning, organizing, commanding (usually termed "directing" today), coordinating and controlling (Plunkett and Attner, 1989).

The work of Fayol, Taylor and their adherents is generally grouped under the heading of functional management. This philosophy basically held that the worker was an interchangeable part of a giant organization; employees should be managed in the same fashion as were other raw materials. It failed to take into account the psychological and emotional aspects of the workplace, and sought to completely control every function of the worker while on the job.

Critics of the scientific management theory contended that it paid scant attention to the significance of worker motivation. They initiated the next phase of the development of management thought, the study of the importance of human behavior in the workplace. It is generally agreed that the roots of this humanistic approach to management theory can be
found in the Hawthorne Studies, conducted at a Western Electric plant near Chicago from 1924-1932. Originally a study to examine the effect of illumination on worker productivity, the experiment revealed that workers increased their output regardless of the lighting of their work area. After eight years of intense and comprehensive study, the researchers concluded that this increase occurred because the workers had a feeling of worth and importance primarily due to their knowledge that they were being studied. A secondary finding was that workers were motivated by peer group approval and by ego needs (Marsh, 1994, 1-14).

The Hawthorne Studies demonstrated that corporations were social systems as well as places of labor. In the 1940s and 1950s, theories of the needs of individuals within those social systems began to emerge. Abraham Maslow’s *Motivation and Personality* (1954) contained his theory that human needs could be classified in five categories, from lower level physiological needs such as food, shelter and safety through higher level needs like social needs, esteem and self-actualization. As the lower order needs were met, they assumed less importance as motivators. McGregor (1960, 1966) developed the idea of *Theory X* and *Theory Y* managers. The former characterized a manager’s perceptions that the average worker was lazy, inefficient, irresponsible and in need of constant and close supervision. This supervision was based on coercive, punitive management practices. Theory Y managers, conversely, assumed that the potential for greater achievement, responsibility and the desire to accomplish organizational goals are inherent in workers, and that management's charge was to develop and enhance those attributes (McGregor, 1966, pp. 5-20). Ouchi (1981) expanded upon McGregor by formulating "Theory Z". The primary tenet of this approach was that management could produce a strong commitment
on the part of its employees by paying careful attention to their needs and by establishing a collaborative, participative industrial work environment. Out of these concepts supported by Carl Rogers and others the humanistic school of management was born (Rogers, 1969).

The humanistic approach to management assumes that the organization is designed to produce a product and make a profit, while at the same time enhancing and encouraging its workforce to develop and strengthen its professional and personal potential. Establishing and maintaining this balance of productivity and individual enhancement is quite a challenge; tilting that balance in either direction, be it toward the mechanistic side or the relationship side, can be extremely detrimental to the organization's future.

By the end of the 1970’s, most researchers agreed that the prevailing theories of management were obsolete. Realizing that the existing human management theory is outdated, most advocate a combination of concepts called the contingency approach. The contingency approach holds that to maintain the balance described in the preceding section requires the application of different management techniques based upon the specific situation being addressed (Megginson, et.al., 1983, p. 75). These techniques could include those derived from the scientific approach as well as humanistic methods. The contingency approach begins with an analysis of the problem, consideration of possible solutions and the probable consequences of those solutions, and the application of the solution most likely to create the desired result (Plunkett and Attner, 1989, p. 28).

**Leadership Concepts**

The literature amply demonstrates that management is different from leadership. The following section of the literature review concentrates of various aspects of leadership.
Dyadic Processes

The dyadic approach concentrates on the relationship between the leader and the individual follower. According to Yukl (1998), early leadership research concentrated primarily upon the influence wielded by the leader over the follower. However, recent scholarship demonstrates that a key factor in analyzing the effectiveness of the relationship between the leader and follower is the reciprocal nature of the relationship, and how leader and follower influence roles are established and modified over time.

Informal observation would tell us that leaders do not treat all subordinates alike. However, much leadership research seems to ignore this fact. Dansereau, Graen and Haga (1975) developed the vertical dyad linkage (VDL) as a model to examine the diverse ways in which leaders and individual followers interact and influence each other. The VDL provides the basis for the Leader-member exchange (LMX) theory, which states that leaders develop a separate exchange (influence) relationship with each subordinate. Leaders establish “in-groups” and “out-groups” of followers, and the reciprocal influence process evolves differently for each group. The leader expects greater productivity and commitment from the in-group, and in exchange the follower may expect greater tangible and intangible rewards. The “out-group” has a far lesser level of reciprocal influence, and the relationship between the leader and the “out-group” is more formal.

Yukl (1998) states that this theory suffers in that it does not adequately address the interrelationship of individual dyadic relationships and the resulting effect on group
performance. He also suggests that further inquiry is necessary on lateral dyadic relationships and informal, network relationships (p. 154).

Attribution theory focuses on the perceptions of the leader toward the subordinate, particularly in times of low subordinate performance. The leader develops an approach to remedy the poor performance based on his judgment of the causes of the low performance. These perceived causes may be either internal factors (i.e., low ability or commitment) or external (for example, equipment malfunction or illness). The leader proposes solutions to the problem based on these attributions (Mitchell & Wood, 1980).

The dyadic approach is helpful in explaining the nature of individual leader-follower relationships in organizations, and as such provides the theoretical basis for research into more complex leadership-subordinate dynamics. The next section examines the leader-group relationship.

**The Leader’s Role in Group Effectiveness**

The best leaders concentrate on convincing followers, through the positive use of power and influence, that it is in the followers’ interest to contribute toward the attainment of organizational goals and objectives. The following is an analysis of how the concept of motivation is incorporated into the relationship, and also of the importance of power and influence in the leader-follower relationship.

There are two types of motivation theory: content and process (Hampton, Summer and Webber, 1987). Content theories study *what* motivates individuals.
Maslow’s *hierarchy of needs* continuum is perhaps the most notable of these theories. In his *Motivation and Personality* (1954), Maslow postulated that human wants form a hierarchy. As we have seen, these could be classified in five categories, from lower level physiological needs to higher level needs. As the lower order needs were met, they assumed less importance as motivators. Maslow proposed that wants are not absolute; the more they are satisfied, the less their satisfaction matters.

Herzberg (1976) expanded on Maslow’s work with his *Motivation/Hygiene* theory. He stated that the circumstances under which employees work—pay, environment, supervision—must be maintained to prevent dissatisfaction, but they are not motivators. He theorized that motivators such as intrinsically rewarding work, recognition, and personal growth within the organization must be present for the employee to be achieve fulfillment and attain Maslow’s higher level psychological needs (Drucker, 1974; Hampton, Summer and Webber, 1987). The Motivation/Hygiene approach assumes that most lower order needs of employees have been met, but that their higher level needs have generally not been satisfied.

David McClelland theorized that individuals had three dominant needs, or motives. Those with high achievement motives had strong needs for accomplishing self-imposed goals or standards, and desired feedback, recognition and challenge in the workplace. People with high affiliation motives value greatly their relationships with others, particularly enjoying a collegial atmosphere. Those with a predominant need for power fall into two groups. Persons desiring personal power do so because they want to dominate and control others. Aspirants to social power want to use their power in manners that benefit the organization as a whole by encouraging and mentoring others. According
to McClelland, an individual's need for power, achievement and affiliation in the workplace are powerful motivators within any organization (Baker, 1997; Hampton, Summer and Webber, 1987).

*Process* theories examine how individuals are motivated. The *expectancy* process theory holds that managers must create an environment in which workers understand and believe in the causal relationship between effort, performance, satisfaction and reward. Organizations must establish "climates of expectancies" which support the motivation to perform (Hampton, Summer and Webber, 1987).

*Equity* process theory posits that in our culture, there is a belief that employees should be treated fairly, and that institutions should strive to achieve norms of equity (Johnson and Johnson, 1994). Individuals compare their efforts to the efforts of others within the organization. When they perceive that their efforts are more important, yet less rewarded, they experience frustration and futility. Such workers will take concrete steps to alleviate this sense of "cognitive dissonance" by leaving the organization or reducing their contributions to it (Hampton, Summer and Webber, 1987).

Leadership is rarely exerted solely upon individuals. The interrelationship between leadership and followership is extremely intricate and complex. The leader has an enormous responsibility to blend the varied skills and attitudes of followers into an effective, cohesive work group. Obviously, this association between the leader and the group has a tremendous impact upon the success of both in accomplishing organizational goals and objectives.
**Trait Theory**

The concept that leadership consists of unique, inborn traits held great sway in the early 1900s, leading to hundreds of research inquiries conducted to ascertain the personal attributes of leaders (Yukl, 1998). These studies demonstrated that certain characteristics such as intelligence, alertness, understanding of the needs of others and of the task at hand, acceptance of responsibility, self-confidence and problem solving abilities were common qualities of leaders. Stodgill’s (1948) meta-analysis of these studies, however, clearly demonstrated that the relative importance of leadership traits depended greatly upon the particular situation. He further established that the presence of a particular leadership trait did not automatically guarantee success. In fact, none of the identified traits, when considered separately, had a high correlation with success. Additional inquiry by Stodgill (1974) again demonstrated that while effective leaders do exhibit certain common traits, the relative importance of these traits depended primarily upon the particular leadership situation. Stodgill found little evidence that there are universal, inherent characteristics that a leader must possess to be successful. The premise that certain traits were necessary for effective leadership could not be sustained (Hampton, Summer & Webber, 1987). Yukl (1998) proposed that while traits such as integrity, emotional maturity, self-confidence, achievement orientation, power motivation, need for affiliation and a high energy level are associated with leadership effectiveness, these characteristics could not guarantee that an individual would be an effective leader.
Behavioral Leadership Theories

Behavioral theories of leadership began to emerge in the early 1920’s. This approach is distinguished from trait theories in that it considers the actions rather than the characteristics of the leader. As previously noted, the antecedents of the behavioral theory of leadership are found in the Hawthorne Studies, conducted from 1924-1932. Researchers learned that increased employee productivity occurred because the workers had a feeling of worth and importance primarily due to their knowledge that they were being studied. A secondary finding was that workers were motivated by peer group approval and by ego needs (Marsh, 1994, pp.1-14). Complementing the Hawthorne Studies were the Ohio State Leadership Studies of the 1940s. This inquiry proposed that there were two primary leadership behaviors: consideration and initiation of structure. A leader demonstrated consideration when he or she was perceptive to the needs of the subordinates and took steps to meet those needs. Initiation of structure occurred when the leader set standards, related those standards to organizational goals and directed the activities of the subordinates toward accomplishing those goals. (Kreitner and Kinicki, 1995).

The Hawthorne and Ohio State Leadership Studies demonstrated that corporations were social systems as well as places of labor. In the 1940s and 1950s, theories of the needs of individuals within those social systems began to emerge. Maslow’s Motivation and Personality (1954), and McGregor’s (1960, 1966) development of the Theory X and Theory Y leadership concept were important contributions to the Humanistic school, as was Ouchi’s (1981) expanded "Theory Z".
Current organizational theorists advocate an integration of the scientific perspective with the humanistic perspective. Included within this integrative approach is the Sociotechnical School. Trist and Bamforth (1951) explored the interrelationship of technology and the work group, warning that the effective leader could not exclude either in trying to understand a work system. They advocated the creation or continuance of strong social systems within the workplace upon the introduction of technology and the need for specialized skills.

Systems theorists note that human, physical and capital resources must be wholly integrated within the environment of the organization (Koontz, 1980). As we have examined earlier, a system is open and dynamic, continually receiving new resources and information. These must be transformed, through the interrelationship of personnel and resources, into needed products.

The contingency approach requires the application of different management techniques based upon the specific situation being addressed (Meggison, et.al., 1983, p. 75). These techniques could include those derived from the scientific approach as well as humanistic methods. The contingency approach begins with an analysis of the problem, consideration of possible solutions and the probable consequences of those solutions, and the application of the solution most likely to create the desired result (Plunkett and Attner, 1989, p. 28).
The Leader and the Open System

Another leadership domain is that of the leader and the open system. Thus far the review has concentrated primarily upon leadership properties. The review now moves to an examination of the leadership process—how leaders influence followers, and how followers respond to and interact with leaders.

Yukl describes organizations as open-systems models in which work groups are subsystems (1998, p. 12). To survive and prosper, these organizations must be imminently adaptable to changes in the market and the environment. Yukl sees leadership as a critical function necessary to aid the organization in remaining competitive through positive interaction with external groups that can have a favorable impact upon the success of the organization. However, he also emphasizes the leader’s responsibility in influencing internal activities. The leader must structure the work process in ways that will bring about greater efficiency. This need for increased efficiency must be accompanied by increased worker motivation and willingness to cooperate (1998, pp. 9-10). Yukl concludes that those

“who become too fixated on task objectives at the expense of concern for people usually fail to achieve the high level of productivity and quantity that they seek. The challenge is to find the appropriate amount and form of structure and control, which will depend on the type of work performed by the organization and the type of people who do the work” (1998).
Trait and behavioral approaches to the study of leadership concentrate almost exclusively on the reaction of followers to the actions of the leader. Conversely, the perceptions and attitudes of followers are considered extremely important when discussing organizational culture and leadership. Identical behavior from a leader may elicit significantly different reactions from followers, depending upon the nature of the incident, previous interaction and follower interpretation of the leader’s actions (MacGregor, 1978). The following is a discussion of Power-Influence, Contingency, Charismatic and Transformational leadership theory.

**Power and Influence**

Consistent throughout the literature is the idea that all human interaction involves power and influence (Johnson and Johnson, 1994). Beyond this point, however, agreement on the definition and nature of power and influence is almost non-existent. This lack of concurrence stems from the difficulty (if not impossibility) in separating power and influence from other organizational concepts, such as motivation, organizational design, conflict resolution and other aspects of decision making (Baker and Quinley, 1995).

Thus, any discussion about power and influence must necessarily center on the approach taken by the researcher. French and Raven (1959) discuss the multiple bases of social power. These bases are:

- **Coercive:** the ability of the influencer to inflict punishment;
- **Reward:** the ability to provide rewards;
- **Legitimate:** the follower is convinced that the leader has the right to influence;
Referent: the follower identifies with a charismatic leader;

Expert: the follower believes the leader has significant expertise.

While all of these types of power have logical applications within the organization, Hampton, Summer and Webber (1987) conclude that expert power seems to be the major source of most managerial influence.

McClelland (1970) speaks of a leader's need for power, and discusses two types of individual power. He characterizes personal power as the "win-lose" concept, or the dominance-submission mode. The leader exercising socialized power has a concern for group goals, and is concerned with utilizing their power for the benefit of individuals and the organization.

Johnson and Johnson (1994) concentrate on the use of power. They focus on the trait-factor approach and the dynamic-interdependence approach. The success of the trait-factor approach is predicated upon the credibility and attractiveness of the source (leader), the effects of the message being transmitted and received, and the characteristics of the receiver of the message. The dynamic-interdependence approach views power as an attribute of interpersonal relationships, in which leaders and workers are dependent upon each other's efforts for outcomes and information.

Yukl (1998) explores sources of power within the organization. Drawing upon the work of French and Raven, Yukl divided the sources of power into three types: positional (formal authority, rewards and punishment, and information); personal (expertise, friendship, and personality); and political (control over decision processes, coalitions, and co-optation). To these three power sources, Baker and Quinley (1995) added situational power, which they term the control over critical contingencies.
Leaders use social influence to persuade followers to carry out instructions. A number of studies conducted by Yukl and colleagues determined that there are nine basic types of influence used by leaders with followers. These influence tactics include:

a. _Rational persuasion:_ trying to convince someone with reason, logic or fact;

b. _Inspirational appeals:_ trying to build enthusiasm by appealing to others’ emotions, ideals or values;

c. _Consultation:_ encouraging the active participation of followers in the decision making process, and modifying strategies or plans as result of followers’ input, suggestions or concerns;

d. _Ingratiation:_ the use of praise or flattery to get the follower in a good mood;

e. _Personal appeals:_ the appeal to the followers’ loyalty and friendship;

f. _Exchange:_ making implicit or explicit promises as rewards for compliance;

g. _Coalition:_ using the support of others to convince the follower to comply;

h. _Legitimating:_ the leader asserts his authority and right to make the request;


Kreitner and Kinicki (1995) indicate that the above influence tactics remain fairly consistent regardless of whether the direction of influence is downward, upward or lateral.
Though the use of these tactics remains constant, their effectiveness does not. Yukl and Tracey (1992) state that consultation, rational persuasion and inspirational appeals are the most effective tactics, while pressure and coalition tactics were the least effective.

**Charismatic Leadership**

Charismatic leaders generally have a strong need for power, possess high self-confidence and maintain a strong conviction in their own beliefs and abilities. By combining these attributes with a skillful articulation of organizational goals and objectives, charismatic leaders inspire enthusiasm and commitment from followers. These leaders tend to arouse motives in followers that contribute to the accomplishment of the organizational mission (Yukl, 1998). Bass (1985) proposes that charismatic leaders most often emerge, and are most successful, when organizations are in states of relative turmoil and transition.

Not all charismatic leaders display positive leadership; Conger (1990) investigated the impact of negative charismatic leadership. Negative characteristics associated with charismatic leaders included poor inter-personal relationships; negative consequences of impulsive, unconventional behavior; negative consequences of impression management; poor administrative skills and practices; negative consequences of self-confidence; and failure to plan for succession (Yukl, 1998).

**Transformational Leadership**

James MacGregor Burns (1987) stated that "leadership over human beings is exercised when persons with certain motives and purposes mobilize, in competition or
conflict with others, institutional, political, psychological, and other resources so as to arouse, engage, and satisfy the motives of followers" (p. 18). Burns distinguished between what he termed "transactional leadership", that leadership occurring when one person takes the initiative in making contact with others to enact the exchange of things of value, and "transformational leadership", which occurs when individuals engage with each other in such a manner that both leader and follower are raised to higher levels of motivation and morality (pp. 19-20). Burns (1987) described leadership as a process rather than a set of discrete activities. Transformational leaders, by making followers more aware of the mission of the organization and enabling them to comprehend their role in achieving organizational goals, activate the higher order needs of the followers. Due to the transformational influence exhibited by the leader, followers are motivated to transcend their own self-interests for the sake of the organization (Bass, 1985).

**Situational Leadership Theories and Models**

In the latter half of the century theorists began to shift their focus from concentrating solely on the traits or behavior of leaders and followers, and began to investigate how situational occurrences affected and influenced the actions of leaders. McGregor (1966) puts forth four variables involved in leadership: the characteristics of the leader; the attitudes and needs of the followers; the characteristics of the organization; and the social, political and economic environment of the organization (p. 73). This concept of situational leadership encompasses the leader, the follower, and a particular goal or situation. The Least Preferred Co-Worker Scale, the Path-Goal Theory, the Vroom-Yetton
Model and the Tri-Dimensional Leadership Effectiveness Model represent contingency leadership theory. The basic, underlying premise to contingency theory is that there is no one best way to lead. Contingency theory stresses that leadership must be situational; for a leader to truly be effective, he or she must apply different leadership principles in different situations.

**Fielder's Least Preferred Co-Worker Model**

Fiedler (1967), developing his contingency model of leadership, concluded that leaders are either task-motivated or relationship-oriented. Task motivated leaders are primarily interested in accomplishing the work at hand; only when production is operating smoothly will this type of leader emphasize human satisfactions. Conversely, the relationship-oriented leader is more apt to involve all members of the group in the leadership and decision-making processes.

Which of these approaches is correct? To address this question, Fielder (1967) developed the Least Preferred Co-Worker (LPC) Scale. He characterized those scoring high on the scale as relationship oriented leaders, while those with low LPC scores were task oriented. Fiedler defined the leadership situation as consisting of three dimensions—task structure, leader/member relationships, and position power (Jago, 1982). His research indicated that relationship oriented leaders were more successful in situations in which they exerted moderate levels of control. Task oriented leaders were most effective in those situations in which they wielded either substantial control or minimal control.
The Vroom-Yetton Decision Making Model

The Vroom-Yetton situational model enables leaders to effectively reach an informed determination on how to decide an issue. Baker (1996) states that the model yields quality decisions and an indication of whether a group will accept the decisions.

The Vroom-Yetton model offers three basic alternatives to the question of deciding who decides. Leaders using the autocratic method make unilateral decisions, using information he already possesses or information he has received from the group. Consultative leaders receive ideas and suggestions from individuals within the group, or from the group as a whole. In both instances, consultative leaders make decisions that may or may not reflect the contributions of the individual or group. Leaders advocating the group method are willing to accept the group’s decision, and may or may not try to influence the decision.

The Vroom-Yetton model hypothesizes that there are generally more than one acceptable solution to any problem. In those rare instances where there is only one solution, and that solution requires neither the support nor the acceptance of the group, either of the styles above could produce an acceptable answer (Baker, 1996). In the vast majority of the cases, however, the decision-making process is (or should be) much more complex, interdependent and dynamic.

Another integral component of the Vroom-Yetton approach is the question of time versus participation. Research demonstrates that while the Autocratic style might produce quicker answers, the other approaches generally produce more qualitative answers. As leaders, then, the key facets influencing the decision making process are (1) quality of the
decision; (2) the acceptance by the group of the decision; and (3) the time required to reach that decision (Vroom & Yetton, 1973; Hampton et. al., 1987; Baker, 1996).

A primary weakness of the Vroom-Yetton model is that in demanding either/or answers, it fails to recognize differences among certain situations. Time constraints, amount of subordinate information and lack of physical proximity of the subordinates were also not considered in the original model. These shortcomings notwithstanding, Vroom and Jago’s 1988 study (Yukl, p. 132) found that the Vroom-Yetton model was successful approximately 62 percent of the time. Vroom and Jago modified and improved the original model, specifically addressing the information issue. The Vroom-Jago model incorporates significant improvements into the model.

**The Tri-Dimensional Leadership Effectiveness Model**

Hersey and Blanchard’s (1993) Tri-Dimensional Leadership Effectiveness Model explores the situational correlation between relationship behavior, task behavior and the readiness of the group. The model is based on the interaction between the leader and followers; this interaction is shaped by the maturity, ability and readiness level of followers combined with the level of support provided by the leader (Hampton, Summer & Webber, 1987). Hersey and Blanchard (1993) state that “situational leadership is based on an interplay among the (1) amount of guidance and direction (task behavior) a leader gives; (2) the amount of socioeconomic support a leader provides; and (3) the readiness level that followers exhibit in performing a specific task, function or objective” (p. 170).
The Path-Goal Theory

The Path-Goal theory was developed by House (1971) and further refined by House and Mitchell (1974), and provides the theoretical framework for this study. The Path-Goal theory states that leaders must provide goals and rewards for followers, and must also furnish them with the skills, abilities and opportunities to obtain those goals and rewards. Thus, the leader enables the follower to be cognizant of the path he or she must follow to obtain goals and rewards.

As discussed in Chapter One, through application of the Path-goal model, a leader can facilitate the achievement of specific goals by illuminating the path to that goal in the mind of the subordinate (Mondy and Premeux, 1993). To accomplish this, leaders use situational leadership approaches, contingent upon the circumstances and characteristics of the organizational environment and the individual or group. These approaches may take the form of Directive leadership (specific instructions with no employee participation), Supportive leadership (consideration for the employee’s welfare), Participative leadership (active employee involvement) and Achievement Orientation leadership (challenging goals accompanied by the confidence to achieve them (Plunkett and Attner, 1989).

House’s Path-goal theory holds that motivation is the result of three different types of perceptions that individuals have. The first, expectancy, is the belief that one’s efforts will result in performance. The second, instrumentality, is the belief that one’s performance will be rewarded. The last, valence, is the perceived value of the reward to the recipient. A primary tenet of expectancy theory is that motivation is a multiplicative
function of these three components. Motivation is higher when all three components are high, and conversely, motivation is lower when all three are low (Greenberg and Baron, 1993). The Path-goal theory provides the conceptual framework and theoretical foundation for the Leadership Competencies Assessment Instrument.

The Leadership Competencies Assessment Instrument

The Leadership Competencies Assessment Instrument (LCAI) is based upon research by Henry Mintzberg, Peter Drucker, George Baker and others, and was developed by Baker. The LCAI provides a model by which leaders can measure their perceptions of their own competence and effectiveness (Chen, 1998). The LCAI lists leadership competencies that relate to job performance. The competencies are divided into three broad categories: leadership roles, values and emotions, and skills.

Leadership Roles

Roles are the various behaviors a leader displays while functioning within an organization (Plunkett and Attner, 1989). As the leader interacts with individuals within and without the organization, his role requirements will be constantly shifting in accordance with the demands and desires of peers, subordinates and superiors.

Henry Mintzberg’s seminal The Nature of Managerial Work, originally published in 1973 and revised in 1979, is one of the most important examinations of leadership roles. Much that we find today in modern management theory relies heavily
upon Mintzberg’s work. Mintzberg’s (1979) view of leadership behavior complements various organizational behavior theories, and emphasizes the motivation of the individual, proper communication, and leadership and decision making. Minztberg observed that managerial work encompasses ten roles, which he grouped into three categories:

**interpersonal contact:** the roles of figurehead, leader, and liaison make up the interpersonal contact category. As a figurehead, the leader symbolizes and represents the organization by performing ceremonial duties. In the role of leader, he interacts with, supports, motivates and develops followers. As a liaison, the leader establishes formal and informal networks to gain information critical to the success of the organization.

**Information processing:** contains the roles of monitor, disseminator and spokesperson. In the monitor role, the leader gathers information both external and internal to the organization. As a disseminator, the leader distributes information to subordinates through formal and informal means. Acting as a spokesperson, the leader gives information to those outside the organization.

**Decision making:** consists of entrepreneur, disturbance handler, resource allocator and negotiator. The entrepreneur designs and initiates organizational change. The disturbance handler handles problems arising from organizational conflict and disruption. As a resource allocator, the leader controls and schedules the allocation personnel, time and financial resources. Finally, as a negotiator the leader represents the organization in both external and internal negotiations (Mintzberg, 1979, pp. 54-99).
In creating the LCAI, Baker (1999) refined and strengthened Mintzberg’s original work. Baker’s 12 leadership roles and their definitions are:

1. Visionary: think globally and of future possibilities, recognize momentum, apply educational convictions, and apply quality concepts.

2. Task Giver: define and structure roles for followers, provide direction, define standards, biased to action yet flexible, high expectations, use authority properly.

3. Motivator: establish mutual trust, encourage creative and innovative performance, increase job satisfaction, reward appropriately, and manage individual and organizational stress.

4. Ambassador: preside at official functions as symbol of the college or as a symbol of external groups and organizations, promoting good will and commitment between organization and stakeholders.

5. Liaison: develop collaborative relationships with groups or individuals in and out of service area, establishing a close bond between the organization and its customers or partners.

6. Monitor: assess institutional needs, use them to identify programs and services, evaluate opportunities, develop/analyze policy, understand the informal organization, employ technology to support decision making, facilitate development and maintenance.
7. Disseminator: use technology; use effective techniques for speaking, writing, listening and reading; make effective use of formal/informal communication; identify talent in staff; develop personnel performance appraisal processes.

8. Advocate: keep various segments of the community informed of the organization’s progress in fulfilling its mission, deal effectively with mass media, and have working knowledge of political processes.

9. Change Agent: set measurable objectives, develop strategies/plans, develop quality initiatives, make prudent decisions, provide motivation for change, and seek new opportunities for the organization.

10. Disturbance Handler: identify problems and work to resolve them, find alternatives to produce win-win-outcomes, and resolve conflict and other problems in the best interest of the organization and community.

11. Resource Allocator: develop basic principles of organizational planning, determine span of control, develop budgets, manage time, design personnel plans, see employees as human capital.

12. Negotiator: represent the institution in major and local negotiations; skillful in and have working knowledge of group dynamics, conflict resolution, decision making, and problem solving techniques.

**Leadership Values**

For centuries the prevailing values of leaders appeared to be Machiavellian and Hobbesian. Niccolo Machiavelli’s sixteenth century works *The Prince* and *Discourses*
have made his name synonymous with self-serving, exploitative and unethical leadership. In *Leviathan*, Thomas Hobbes proposed that the sovereign (or leader) must demand and receive absolute authority over his followers. This absolute power was necessary, argued Hobbes, for the preservation of societal peace and order.

McGregor (1966) called those who adhere to these principles “Theory X” leaders. Theory X leaders use negative motivational tactics such as threats, coercion, fines, suspension or termination, coupled with a consistently autocratic decision-making style. They view the average worker as naturally lazy, lacking in ambition, resistant to change and not especially bright (McGregor, 1966, pp. 5-7). McGregor proposed a countervailing approach to management and leadership, “Theory Y”. These leaders view their followers as having the capacity for self-development and greater personal responsibility for organizational performance and outcomes. He saw the task of the leader as “arranging organizational conditions and methods of operation so that people can achieve their own goals best by directing their own efforts toward organizational objectives (1966, p. 15).

McGregor’s work evolved from behavioral and scientific management thought and essentially concentrated on improving management practices. Goldman (1980) addressed the issue of leadership and moral values from a philosophical view. He argued that the Hobbesian notion of absolute authority had no place in modern organizations, and that modern leaders should actually be held to a higher moral standard than others (pp. 271-272).

Kohlberg’s (1958, 1976) model for six stages of moral development theorized that the process by which individuals go about making decisions that affect themselves and others follows a hierarchical, sequential progression similar to that of intellectual
development. The six stages are contained within three levels. In the Preconventional Level, individuals act to avoid punishment and make decisions based on mutual exchange. The Conventional Level sees the individual act to gain approval of others and also to uphold societal rules and laws. The final Postconventional or Principled Level sees the individual becoming aware that societal rules may be reevaluated or changed. In the final stage of this level, the person has adopted ethical principles that guide his behavior. These principles, which include justice, equality, and respect for human dignity, take precedence over laws.

Burns (1978) addressed what he termed the “structure of moral leadership”. Burns’ theory of leadership is based on reciprocity between followers and leaders. According to him, leaders must appeal to higher order values that express followers’ basic, abiding needs. Burns also advocates that leaders not only embrace change, but also initiate it for the good of the organization and society. Achieving Kohlberg’s final stage, said Burns, allows the leader an “opportunity for rare and creative leadership…mobilizing and directing support for such values as justice and empathy” (p. 43). Ultimately, Burns says, the test of moral leadership is its capacity to transcend the claims of multiplicity of everyday wants and needs and expectations, to respond to the higher levels of moral development, and to relate leadership behavior-its roles, choices, style commitments-to a set of reasoned, relatively explicit, conscious values (p. 46).

Covey (1991) advocates a leadership style based on what he considers to be universally valid principles and values of trust, integrity, fairness, and kindness. These
qualities, properly cultivated and honed by the effective leader, will result in significant increases in personal and organizational effectiveness. He sees his “principle-centered leadership” as meeting the needs of the whole person, while previous approaches addressed only specific needs (pp. 178-180).

McGregor’s approach is based in behavioral science; Goldman’s and Burns’ are philosophical; Kohlberg’s is psychological; and Covey’s is spiritual. Together, they represent a synergistic model for the development of leadership values.

Baker (1999) 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.

The five competencies in the values section are:

8. Empathy: to understand and effectively respond to the 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.

**Leadership Skills**

A person’s leadership skills are those abilities brought to bear on a routine, constant, consistent basis within the organization. In the LCAI, these are the thinking, managing, communication, motivational, influencing, and cultural skills. These skills reflect a synthesis of extensive management science research conducted over the past hundred years.

Baker (1999) states that these skills are a joint result of training and heredity. This is a crucial point, because as we have seen, earlier in the 20th century many researchers believed that the presence of certain traits would guarantee competence on the part of the individual leader. Stogdill’s meta-analyses (1948, 1974) on trait research demonstrated that this was not the case. It is apparent, however, that the presence of certain traits, including intelligence, organizational and administrative ability, excellent communication skills, persuasiveness and sound thinking and judgment do enhance the potential leader’s likelihood for success (Yukl, 1994).

As previously discussed, Fayol is credited with introducing the notion that certain skills were necessary for effective management. He stated that the manager’s function was to plan, organize direct and control the activities of the organization (Plunkett and Attner, 1989). To properly accomplish these functions, the manager needs three types of skills. The technically skilled manager is cognizant of and able to use the processes, techniques and tools required of a specialty area. The manager’s human skills allow him to interact
with others successfully. Finally, the manager must be conceptually skilled, so that he may deal with abstract ideas and relationships (Mann, Katz, 1974; Yukl, 1994).

Baker (1999) includes the following competencies in the Skills category of the LCAI:

1. Thinking skills: judgement, 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.
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.

Baker’s LCAI reflects the evolution of inquiry into roles, values and skills necessary for effective leadership and applies House's 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 situationally.
Summary of the Review of the Literature

The community college movement in the United States began in the late 1800's, and has become increasingly important to the country's educational future. Initially considered an extension of the public schools, community colleges today play an integral role within their communities, and are becoming progressively more influential in shaping state, national and global economies.

The North Carolina Community College System is a relative infant when compared to the other community college systems. It was officially organized in 1963, although attempts to establish two year institutions predate the system by almost 40 years. Initially controlled by the public schools, today's system is led by the State Board of Community Colleges. Presidents of the state's colleges face many similar leadership issues and challenges, but they also must confront concerns that are determined by the urban or rural setting of their institution, and also by the size of their enrollment. Another important factor a president must consider is the growth rate of the institution. There exists a limited body of research on small and rural colleges, and on large, urban colleges as well. However, little research has been conducted into the effect a college's urban or rural setting, enrollment size, or rate of enrollment growth have upon a president's application of leadership behaviors.

To lead their colleges into the 21st century, it is imperative that community college presidents be cognizant of and attuned to the ever changing and evolving theories of leadership. Modern leadership thought has its foundation in and has evolved from management theory. Leadership is differentiated from management in that leaders work
through and with others to accomplish the goals of the organization, while managers focus on the efficient use of materials, resources and personnel through tightly structured systems designed to obtain maximum results.

Management theory itself has developed over the centuries, and was greatly influenced by the advent of the Industrial Revolution. Early scholars of leadership, building upon the concepts of scientific management thought, believed that the existence of certain traits was necessary for positive leadership, and that the presence of these traits guaranteed the success of the leader. Advocates of the humanistic school of leadership discovered that workers were not simply employees, but also contributed to and were integral components of a dynamic social system within the work place. From these early humanistic studies evolved the notion that leaders and followers exert reciprocal influence upon each other. This interaction of the leader and the follower was expanded to include the role of the leader as motivator within the organization or group. Some theorists studied motivation content—what motivated employees—and others examined how employees were motivated, or the process of motivation. Other leadership studies concentrated on the leader's use of power and influence. Charismatic leaders have been determined to be those who exhibited great self-confidence and were inspirational to their followers. Charismatic leadership has its negative side, in that these leaders are often motivated by personal power and can be impulsive. Transformational leaders concentrate on activating the higher order needs of subordinates, and strive to raise the organization, their followers and themselves to higher levels than previously attained.

A main focus of the literature review is to examine contingency leadership theory. Contingency theory added another component to the leader-follower paradigm: that of the
situation. Leading contingency theorists include Fielder, Vroom and Yetton, Hersey and Blanchard, and most importantly for the purposes of this study, Robert House. House's Path-goal theory provides the conceptual foundation for the Leadership Competencies Assessment Instrument, which measures a leader's perceptions of his competence and effectiveness in implementing the leadership roles, values and emotions, and skills that comprise leadership behaviors. The literature review provides the basis for this study.
CHAPTER THREE

Methodology

Introduction

Chapter three details the research methodology of the study. The research questions, design, population and population selection process, and data collection and analysis procedures are discussed. Delimitations and limitations of the study are presented. Questions of validity are addressed, as is the methodology used to implement the study. The purposes of this study were:

1. To survey the presidents of the North Carolina community colleges to ascertain which leadership roles, skills and values they perceive to be most important.

2. To use the data collected to determine if the perceptions of presidents of large community colleges about which leadership competencies are most important differ from the perceptions of presidents of small community colleges.

3. To use the data collected to determine if the perceptions of presidents of high growth community colleges about which leadership competencies are most important differ from the perceptions of presidents of low growth community colleges.

4. To use the data collected to determine if the perceptions of presidents of urban community colleges about which leadership competencies are most important differ from the perceptions of presidents of rural community colleges.
The Leadership Competencies Assessment Instrument (LCAI), discussed in Chapter Two, was the instrument used to gather the research data. This study employed a causal-comparative research design, an approach intended to describe the study population in terms of the variable of the institutional characteristics previously described.

Research Questions

The methodology for this study was intended to address the following questions:

1. Do the perceptions of large enrollment North Carolina community college presidents about which leadership roles are most important differ from the perceptions of small enrollment North Carolina community college presidents?

2. Do the perceptions of large enrollment North Carolina community college presidents about which leadership values and emotions are most important differ from the perceptions of small enrollment North Carolina community college presidents?

3. Do the perceptions of large enrollment North Carolina community college presidents about which leadership skills are most important differ from the perceptions of small enrollment North Carolina community college presidents?

4. Do the perceptions of high enrollment growth North Carolina community college presidents about which leadership roles are most important differ from
the perceptions of low enrollment growth North Carolina community college presidents?

5. Do the perceptions of high enrollment growth North Carolina community college presidents about which leadership values and emotions are most important differ from the perceptions of low enrollment growth North Carolina community college presidents?

6. Do the perceptions of high enrollment growth North Carolina community college presidents about which leadership skills are most important differ from the perceptions of small enrollment North Carolina community college presidents?

7. Do the perceptions of urban North Carolina community college presidents about which leadership roles are most important differ from the perceptions of rural North Carolina community college presidents?

8. Do the perceptions of urban North Carolina community college presidents about which leadership values and emotions are most important differ from the perceptions of rural North Carolina community college presidents?

9. Do the perceptions of urban North Carolina community college presidents about which leadership skills are most important differ from the perceptions of rural North Carolina community college presidents?

**Null Hypotheses**

The following null hypotheses were tested in the study:
1. There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership roles are most important.

2. There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership values and emotions are most important.

3. There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership skills are most important.

4. There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership roles are most important.

5. There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership values and emotions are most important.

6. There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth
and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership skills are most important.

7. There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership roles are most important.

8. There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership values and emotions are most important.

9. There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership skills are most important.

**Setting and Population**

The North Carolina Community College System (NCCCS) provided the setting for this study. The population consists of the presidents of the 58 comprehensive institutions comprising the North Carolina Community College System. The population studied is finite and represented the entire universe of North Carolina community college presidents.
For this study, the presidents were segregated into three groups. The first group consisted of the presidents of large community colleges and the presidents of small community colleges. A list of the participating colleges in this group may be found in Appendix B. The second group was comprised of the presidents of high enrollment growth colleges and the presidents of low enrollment growth schools, and the participating schools are listed in Appendix C. The final group was made up of the presidents of urban and rural community colleges, and those institutions that participated can be located in Appendix D. Definitions for each of these groups appeared in chapter one.

**Research Design**

This study used an *ex post facto*, non-experimental, causal-comparative descriptive research design to examine the leadership perceptions of North Carolina community college presidents. *Ex post facto* research is a form of causal comparative inquiry in which causes are studied after they have exerted their influence upon another variable (Gall, Borg & Gall, 1996). In non-experimental research, the researcher attempts to describe a population in terms of one or more variables, without manipulating them. Descriptive research involves obtaining, tabulating and describing collected data on the population studied. Descriptive research is primarily interested in determining “what is” (Borg & Gall, 1996; Glass & Hopkins, 1984).
Delimitations and Limitations

The goal of this study was to test the relationship between the perceptions of the participants and the institutional characteristics previously described. Delimitations and limitations of a study describe the boundaries, parameters, reservations and possible weaknesses of a study. Delimitations narrow the scope of the study, and limitations identify potential weaknesses in a study (Creswell, 1994).

The population of this study consisted of the presidents of the 58 institutions comprising the North Carolina community college system. The results, therefore, should not be generalized outside of that population. The uniqueness of the North Carolina system prevents extrapolation of the study's results to community college systems in other states. Also, the small sample size, coupled with the limitations found in the causal-comparative research approach limits the predictability of results and the ability to draw conclusions.

Participants in this study may have not previously considered the impact the prescribed institutional characteristics had upon their perceptions of leadership. Consequently, whether they viewed the issue as important may have affected both the response rate and the nature of the responses (Gall, Borg and Gall, 1996, p. 293).

This study proposed a non-random assignment of the population to comparison groups. The assignment of colleges to a certain status was based upon previously defined institutional criteria. This particular type of study is defined as a "causal-comparative" study (Jaeger, 1990). Causal-comparative research seeks to determine the possible causes and effects of characteristics by comparing a group or groups in which
the characteristic is present with a group or groups in which the characteristic is not present, or present to a lesser degree (Gall, Borg and Gall, 1989).

An advantage of the causal-comparative approach is that it allows for the study of characteristics without manipulating them. The causal-comparative research method was appropriate for this study because the independent variables—the institution’s size, rate of growth or geographic location—could not be manipulated. Causal-comparative studies are also termed *ex post facto* studies, as the effect has already been exerted upon the variable. A major advantage of using the causal-comparative approach in this study is that this was a non-experimental study, as the variables have already been determined and could not be adjusted by the researcher.

A limitation of the causal-comparative approach is that, due to the lack of manipulation and control, cause-effect relationships between variables are tenuous and tentative. As changes in the independent variable occurred prior to the study, causal-comparative research is not as effective as experimental research in establishing cause-effect relationships. Because experimental control does not exist in a causal comparative study, one cannot conclude the existence of a cause-effect relationship with any degree of certainty (Gall, Borg and Gall, 1996).

**Internal Validity**

According to Jaeger (1990), a research finding has internal validity when it accurately identifies a cause-effect relationship and when other, extraneous variables have been controlled for and ruled out. This study proposed to examine whether certain
institutional characteristics had an impact upon presidential perceptions of leadership. In a causal-comparative, non-experimental approach, other variables that might affect leadership cannot be controlled for. Relationships detailed in this study could be attributed to other variables.

**External Validity**

External validity exists when one can generalize the results of a study to a larger population (Jaeger, 1990). The limitations of the causal-comparative approach and the small size of the population studied preclude such generalization, thus negatively affecting the external validity of the study.

**Content Validity**

Content validity is the degree to which the responses to a survey instrument adequately measure what the instrument purported to measure (Jaeger, 1990; Gall, Borg and Gall, 1996). As discussed earlier, the LCAI was developed by Baker and was based on the work of Mintzberg and Drucker. The individual competencies found in the LCAI were initially confirmed by Thompson (1981) and were further refined by Doty (1995), Chen (1998) and Athans (2000). Their work, along with that of Baker and others, has assisted in the establishment of the instrument's content validity.
Instrumentation and Data Collection

The Leadership Competencies Assessment Instrument (LCAI), previously addressed in chapter two, is a widely used assessment instrument based upon research by Henry Mintzberg, Peter Drucker and George Baker, and developed by Baker. The LCAI was used to collect the leadership perceptions of the 58 North Carolina community college presidents. Respondents were asked to indicate their perceptions regarding specific leadership competencies by completing a Likert scale of one through seven. The Likert scale allowed the respondents to choose one of several degrees of feeling about a statement. The statements seemed either definitely favorable or definitely unfavorable toward the matter under consideration. The responses were given scores ranging from one to seven. The Likert scale is a commonly used data collection process for t-test statistical analyses such as that utilized for this study (Creswell, 1994).

An example LCAI competency and Likert scale is shown below:

<table>
<thead>
<tr>
<th>Part I: Leadership Roles: The Influencing Roles</th>
<th>Competency Level Exerted</th>
<th>Estimated Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example:</td>
<td>1=Not much influence exerted</td>
<td>1=Not very effective</td>
</tr>
<tr>
<td></td>
<td>4=Average influence exerted</td>
<td>4=Average effectiveness</td>
</tr>
<tr>
<td></td>
<td>7=A great deal of influence exerted</td>
<td>7=Highly effective</td>
</tr>
<tr>
<td>Visionary:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think globally and of future possibilities,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recognize momentum, apply educational convictions,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and apply quality concepts</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

Additional information about the LCAI is found as Appendix A.
Prior to mailing the survey instrument, an introductory e-mail was sent to each North Carolina community college president. According to Gall, Borg and Gall (1996), precontacting potential participants can increase the response rate. The e-mail alerted the presidents that a survey was forthcoming. Shortly thereafter, an introductory letter was mailed to each of the 58 presidents. This letter discussed the purpose of the study, introduced the researcher, and requested the participation of the president. The LCAI accompanied the introductory letter. A pre-paid, addressed envelope was provided. After the deadline for the return of the survey, another e-mail reminder was sent to the non-respondents, and another letter, accompanied by the LCAI, was mailed. After the second deadline had passed, a final e-mail reminder was sent, and soon thereafter a third letter requesting participation, along with the LCAI, was mailed. A response rate of 87.93 percent was achieved, which was considered acceptable for the purposes of the study. The response rate to each invitation to participate is detailed in chapter four.

**Data Analysis**

The hypotheses developed for this study were tested using the t-test for differences between means. T-tests are used to determine the level of statistical significance of an observed difference between sample means (Gall, Borg & Gall, 1996). A significance level of 0.05 was established. Microsoft Excel 5.0 was used to calculate the hypotheses testing, and the results of the statistical analyses were utilized to determine whether the hypotheses were accepted or rejected.
Summary

This chapter outlined the research methodology utilized in this study. The research questions and associated hypotheses were established, and the study’s setting and population was described. The research design was discussed, along with the delimitations and limitations inherent in that design. The internal, content and external validity were examined. Also discussed were the study’s data collection and analysis processes. Chapter four discusses the response rate for the study, and presents the research findings.
CHAPTER FOUR

FINDINGS

Introduction

Chapter three described the methodology by which the research data were collected and analyzed. This chapter discusses the participants’ response rate, and also contains a detailed analysis of the data collected from the respondents.

Survey Instrument and Data Collection

The Leadership Competencies Assessment Instrument (LCAI) was used to collect the study participants’ perceptions about leadership roles, leadership values and emotions, and leadership skills. Within each of these three broad categories, specific competencies were listed. There are 12 competencies in the roles category, 12 competencies in the values and emotions category, and six competencies in the skills category. These 30 specific competencies and their definitions are detailed in chapter two of this study.

Each president was asked to use a Likert scale of 1-7 to assess the degree of energy he or she expended in addressing a particular competency, and then, also using a Likert scale of 1-7, to indicate how successful he or she felt in achieving that competency.

The data for this study were collected via mailed surveys. The population for the study is the 58 presidents within the North Carolina Community College system,
and each was invited to participate. An e-mail describing the study and requesting participation was sent to each president, and the survey itself was mailed two days later. A letter describing the study and instructions on how to complete the LCAI accompanied the survey instrument.

The presidents were not informed about the category or categories—large/small, high growth/low growth, or urban/rural—into which they would be placed. This was so that they would not consider these characteristics when completing the LCAI. It is believed that this approach helped prevent any preconceptions on the part of the presidents as they completed the instrument.

Thirty-four presidents responded to the initial request by completing and returning the survey. After the original deadline for return of the survey passed, a reminder e-mail requesting participation was sent to the 24 non-respondents, and a second survey, along with a descriptive letter and instructions, was mailed to each of them. This second mailing prompted another 13 presidents to complete and return the LCAI.

A second reminder e-mail was sent to the remaining 11 non-participants, and a third LCAI, again with a letter of description and instructions, was mailed to each of them. This mailing elicited six additional completed surveys. The e-mails and the accompanying letters are found in Appendices E, F and G.

Response Rate

Of the 58 presidents in the North Carolina Community College System, 53 returned a survey, an initial response rate of 91.38 percent. One survey was deleted
because only the first three items were completed. Another survey was deleted because
the respondent, an interim president, stated that the respondent found the survey
difficult to complete due to the respondent's interim status. The deletion of these two
surveys lowered the number of responses to 51 out of 58, an overall response rate of
87.93 percent.

This study was designed to investigate the relationship of presidential
perceptions of leadership styles and certain institutional characteristics. The presidents
were segregated into groups based on specific characteristics of their institutions.

The first group studied consisted of the presidents of large enrollment colleges
and the presidents of small enrollment colleges. For this study, a “large enrollment”
college is defined as a college with 3,000 or more annual FTE, based on the 2000-2001
year. A “small enrollment” college is defined as a community college with 1500 or less
FTE. These definitions were selected to insure a large degree of contrast between the
two groups being studied. Using these definitions, there was at least a one hundred
percent difference in annual FTE between the smallest school in the “large enrollment”
category and the largest school in the “small enrollment” category. It was felt that a
difference of at least 100 percent was a significant rate of contrast for the purposes of
this study.

Eighteen colleges met the definition of “large enrollment”, and 12 fit the
definition of “small enrollment” schools. Of the 18 colleges defined as “large
enrollment”, completed surveys were received from 15 presidents. This represents a
return rate of 83.33 percent. Ten responses were received from presidents of “small
enrollment” schools, also a response rate of 83.33 percent. Both response rates were
deemed acceptable for this study. Those colleges and their 2000-2001 FTE enrollment are found in Appendix B.

The second group studied was comprised of the presidents of high growth and low growth schools. A “high growth” school is defined as a college that experienced an overall FTE enrollment growth of 28.10 percent or greater for the period of 1991-1992 through 2000-2001. This rate of 28.10 percent exceeds the North Carolina Community College System’s growth rate of 16.06 percent for the period of 1991-1992 through 2000-2001 by 75 percent. A “low growth” institution is defined as a community college that experienced an overall FTE enrollment growth of 4.01 percent or less for the period of 1991-1992 through 2000-2001. The rate of 4.01 percent is 75 percent lower than the North Carolina Community College System’s growth rate of 16.06 percent for the period of 1991-1992 through 2000-2001. The colleges fitting these criteria are shown in Appendix C.

Seventeen colleges met the “high growth” criteria; of those, 15 presidents completed and returned the LCAI, for a response rate of 88.23 percent. Twenty schools were defined as “low growth”; of this group, 17 presidents returned a completed survey, creating a return rate of 85 percent. These rates were considered acceptable for the study.

The final group researched was comprised of the presidents of urban and rural colleges. A school was termed “urban” if it was located within a Metropolitan Statistical Area, which is defined as any county or group of adjoining counties containing at least one urbanized area of 50,000 or more inhabitants. Sixteen colleges fit this description, and completed surveys were received from 14 presidents from the
group, for a response rate of 87.50 percent. A “rural” college was any college not located within an MSA, and 42 colleges met that criterion. Of those, 37 presidents responded, for a return rate of 88.09 percent. Again, these return rates were considered acceptable for the purposes of this study. The urban and rural colleges are listed in Appendix D.

The return rates for all groups in the study are shown below:

<table>
<thead>
<tr>
<th></th>
<th>Surveys Mailed</th>
<th>Usable surveys returned</th>
<th>Response rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Carolina Community College Presidents: N=58</td>
<td>58</td>
<td>51</td>
<td>87.93</td>
</tr>
<tr>
<td>Presidents of large enrollment colleges: N=18</td>
<td>18</td>
<td>15</td>
<td>83.33</td>
</tr>
<tr>
<td>Presidents of small enrollment colleges: N=12</td>
<td>12</td>
<td>10</td>
<td>83.33</td>
</tr>
<tr>
<td>Presidents of high growth colleges: N=17</td>
<td>17</td>
<td>15</td>
<td>88.23</td>
</tr>
<tr>
<td>Presidents of low growth colleges: N=20</td>
<td>20</td>
<td>17</td>
<td>85.00</td>
</tr>
<tr>
<td>Presidents of urban colleges: N=16</td>
<td>16</td>
<td>14</td>
<td>87.50</td>
</tr>
<tr>
<td>Presidents of rural colleges: N=42</td>
<td>42</td>
<td>37</td>
<td>88.09</td>
</tr>
</tbody>
</table>

**Analysis of Data and Testing of Hypotheses**

The purpose of this study was to determine if the presidents comprising the groups defined above had different perceptions about leadership roles, values and emotions, and skills. When completing the LCAI, the respondents were asked to use a Likert scale of 1-7 to assess the degree of energy expended in addressing each of the 30 competencies. This was the respondents’ Competency Level Exerted. The participants were also instructed to indicate, again using a 1-7 Likert scale, how successful they felt
in achieving each competency. This is the *Estimated Effectiveness* of the president in accomplishing a particular competency.

As previously discussed, three groups were examined in this study. The first group consisted of large enrollment community presidents and low enrollment community college presidents in North Carolina. For each individual competency from the LCAI, the mean of the responses from the large enrollment college presidents group was calculated, as was the mean of the responses from the low enrollment college presidents group. The standard deviation for each question was also determined for both groups. These data were then analyzed using the t-test for the difference between means. The t-test allows the researcher to determine whether the means of two groups are statistically different from each other. This test is appropriate whenever one is comparing the means of two groups (Gall, Borg and Gall, 1996). The t-test calculated the P value for each competency.

To test the hypotheses of this study, the mean of each group’s response to the competencies in the three leadership categories-roles, values and emotions, and skills—were averaged to obtain an overall mean of responses from both groups for each of the three categories. Each of the 30 competencies in the LCAI has two components—the respondent’s *Competency Level Exerted*, and the respondent’s *Estimated Effectiveness*. The averages of the means for both components were compared using the two-sample t-test for the difference between means. This comparison determined the P value for each component in each competency, and provided the results necessary to determine if the hypothesis should be accepted or rejected. The level of significance to warrant rejecting the hypotheses of this study was set at 0.05. Both the *Competency Level*
Exerted and the Estimated Effectiveness components were evaluated at the 0.05 level, and the hypothesis was rejected only if a level of significance of less than 0.05 was noted for both.

These same data analysis procedures were used with the other two groups investigated in this study. The second group consisted of the presidents of North Carolina Community Colleges that experience high enrollment growth for the period of 1991-1992 through 2000-2001, and the presidents of North Carolina Community Colleges that experienced low enrollment growth for the period of 1991-1992 through 2000-2001. The final group consisted of the presidents of urban colleges in North Carolina and the presidents of rural community colleges in North Carolina.

The following sections analyze the data collected and discusses the results of the hypotheses testing.

Responses of Presidents of Large Community Colleges and Presidents of Small Community Colleges

For this study, a “large enrollment” college was defined as a college with 3,000 or more annual FTE, based on the 2000-2001 year. A “small enrollment” college was defined as a community college with 1,500 or less FTE. Three research questions and associated hypotheses were developed for this group:
Research Questions and Hypotheses

Research Question 1:

Do the perceptions of large enrollment North Carolina community college presidents about which leadership roles are most important differ from the perceptions of small enrollment North Carolina community college presidents?

Eighteen colleges met the definition of “large enrollment” and responses were received from 15 presidents. Twelve colleges were classified as “small enrollment”, and 10 presidents of schools in this category returned surveys. The responses to the Competency Level Exerted for specific leadership role competencies are shown in table 4.2:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Large N</th>
<th>Large Mean</th>
<th>Large SD</th>
<th>Small N</th>
<th>Small Mean</th>
<th>Small SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visionary</td>
<td>15</td>
<td>5.266</td>
<td>1.100</td>
<td>10</td>
<td>5.800</td>
<td>1.033</td>
<td>0.232</td>
</tr>
<tr>
<td>Task giver</td>
<td>15</td>
<td>5.733</td>
<td>0.799</td>
<td>10</td>
<td>5.400</td>
<td>0.966</td>
<td>0.378</td>
</tr>
<tr>
<td>Motivator</td>
<td>15</td>
<td>6.666</td>
<td>0.816</td>
<td>10</td>
<td>6.400</td>
<td>0.699</td>
<td>0.002</td>
</tr>
<tr>
<td>Ambassador</td>
<td>15</td>
<td>5.933</td>
<td>1.100</td>
<td>10</td>
<td>6.300</td>
<td>0.823</td>
<td>0.351</td>
</tr>
<tr>
<td>Liaison</td>
<td>15</td>
<td>6.000</td>
<td>1.000</td>
<td>10</td>
<td>6.000</td>
<td>0.816</td>
<td>1.000</td>
</tr>
<tr>
<td>Monitor</td>
<td>15</td>
<td>5.133</td>
<td>1.187</td>
<td>10</td>
<td>5.200</td>
<td>0.632</td>
<td>0.857</td>
</tr>
<tr>
<td>Disseminator</td>
<td>15</td>
<td>5.200</td>
<td>1.146</td>
<td>10</td>
<td>5.800</td>
<td>0.919</td>
<td>0.162</td>
</tr>
<tr>
<td>Advocate</td>
<td>15</td>
<td>5.866</td>
<td>1.060</td>
<td>10</td>
<td>5.800</td>
<td>0.632</td>
<td>0.845</td>
</tr>
<tr>
<td>Change Agent</td>
<td>15</td>
<td>5.866</td>
<td>0.834</td>
<td>10</td>
<td>5.800</td>
<td>0.632</td>
<td>0.822</td>
</tr>
<tr>
<td>Disturbance Handler</td>
<td>15</td>
<td>5.466</td>
<td>0.915</td>
<td>10</td>
<td>5.800</td>
<td>0.919</td>
<td>0.384</td>
</tr>
<tr>
<td>Resource Allocator</td>
<td>15</td>
<td>5.466</td>
<td>.1246</td>
<td>10</td>
<td>5.700</td>
<td>0.675</td>
<td>0.551</td>
</tr>
<tr>
<td>Negotiator</td>
<td>15</td>
<td>5.333</td>
<td>1.234</td>
<td>10</td>
<td>5.900</td>
<td>0.738</td>
<td>0.164</td>
</tr>
</tbody>
</table>

The responses of 15 large enrollment college presidents and 10 small enrollment college presidents to the Estimated Effectiveness portion of the LCAI for specific leadership role competencies are shown in table 4.3:
Table 4.3: Estimated Effectiveness -Leadership Roles Responses of Large Enrollment and Small Enrollment College Presidents

<table>
<thead>
<tr>
<th>Competency</th>
<th>Large N</th>
<th>Large Mean</th>
<th>Large SD</th>
<th>Small N</th>
<th>Small Mean</th>
<th>Small SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visionary</td>
<td>15</td>
<td>5.600</td>
<td>0.632</td>
<td>10</td>
<td>5.300</td>
<td>0.949</td>
<td>0.394</td>
</tr>
<tr>
<td>Task giver</td>
<td>15</td>
<td>5.866</td>
<td>0.640</td>
<td>10</td>
<td>5.600</td>
<td>0.843</td>
<td>0.407</td>
</tr>
<tr>
<td>Motivator</td>
<td>15</td>
<td>5.733</td>
<td>0.961</td>
<td>10</td>
<td>6.100</td>
<td>0.568</td>
<td>0.243</td>
</tr>
<tr>
<td>Ambassador</td>
<td>15</td>
<td>6.266</td>
<td>0.844</td>
<td>10</td>
<td>6.100</td>
<td>0.876</td>
<td>0.647</td>
</tr>
<tr>
<td>Liaison</td>
<td>15</td>
<td>5.933</td>
<td>0.844</td>
<td>10</td>
<td>5.500</td>
<td>0.707</td>
<td>0.188</td>
</tr>
<tr>
<td>Monitor</td>
<td>15</td>
<td>5.333</td>
<td>1.047</td>
<td>10</td>
<td>5.000</td>
<td>0.471</td>
<td>0.292</td>
</tr>
<tr>
<td>Disseminator</td>
<td>15</td>
<td>5.600</td>
<td>1.056</td>
<td>10</td>
<td>5.500</td>
<td>0.707</td>
<td>0.779</td>
</tr>
<tr>
<td>Advocate</td>
<td>15</td>
<td>6.133</td>
<td>0.743</td>
<td>10</td>
<td>5.400</td>
<td>0.699</td>
<td>0.021</td>
</tr>
<tr>
<td>Change Agent</td>
<td>15</td>
<td>5.800</td>
<td>0.676</td>
<td>10</td>
<td>5.600</td>
<td>0.699</td>
<td>0.486</td>
</tr>
<tr>
<td>Disturbance Handler</td>
<td>15</td>
<td>5.400</td>
<td>1.056</td>
<td>10</td>
<td>5.700</td>
<td>0.675</td>
<td>0.395</td>
</tr>
<tr>
<td>Resource Allocator</td>
<td>15</td>
<td>5.600</td>
<td>1.121</td>
<td>10</td>
<td>5.700</td>
<td>0.675</td>
<td>0.783</td>
</tr>
<tr>
<td>Negotiator</td>
<td>15</td>
<td>5.400</td>
<td>1.121</td>
<td>10</td>
<td>5.600</td>
<td>0.516</td>
<td>0.553</td>
</tr>
</tbody>
</table>

The data contained in tables 4.2 and 4.3 were used to test the following hypothesis:

**Hypothesis 1:**

There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership roles are most important.

To test this hypothesis, the t-test was applied to determine if the average of the large enrollment presidents’ means of responses differed from the average of the small enrollment presidents’ means of responses for both the Competency Level Exerted and the Estimated Effectiveness components. Those results are shown in table 4.4:
Table 4.4: Leadership Roles for Large Enrollment and Small Enrollment College Presidents; P values for Competency Level Exerted and Estimated Effectiveness

<table>
<thead>
<tr>
<th></th>
<th>Large college average of the means</th>
<th>Large college SD</th>
<th>Small college average of the means</th>
<th>Small college SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Level Exerted for Leadership Roles</td>
<td>5.660</td>
<td>0.438</td>
<td>5.825</td>
<td>0.327</td>
<td>0.311</td>
</tr>
<tr>
<td>Estimated Effectiveness for Leadership Roles</td>
<td>5.722</td>
<td>0.292</td>
<td>5.591</td>
<td>0.030</td>
<td>0.297</td>
</tr>
</tbody>
</table>

An analysis of the data shown in table 4.4 indicates a P value of 0.311 for Competency Level Exerted and a P value of 0.297 for Estimated Effectiveness. To warrant rejection of the claim of no difference, the P value should be less than the level of significance, 0.05. Since these P values are greater than 0.05, evidence suggests that there is no significant difference between the Leadership Roles scores for large enrollment college presidents and small enrollment college presidents, and the hypothesis is not rejected.

Research Question 2:

Do the perceptions of large enrollment North Carolina community college presidents about which leadership values and emotions are most important differ from the perceptions of small enrollment North Carolina community college presidents?

The responses of 15 presidents of large enrollment colleges and ten presidents of small enrollment colleges were used to address this question. The responses to the
Competency Level Exerted for specific leadership values and emotions competencies are shown in table 4.5:

Table 4.5: Competency Level Exerted: Leadership Values and Emotions of Large Enrollment and Small Enrollment College Presidents

<table>
<thead>
<tr>
<th>Competency</th>
<th>Large N</th>
<th>Large Mean</th>
<th>Large SD</th>
<th>Small N</th>
<th>Small Mean</th>
<th>Small SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplishment</td>
<td>15</td>
<td>5.333</td>
<td>1.113</td>
<td>10</td>
<td>6.300</td>
<td>0.675</td>
<td>0.001</td>
</tr>
<tr>
<td>Fulfillment</td>
<td>15</td>
<td>5.2</td>
<td>0.941</td>
<td>10</td>
<td>6.100</td>
<td>0.738</td>
<td>0.013</td>
</tr>
<tr>
<td>Justice in Life</td>
<td>15</td>
<td>4.466</td>
<td>0.834</td>
<td>10</td>
<td>5.000</td>
<td>1.333</td>
<td>0.278</td>
</tr>
<tr>
<td>Development of subordinates</td>
<td>15</td>
<td>5.266</td>
<td>1.233</td>
<td>10</td>
<td>6.000</td>
<td>0.816</td>
<td>0.085</td>
</tr>
<tr>
<td>Resolve dilemmas</td>
<td>15</td>
<td>5.533</td>
<td>1.060</td>
<td>10</td>
<td>5.900</td>
<td>0.958</td>
<td>0.274</td>
</tr>
<tr>
<td>Self esteem</td>
<td>15</td>
<td>5.200</td>
<td>1.082</td>
<td>10</td>
<td>6.000</td>
<td>0.667</td>
<td>0.031</td>
</tr>
<tr>
<td>Recognition</td>
<td>15</td>
<td>5.266</td>
<td>1.033</td>
<td>10</td>
<td>6.200</td>
<td>0.632</td>
<td>0.010</td>
</tr>
<tr>
<td>Empathy</td>
<td>15</td>
<td>5.133</td>
<td>0.990</td>
<td>10</td>
<td>5.900</td>
<td>0.994</td>
<td>0.073</td>
</tr>
<tr>
<td>Self awareness</td>
<td>15</td>
<td>5.266</td>
<td>1.033</td>
<td>10</td>
<td>5.500</td>
<td>0.850</td>
<td>0.344</td>
</tr>
<tr>
<td>Self regulation</td>
<td>15</td>
<td>4.933</td>
<td>1.033</td>
<td>10</td>
<td>5.700</td>
<td>0.675</td>
<td>0.034</td>
</tr>
<tr>
<td>Motivation</td>
<td>15</td>
<td>6.133</td>
<td>0.915</td>
<td>10</td>
<td>6.400</td>
<td>0.699</td>
<td>0.418</td>
</tr>
<tr>
<td>Social skills</td>
<td>15</td>
<td>5.800</td>
<td>1.014</td>
<td>10</td>
<td>6.000</td>
<td>0.471</td>
<td>0.514</td>
</tr>
</tbody>
</table>

The responses of 15 large enrollment college presidents and 10 small enrollment college presidents to the Estimated Effectiveness portion of the LCAI for specific leadership values and emotions competencies are shown in table 4.6:

Table 4.6: Estimated Effectiveness: Leadership Values and Emotions of Large Enrollment and Small Enrollment College Presidents

<table>
<thead>
<tr>
<th>Competency</th>
<th>Large N</th>
<th>Large Mean</th>
<th>Large SD</th>
<th>Small N</th>
<th>Small Mean</th>
<th>Small SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplishment</td>
<td>15</td>
<td>5.533</td>
<td>0.990</td>
<td>10</td>
<td>6.000</td>
<td>0.943</td>
<td>0.248</td>
</tr>
<tr>
<td>Fulfillment</td>
<td>15</td>
<td>5.600</td>
<td>0.986</td>
<td>10</td>
<td>5.800</td>
<td>0.789</td>
<td>0.580</td>
</tr>
<tr>
<td>Justice in Life</td>
<td>15</td>
<td>4.400</td>
<td>0.737</td>
<td>10</td>
<td>5.000</td>
<td>1.155</td>
<td>0.167</td>
</tr>
<tr>
<td>Development of subordinates</td>
<td>15</td>
<td>5.600</td>
<td>1.056</td>
<td>10</td>
<td>5.500</td>
<td>0.707</td>
<td>0.779</td>
</tr>
<tr>
<td>Resolve dilemmas</td>
<td>15</td>
<td>5.666</td>
<td>0.900</td>
<td>10</td>
<td>5.400</td>
<td>0.699</td>
<td>0.414</td>
</tr>
<tr>
<td>Self esteem</td>
<td>15</td>
<td>5.133</td>
<td>1.060</td>
<td>10</td>
<td>5.700</td>
<td>0.483</td>
<td>0.084</td>
</tr>
<tr>
<td>Recognition</td>
<td>15</td>
<td>5.600</td>
<td>0.910</td>
<td>10</td>
<td>5.800</td>
<td>0.919</td>
<td>0.598</td>
</tr>
<tr>
<td>Empathy</td>
<td>15</td>
<td>5.200</td>
<td>0.941</td>
<td>10</td>
<td>5.700</td>
<td>0.949</td>
<td>0.210</td>
</tr>
<tr>
<td>Self awareness</td>
<td>15</td>
<td>5.066</td>
<td>0.961</td>
<td>10</td>
<td>5.000</td>
<td>0.816</td>
<td>0.854</td>
</tr>
<tr>
<td>Self regulation</td>
<td>15</td>
<td>5.066</td>
<td>0.961</td>
<td>10</td>
<td>5.300</td>
<td>0.675</td>
<td>0.483</td>
</tr>
<tr>
<td>Motivation</td>
<td>15</td>
<td>6.400</td>
<td>0.737</td>
<td>10</td>
<td>6.000</td>
<td>0.943</td>
<td>0.274</td>
</tr>
<tr>
<td>Social skills</td>
<td>15</td>
<td>6.000</td>
<td>0.756</td>
<td>10</td>
<td>5.900</td>
<td>0.738</td>
<td>0.745</td>
</tr>
</tbody>
</table>
The following hypothesis was tested using the data in tables 4.5 and 4.6:

**Hypothesis 2:**

There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership values and emotions are most important.

To test this hypothesis, the t-test was applied to determine if the average of the large enrollment presidents’ means of responses differed from the average of the small enrollment presidents’ means of responses for both the *Competency Level Exerted* and the *Estimated Effectiveness*. Those results are shown in table 4.7:

<table>
<thead>
<tr>
<th></th>
<th>Large college average of the means</th>
<th>Large college SD</th>
<th>Small college average of the means</th>
<th>Small college SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Level Exerted for Leadership Values and Emotions</td>
<td>5.294</td>
<td>0.413</td>
<td>5.916</td>
<td>0.379</td>
<td>0.0008</td>
</tr>
<tr>
<td>Estimated Effectiveness for Leadership Values and Emotions</td>
<td>5.436</td>
<td>0.512</td>
<td>5.5916</td>
<td>0.352</td>
<td>0.404</td>
</tr>
</tbody>
</table>

An analysis of the data shown in table 4.7 indicates a P value of 0.0008 for *Competency Level Exerted* and a P value of 0.404 for *Estimated Effectiveness*. To warrant rejection of the hypothesis, a P value of less than 0.05 for both sets of data must be established. Therefore, the results indicate that there is no significant difference
between the Leadership Values and Emotions scores for large enrollment college presidents and small enrollment college presidents, and the hypothesis is not rejected.

**Research Question 3:**

Do the perceptions of large enrollment North Carolina community college presidents about which leadership skills are most important differ from the perceptions of small enrollment North Carolina community college presidents?

To address this question, the responses of 15 large enrollment college presidents and 10 small enrollment college presidents were utilized. The data relative to *Competency Level Exerted* for specific competencies is shown in the following table 4.8:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Urban N</th>
<th>Urban Mean</th>
<th>Urban SD</th>
<th>Rural N</th>
<th>Rural Mean</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking</td>
<td>15</td>
<td>5.266</td>
<td>1.534</td>
<td>10</td>
<td>6.200</td>
<td>0.789</td>
<td>0.058</td>
</tr>
<tr>
<td>Management skills</td>
<td>15</td>
<td>5.800</td>
<td>0.775</td>
<td>10</td>
<td>6.200</td>
<td>0.422</td>
<td>0.110</td>
</tr>
<tr>
<td>Communication skills</td>
<td>15</td>
<td>6.066</td>
<td>0.884</td>
<td>10</td>
<td>6.100</td>
<td>0.738</td>
<td>0.919</td>
</tr>
<tr>
<td>Motivational Skills</td>
<td>15</td>
<td>5.600</td>
<td>0.986</td>
<td>10</td>
<td>6.100</td>
<td>0.738</td>
<td>0.161</td>
</tr>
<tr>
<td>Influencing skills</td>
<td>15</td>
<td>6.000</td>
<td>0.926</td>
<td>10</td>
<td>6.500</td>
<td>0.707</td>
<td>0.140</td>
</tr>
<tr>
<td>Cultural skills</td>
<td>15</td>
<td>5.800</td>
<td>1.082</td>
<td>10</td>
<td>6.100</td>
<td>0.876</td>
<td>0.453</td>
</tr>
</tbody>
</table>
The responses of 15 large enrollment college presidents and 10 small enrollment college presidents to the Estimated Effectiveness portion of the LCAI for specific leadership values and emotions competencies are shown in table 4.9:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Urban N</th>
<th>Urban Mean</th>
<th>Urban SD</th>
<th>Rural N</th>
<th>Rural Mean</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking</td>
<td>15</td>
<td>5.400</td>
<td>1.595</td>
<td>10</td>
<td>5.700</td>
<td>0.823</td>
<td>0.544</td>
</tr>
<tr>
<td>Management skills</td>
<td>15</td>
<td>5.800</td>
<td>0.941</td>
<td>10</td>
<td>5.800</td>
<td>0.632</td>
<td>1.000</td>
</tr>
<tr>
<td>Communication skills</td>
<td>15</td>
<td>6.1333</td>
<td>0.990</td>
<td>10</td>
<td>5.700</td>
<td>0.949</td>
<td>0.284</td>
</tr>
<tr>
<td>Motivational Skills</td>
<td>15</td>
<td>5.466</td>
<td>0.834</td>
<td>10</td>
<td>5.900</td>
<td>0.568</td>
<td>0.135</td>
</tr>
<tr>
<td>Influencing skills</td>
<td>15</td>
<td>6.066</td>
<td>0.704</td>
<td>10</td>
<td>5.900</td>
<td>0.568</td>
<td>0.520</td>
</tr>
<tr>
<td>Cultural skills</td>
<td>15</td>
<td>5.933</td>
<td>1.100</td>
<td>10</td>
<td>5.700</td>
<td>0.949</td>
<td>0.578</td>
</tr>
</tbody>
</table>

The data from tables 4.8 and 4.9 were used to test the following hypothesis:

**Hypothesis 3:**

There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership skills are most important.

To test this hypothesis, the t-test was applied to determine if the average of the large enrollment presidents’ means of responses differed from the average of the small enrollment presidents’ means of responses for both the Competency Level Exerted and the Estimated Effectiveness. Those results are shown in table 4.10:
Table 4.10: Leadership Skills for Large Enrollment and Small Enrollment College Presidents; P values for Competency Level Exerted and Estimated Effectiveness

<table>
<thead>
<tr>
<th></th>
<th>Large college average of the means</th>
<th>Large college SD</th>
<th>Small college average of the means</th>
<th>Small college SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Level Exerted for Leadership Skills</td>
<td>5.755</td>
<td>0.291</td>
<td>6.200</td>
<td>0.154</td>
<td>0.010</td>
</tr>
<tr>
<td>Estimated Effectiveness for Leadership Skills</td>
<td>5.799</td>
<td>0.306</td>
<td>5.783</td>
<td>0.098</td>
<td>0.904</td>
</tr>
</tbody>
</table>

An analysis of the data shown in table 4.10 indicates a P value of 0.010 for Competency Level Exerted and a P value of 0.904 for Estimated Effectiveness. For the hypothesis to be rejected, a P value of less than 0.05 for both components must be established. Therefore, the results indicate that there is no significant difference between the Leadership Skills scores for large enrollment college presidents and small enrollment college presidents, and the hypothesis is not rejected.

Responses of High Enrollment Growth and Low Small Enrollment Growth College Presidents


Seventeen colleges met the “high growth” criteria; of those, 15 presidents completed and returned the LCAI. Twenty schools were defined as “low growth”; of
this group, 17 presidents returned a completed survey. Three research questions and three related hypotheses were established for this group:

**Research Questions and Hypotheses**

**Research Question 4:**

Do the perceptions of high enrollment growth North Carolina community college presidents about which leadership roles are most important differ from the perceptions of low enrollment growth North Carolina community college presidents?

Data from the 15 high enrollment growth college presidents and the 17 low enrollment growth college presidents were used to determine responses relative to the Competency Level Exerted for leadership roles, and are shown in table 4.11:

**Table 4.11: Competency Level Exerted-Leadership Roles of High Enrollment Growth and Low Enrollment Growth College Presidents**

<table>
<thead>
<tr>
<th>Competency</th>
<th>High growth college N</th>
<th>High growth college Mean</th>
<th>High growth college SD</th>
<th>Low growth college N</th>
<th>Low growth college Mean</th>
<th>Low growth college SD</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visionary</td>
<td>15</td>
<td>5.333</td>
<td>1.234</td>
<td>17</td>
<td>6.059</td>
<td>0.827</td>
<td>0.066</td>
</tr>
<tr>
<td>Task giver</td>
<td>15</td>
<td>5.867</td>
<td>1.246</td>
<td>17</td>
<td>5.647</td>
<td>0.786</td>
<td>0.563</td>
</tr>
<tr>
<td>Motivator</td>
<td>15</td>
<td>5.867</td>
<td>0.834</td>
<td>17</td>
<td>6.188</td>
<td>1.054</td>
<td>0.458</td>
</tr>
<tr>
<td>Ambassador</td>
<td>15</td>
<td>6.000</td>
<td>1.134</td>
<td>17</td>
<td>6.059</td>
<td>0.748</td>
<td>0.866</td>
</tr>
<tr>
<td>Liaison</td>
<td>15</td>
<td>5.933</td>
<td>0.799</td>
<td>17</td>
<td>5.941</td>
<td>1.029</td>
<td>0.981</td>
</tr>
<tr>
<td>Monitor</td>
<td>15</td>
<td>5.467</td>
<td>1.302</td>
<td>17</td>
<td>5.353</td>
<td>1.057</td>
<td>0.790</td>
</tr>
<tr>
<td>Disseminator</td>
<td>15</td>
<td>5.333</td>
<td>0.976</td>
<td>17</td>
<td>5.706</td>
<td>1.047</td>
<td>0.306</td>
</tr>
<tr>
<td>Advocate</td>
<td>15</td>
<td>5.800</td>
<td>1.082</td>
<td>17</td>
<td>5.706</td>
<td>0.920</td>
<td>0.794</td>
</tr>
<tr>
<td>Change Agent</td>
<td>15</td>
<td>5.933</td>
<td>0.799</td>
<td>17</td>
<td>6.000</td>
<td>0.935</td>
<td>0.829</td>
</tr>
<tr>
<td>Disturbance Handler</td>
<td>15</td>
<td>5.533</td>
<td>0.640</td>
<td>17</td>
<td>5.471</td>
<td>1.505</td>
<td>0.877</td>
</tr>
<tr>
<td>Resource Allocator</td>
<td>15</td>
<td>5.267</td>
<td>1.335</td>
<td>17</td>
<td>5.529</td>
<td>1.419</td>
<td>0.594</td>
</tr>
<tr>
<td>Negotiator</td>
<td>15</td>
<td>5.800</td>
<td>1.207</td>
<td>17</td>
<td>5.765</td>
<td>1.091</td>
<td>0.932</td>
</tr>
</tbody>
</table>
The data from the respondents regarding their *Estimated Effectiveness* is detailed in table 4.12:

<table>
<thead>
<tr>
<th>Competency</th>
<th>High growth college N</th>
<th>High growth college Mean</th>
<th>High growth college SD</th>
<th>Low growth college N</th>
<th>Low growth college Mean</th>
<th>Low growth college SD</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visionary</td>
<td>15</td>
<td>5.400</td>
<td>0.828</td>
<td>17</td>
<td>5.529</td>
<td>1.007</td>
<td>0.693</td>
</tr>
<tr>
<td>Task giver</td>
<td>15</td>
<td>5.667</td>
<td>0.724</td>
<td>17</td>
<td>5.765</td>
<td>0.752</td>
<td>0.710</td>
</tr>
<tr>
<td>Motivator</td>
<td>15</td>
<td>5.733</td>
<td>0.704</td>
<td>17</td>
<td>6.059</td>
<td>0.748</td>
<td>0.215</td>
</tr>
<tr>
<td>Ambassador</td>
<td>15</td>
<td>5.933</td>
<td>0.961</td>
<td>17</td>
<td>6.176</td>
<td>0.728</td>
<td>0.432</td>
</tr>
<tr>
<td>Liaison</td>
<td>15</td>
<td>5.733</td>
<td>0.799</td>
<td>17</td>
<td>5.706</td>
<td>0.722</td>
<td>0.922</td>
</tr>
<tr>
<td>Monitor</td>
<td>15</td>
<td>5.533</td>
<td>1.060</td>
<td>17</td>
<td>5.294</td>
<td>0.920</td>
<td>0.504</td>
</tr>
<tr>
<td>Disseminator</td>
<td>15</td>
<td>5.067</td>
<td>1.033</td>
<td>17</td>
<td>5.882</td>
<td>0.697</td>
<td>0.016</td>
</tr>
<tr>
<td>Advocate</td>
<td>15</td>
<td>5.600</td>
<td>0.986</td>
<td>17</td>
<td>5.706</td>
<td>0.849</td>
<td>0.749</td>
</tr>
<tr>
<td>Change Agent</td>
<td>15</td>
<td>5.333</td>
<td>1.113</td>
<td>17</td>
<td>5.824</td>
<td>0.728</td>
<td>0.159</td>
</tr>
<tr>
<td>Disturbance Handler</td>
<td>15</td>
<td>5.733</td>
<td>0.799</td>
<td>17</td>
<td>5.647</td>
<td>1.222</td>
<td>0.813</td>
</tr>
<tr>
<td>Resource Allocator</td>
<td>15</td>
<td>5.200</td>
<td>1.265</td>
<td>17</td>
<td>5.588</td>
<td>1.228</td>
<td>0.387</td>
</tr>
<tr>
<td>Negotiator</td>
<td>15</td>
<td>5.800</td>
<td>1.014</td>
<td>17</td>
<td>5.529</td>
<td>0.874</td>
<td>0.429</td>
</tr>
</tbody>
</table>

The data in tables 4.11 and 4.12 were used to test the following hypothesis:

**Hypothesis 4:**

There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership roles are most important.

To test this hypothesis, the t-test was applied to determine if the average of the large enrollment presidents’ means of responses differed from the average of the small
enrollment presidents’ means of responses for both the Competency Level Exerted and the Estimated Effectiveness. Those results are shown in table 4.13:

<table>
<thead>
<tr>
<th>Competency</th>
<th>High growth college average of the means</th>
<th>High growth college SD</th>
<th>Low growth college average of the means</th>
<th>Low growth college SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Level Exerted for Leadership Roles</td>
<td>5.677</td>
<td>0.270</td>
<td>5.785</td>
<td>0.263</td>
<td>0.335</td>
</tr>
<tr>
<td>Estimated Effectiveness for Leadership Roles</td>
<td>5.561</td>
<td>0.261</td>
<td>5.725</td>
<td>0.241</td>
<td>0.123</td>
</tr>
</tbody>
</table>

An analysis of the data shown in table 4.13 indicates a P value of 0.335 for Competency Level Exerted and a P value of 0.123 for Estimated Effectiveness. To warrant rejection of the hypothesis, a P value of less than 0.05 for both sets of data must be established. Therefore, the evidence indicates that there is no significant difference between the Leadership Skills scores for high enrollment growth college presidents and low enrollment growth college presidents, and the hypothesis is not rejected.

**Research Question 5:**

Do the perceptions of high enrollment growth North Carolina community college presidents about which leadership values and emotions are most important differ from the perceptions of low enrollment growth North Carolina community college presidents?
The responses from 15 high enrollment growth college presidents and 17 low enrollment growth college presidents were used to address this question. The results are shown in table 4.14:

### Table 4.14: Competency Level Exerted-Leadership Values and Emotions of High Enrollment Growth and Low Enrollment Growth College Presidents

<table>
<thead>
<tr>
<th>Competency</th>
<th>High growth college N</th>
<th>High growth college Mean</th>
<th>High growth college SD</th>
<th>Low growth college N</th>
<th>Low growth college Mean</th>
<th>Low growth college SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplishment</td>
<td>15</td>
<td>5.800</td>
<td>1.082</td>
<td>17</td>
<td>6.118</td>
<td>1.054</td>
<td>0.408</td>
</tr>
<tr>
<td>Fulfillment</td>
<td>15</td>
<td>5.600</td>
<td>1.056</td>
<td>17</td>
<td>5.710</td>
<td>1.359</td>
<td>0.810</td>
</tr>
<tr>
<td>Justice in Life</td>
<td>15</td>
<td>4.533</td>
<td>1.302</td>
<td>16</td>
<td>4.375</td>
<td>1.455</td>
<td>0.752</td>
</tr>
<tr>
<td>Development of subordinates</td>
<td>15</td>
<td>5.533</td>
<td>1.407</td>
<td>17</td>
<td>5.765</td>
<td>1.393</td>
<td>0.645</td>
</tr>
<tr>
<td>Resolve dilemmas</td>
<td>15</td>
<td>5.600</td>
<td>1.056</td>
<td>17</td>
<td>5.588</td>
<td>1.176</td>
<td>0.976</td>
</tr>
<tr>
<td>Self esteem</td>
<td>15</td>
<td>5.600</td>
<td>1.056</td>
<td>17</td>
<td>5.706</td>
<td>1.160</td>
<td>0.789</td>
</tr>
<tr>
<td>Recognition</td>
<td>15</td>
<td>5.600</td>
<td>1.056</td>
<td>17</td>
<td>5.765</td>
<td>1.147</td>
<td>0.675</td>
</tr>
<tr>
<td>Empathy</td>
<td>15</td>
<td>5.400</td>
<td>0.986</td>
<td>17</td>
<td>5.529</td>
<td>1.179</td>
<td>0.738</td>
</tr>
<tr>
<td>Self awareness</td>
<td>15</td>
<td>5.267</td>
<td>1.033</td>
<td>17</td>
<td>5.294</td>
<td>1.160</td>
<td>0.944</td>
</tr>
<tr>
<td>Self regulation</td>
<td>15</td>
<td>5.333</td>
<td>0.976</td>
<td>17</td>
<td>5.235</td>
<td>1.348</td>
<td>0.814</td>
</tr>
<tr>
<td>Motivation</td>
<td>15</td>
<td>6.467</td>
<td>0.915</td>
<td>17</td>
<td>6.294</td>
<td>0.849</td>
<td>0.586</td>
</tr>
<tr>
<td>Social skills</td>
<td>15</td>
<td>5.800</td>
<td>0.941</td>
<td>17</td>
<td>5.647</td>
<td>0.931</td>
<td>0.648</td>
</tr>
</tbody>
</table>

The data from the respondents regarding their *Estimated Effectiveness* is detailed in table 4.15:

### Table 4.15: Estimated Effectiveness-Leadership Values and Emotions of High Enrollment Growth and Low Enrollment Growth College Presidents

<table>
<thead>
<tr>
<th>Competency</th>
<th>High growth college N</th>
<th>High growth college Mean</th>
<th>High growth college SD</th>
<th>Low growth college N</th>
<th>Low growth college Mean</th>
<th>Low growth college SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplishment</td>
<td>15</td>
<td>5.867</td>
<td>0.915</td>
<td>17</td>
<td>6.000</td>
<td>1.000</td>
<td>0.697</td>
</tr>
<tr>
<td>Fulfillment</td>
<td>15</td>
<td>5.600</td>
<td>1.056</td>
<td>17</td>
<td>5.647</td>
<td>1.320</td>
<td>0.912</td>
</tr>
<tr>
<td>Justice in Life</td>
<td>15</td>
<td>4.627</td>
<td>1.033</td>
<td>17</td>
<td>4.353</td>
<td>1.801</td>
<td>0.867</td>
</tr>
<tr>
<td>Development of subordinates</td>
<td>15</td>
<td>5.400</td>
<td>0.986</td>
<td>17</td>
<td>5.706</td>
<td>0.920</td>
<td>0.373</td>
</tr>
<tr>
<td>Resolve dilemmas</td>
<td>15</td>
<td>5.600</td>
<td>0.910</td>
<td>17</td>
<td>5.588</td>
<td>0.939</td>
<td>0.972</td>
</tr>
<tr>
<td>Self esteem</td>
<td>15</td>
<td>5.600</td>
<td>0.986</td>
<td>17</td>
<td>5.588</td>
<td>0.939</td>
<td>0.973</td>
</tr>
<tr>
<td>Recognition</td>
<td>15</td>
<td>5.667</td>
<td>0.900</td>
<td>17</td>
<td>6.000</td>
<td>0.791</td>
<td>0.278</td>
</tr>
<tr>
<td>Empathy</td>
<td>15</td>
<td>5.467</td>
<td>0.934</td>
<td>17</td>
<td>5.529</td>
<td>1.007</td>
<td>0.849</td>
</tr>
<tr>
<td>Self awareness</td>
<td>15</td>
<td>5.333</td>
<td>0.900</td>
<td>17</td>
<td>4.941</td>
<td>1.088</td>
<td>0.274</td>
</tr>
<tr>
<td>Self regulation</td>
<td>15</td>
<td>5.267</td>
<td>0.884</td>
<td>17</td>
<td>5.059</td>
<td>0.966</td>
<td>0.530</td>
</tr>
<tr>
<td>Motivation</td>
<td>15</td>
<td>6.467</td>
<td>0.743</td>
<td>17</td>
<td>6.235</td>
<td>0.903</td>
<td>0.433</td>
</tr>
<tr>
<td>Social skills</td>
<td>15</td>
<td>5.667</td>
<td>0.976</td>
<td>17</td>
<td>5.647</td>
<td>0.862</td>
<td>0.953</td>
</tr>
</tbody>
</table>
The data from tables 4.14 and 4.15 were used to test the following hypothesis:

**Hypothesis 5:**

There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership values and emotions are most important.

To test this hypothesis, the t-test was applied to determine if the average of the large enrollment college presidents’ means of responses differed from the average of the small enrollment college presidents’ means of responses for both the *Competency Level Exerted* and the *Estimated Effectiveness*. Those results are shown in table 4.16:

**Table 4.16: Leadership Values and Emotions for High Growth and Low Growth College Presidents; P values for Competency Level Exerted and Estimated Effectiveness**

<table>
<thead>
<tr>
<th></th>
<th>High growth college average of the means</th>
<th>High growth college SD</th>
<th>Low growth college average of the means</th>
<th>Low growth college SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Level Exerted for Leadership Values and Emotions</td>
<td>5.544</td>
<td>0.443</td>
<td>5.585</td>
<td>0.482</td>
<td>0.830</td>
</tr>
<tr>
<td>Estimated Effectiveness for Leadership Values and Emotions</td>
<td>5.546</td>
<td>0.424</td>
<td>5.524</td>
<td>0.518</td>
<td>0.908</td>
</tr>
</tbody>
</table>

An analysis of the data shown in table 4.16 indicates a P value of 0.830 for *Competency Level Exerted* and a P value of 0.908 for *Estimated Effectiveness*. For the
hypothesis to be rejected, a P value of less than 0.05 for both sets of data must be established. Therefore, the results indicate that there is no significant difference between the Leadership Skills scores for high growth enrollment college presidents and low enrollment growth college presidents, and the hypothesis is not rejected.

**Research Question 6:**

Do the perceptions of high enrollment growth North Carolina community college presidents about which leadership skills are most important differ from the perceptions of small enrollment North Carolina community college presidents?

Of the 15 high enrollment college presidents who returned the LCAI, one president did not respond to any of the competencies listed in the Leadership Skills Competency Level Exerted section of the instrument. Additionally, one did not respond to the “thinking” competency found in the Leadership Skills Competency Level Exerted section of the survey. These non-responses are reflected in the “High Growth College N” column.

The responses of the study participants to the Leadership Skills Competency Level Exerted portion of the LCAI are shown in table 4.17:
Table 4.17: Competency Level Exerted-Leadership Skills of High Enrollment Growth and Low Enrollment Growth College Presidents

<table>
<thead>
<tr>
<th>Competency</th>
<th>High growth college N</th>
<th>High growth college Mean</th>
<th>High growth college SD</th>
<th>Low growth college N</th>
<th>Low growth college mean</th>
<th>Low growth college SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking</td>
<td>13</td>
<td>5.923</td>
<td>0.759</td>
<td>17</td>
<td>6.235</td>
<td>0.752</td>
<td>0.272</td>
</tr>
<tr>
<td>Management skills</td>
<td>14</td>
<td>5.923</td>
<td>0.828</td>
<td>17</td>
<td>6.294</td>
<td>0.771</td>
<td>0.233</td>
</tr>
<tr>
<td>Communication skills</td>
<td>14</td>
<td>6.000</td>
<td>0.877</td>
<td>17</td>
<td>5.941</td>
<td>0.899</td>
<td>0.855</td>
</tr>
<tr>
<td>Motivational Skills</td>
<td>14</td>
<td>5.642</td>
<td>0.928</td>
<td>17</td>
<td>5.882</td>
<td>0.927</td>
<td>0.480</td>
</tr>
<tr>
<td>Influencing skills</td>
<td>14</td>
<td>6.142</td>
<td>0.770</td>
<td>17</td>
<td>6.058</td>
<td>1.144</td>
<td>0.809</td>
</tr>
<tr>
<td>Cultural skills</td>
<td>14</td>
<td>6.000</td>
<td>0.877</td>
<td>17</td>
<td>5.764</td>
<td>1.032</td>
<td>0.498</td>
</tr>
</tbody>
</table>

Of the 15 high enrollment college presidents who returned the LCAI, one president did not respond to any of the competencies listed in the Leadership Skills Estimated Effectiveness section of the instrument. Also, one did not respond to the “thinking” competency found in the Leadership Skills Estimated Effectiveness section of the survey. This is reflected in the “High Growth College N” column.

The responses of the study participants to the Leadership Values and Emotions Estimated Effectiveness portion of the LCAI are shown in table 4.18:

Table 4.18: Estimated Effectiveness -Leadership Skills of High Enrollment Growth and Low Enrollment Growth College Presidents

<table>
<thead>
<tr>
<th>Competency</th>
<th>High growth college N</th>
<th>High growth college Mean</th>
<th>High growth college SD</th>
<th>Low growth college N</th>
<th>Low growth college mean</th>
<th>Low growth college SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking</td>
<td>13</td>
<td>5.769</td>
<td>0.832</td>
<td>17</td>
<td>5.941</td>
<td>0.555</td>
<td>0.527</td>
</tr>
<tr>
<td>Management skills</td>
<td>14</td>
<td>6.000</td>
<td>0.679</td>
<td>17</td>
<td>5.823</td>
<td>0.951</td>
<td>0.552</td>
</tr>
<tr>
<td>Communication skills</td>
<td>14</td>
<td>5.785</td>
<td>0.975</td>
<td>17</td>
<td>5.823</td>
<td>0.833</td>
<td>0.911</td>
</tr>
<tr>
<td>Motivational Skills</td>
<td>14</td>
<td>5.428</td>
<td>0.756</td>
<td>17</td>
<td>5.764</td>
<td>0.831</td>
<td>0.248</td>
</tr>
<tr>
<td>Influencing skills</td>
<td>14</td>
<td>6.241</td>
<td>0.699</td>
<td>17</td>
<td>5.764</td>
<td>0.562</td>
<td>0.063</td>
</tr>
<tr>
<td>Cultural skills</td>
<td>14</td>
<td>5.928</td>
<td>0.997</td>
<td>17</td>
<td>5.529</td>
<td>0.943</td>
<td>0.265</td>
</tr>
</tbody>
</table>
The data contained in tables 4.17 and 4.18 were used to test the following hypothesis:

**Hypothesis 6:**

There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership skills are most important.

To test this hypothesis, the t-test was applied to determine if the average of the high enrollment growth college presidents’ means of responses differed from the average of the low enrollment growth college presidents’ means of responses for both the *Competency Level Exerted* and the *Estimated Effectiveness* components. Those results are shown in table 4.19:

<table>
<thead>
<tr>
<th></th>
<th>High growth college average of the means</th>
<th>High growth college SD</th>
<th>Low growth average of the means</th>
<th>Low growth college SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Level Exerted for Leadership Skills</td>
<td>5.938</td>
<td>0.165</td>
<td>6.029</td>
<td>0.206</td>
<td>0.421</td>
</tr>
<tr>
<td>Estimated Effectiveness for Leadership Skills</td>
<td>5.858</td>
<td>0.271</td>
<td>5.774</td>
<td>0.136</td>
<td>0.518</td>
</tr>
</tbody>
</table>

An analysis of the data shown in table 4.19 indicates a P value of 0.421 for *Competency Level Exerted* and a P value of 0.518 for *Estimated Effectiveness*. For the
hypothesis to be rejected, a P value of less than 0.05 for both components must be established. Therefore, the results indicate that there is no significant difference between the Leadership Skills scores for high enrollment growth college presidents and low enrollment growth college presidents, and the hypothesis is not rejected.

**Responses of Urban and Rural College Presidents**

The final group examined consisted of the presidents of urban community colleges and the presidents of rural community college presidents. A college was defined as “urban” if it was located within a Metropolitan Statistical Area (MSA). An MSA is any county or group of adjoining counties containing at least one urbanized area of 50,000 or more inhabitants. A college was defined as “rural” if it was not located within an MSA. Three research questions and associated hypotheses were developed for this group.

**Research Questions and Hypothesis**

**Research question 7:**

Do the perceptions of urban North Carolina community college presidents about which leadership roles are most important differ from the perceptions of rural North Carolina community college presidents?

Fourteen of the 16 presidents of urban community colleges completed and returned an LCAI, as did 37 of the 42 rural community college presidents. The
responses to the *Competency Level Exerted* for specific leadership role competencies are shown in table 4.20:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Urban N</th>
<th>Urban Mean</th>
<th>Urban SD</th>
<th>Rural N</th>
<th>Rural Mean</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visionary</td>
<td>14</td>
<td>5.308</td>
<td>1.069</td>
<td>37</td>
<td>5.838</td>
<td>.0994</td>
<td>0.144</td>
</tr>
<tr>
<td>Task giver</td>
<td>14</td>
<td>6.071</td>
<td>0.616</td>
<td>37</td>
<td>5.703</td>
<td>0.949</td>
<td>0.111</td>
</tr>
<tr>
<td>Motivator</td>
<td>14</td>
<td>5.929</td>
<td>0.730</td>
<td>37</td>
<td>6.000</td>
<td>1.188</td>
<td>0.781</td>
</tr>
<tr>
<td>Ambassador</td>
<td>14</td>
<td>6.286</td>
<td>0.914</td>
<td>37</td>
<td>6.612</td>
<td>0.917</td>
<td>0.663</td>
</tr>
<tr>
<td>Liaison</td>
<td>14</td>
<td>6.286</td>
<td>0.726</td>
<td>37</td>
<td>5.865</td>
<td>0.938</td>
<td>0.094</td>
</tr>
<tr>
<td>Monitor</td>
<td>14</td>
<td>5.571</td>
<td>0.756</td>
<td>37</td>
<td>5.297</td>
<td>1.439</td>
<td>0.320</td>
</tr>
<tr>
<td>Disseminator</td>
<td>14</td>
<td>5.571</td>
<td>0.938</td>
<td>37</td>
<td>5.486</td>
<td>1.188</td>
<td>0.785</td>
</tr>
<tr>
<td>Advocate</td>
<td>14</td>
<td>6.214</td>
<td>0.699</td>
<td>37</td>
<td>5.676</td>
<td>1.016</td>
<td>0.034</td>
</tr>
<tr>
<td>Change Agent</td>
<td>14</td>
<td>6.286</td>
<td>0.611</td>
<td>37</td>
<td>5.730</td>
<td>0.756</td>
<td>0.016</td>
</tr>
<tr>
<td>Disturbance Handler</td>
<td>14</td>
<td>5.857</td>
<td>0.663</td>
<td>37</td>
<td>5.486</td>
<td>1.016</td>
<td>0.155</td>
</tr>
<tr>
<td>Resource Allocator</td>
<td>14</td>
<td>5.714</td>
<td>0.726</td>
<td>37</td>
<td>5.486</td>
<td>1.342</td>
<td>0.433</td>
</tr>
<tr>
<td>Negotiator</td>
<td>14</td>
<td>5.714</td>
<td>0.914</td>
<td>37</td>
<td>5.622</td>
<td>1.225</td>
<td>0.760</td>
</tr>
</tbody>
</table>

For the *Estimated Effectiveness* for each specific leadership role competency, 14 urban college presidents and 37 rural college presidents responded. The results of the t-test calculation are shown in table 4.21:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Urban N</th>
<th>Urban Mean</th>
<th>Urban SD</th>
<th>Rural N</th>
<th>Rural Mean</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visionary</td>
<td>14</td>
<td>5.357</td>
<td>0.929</td>
<td>37</td>
<td>5.486</td>
<td>0.756</td>
<td>0.656</td>
</tr>
<tr>
<td>Task giver</td>
<td>14</td>
<td>5.929</td>
<td>0.616</td>
<td>37</td>
<td>5.649</td>
<td>0.633</td>
<td>0.170</td>
</tr>
<tr>
<td>Motivator</td>
<td>14</td>
<td>5.714</td>
<td>0.914</td>
<td>37</td>
<td>5.811</td>
<td>0.864</td>
<td>0.739</td>
</tr>
<tr>
<td>Ambassador</td>
<td>14</td>
<td>6.214</td>
<td>0.699</td>
<td>37</td>
<td>6.135</td>
<td>0.975</td>
<td>0.737</td>
</tr>
<tr>
<td>Liaison</td>
<td>14</td>
<td>6.000</td>
<td>0.877</td>
<td>37</td>
<td>5.595</td>
<td>0.975</td>
<td>0.153</td>
</tr>
<tr>
<td>Monitor</td>
<td>14</td>
<td>5.653</td>
<td>0.745</td>
<td>37</td>
<td>5.378</td>
<td>1.231</td>
<td>0.300</td>
</tr>
<tr>
<td>Disseminator</td>
<td>14</td>
<td>5.429</td>
<td>1.089</td>
<td>37</td>
<td>5.568</td>
<td>1.092</td>
<td>0.673</td>
</tr>
<tr>
<td>Advocate</td>
<td>14</td>
<td>6.000</td>
<td>0.877</td>
<td>37</td>
<td>5.595</td>
<td>0.756</td>
<td>0.153</td>
</tr>
<tr>
<td>Change Agent</td>
<td>14</td>
<td>5.857</td>
<td>0.864</td>
<td>37</td>
<td>5.514</td>
<td>0.756</td>
<td>0.214</td>
</tr>
<tr>
<td>Disturbance Handler</td>
<td>14</td>
<td>5.571</td>
<td>0.938</td>
<td>37</td>
<td>5.514</td>
<td>1.324</td>
<td>0.850</td>
</tr>
<tr>
<td>Resource Allocator</td>
<td>14</td>
<td>5.643</td>
<td>0.842</td>
<td>37</td>
<td>5.486</td>
<td>1.167</td>
<td>0.610</td>
</tr>
<tr>
<td>Negotiator</td>
<td>14</td>
<td>5.571</td>
<td>0.938</td>
<td>37</td>
<td>5.568</td>
<td>1.008</td>
<td>0.989</td>
</tr>
</tbody>
</table>
The data shown above in tables 4.20 and 4.21 were used to test the following hypothesis:

**Hypothesis 7:**

There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership roles are most important.

To test this hypothesis, the t-test was applied to determine if the average of the urban presidents’ means of responses differed from the average of the rural presidents’ means of responses for both the *Competency Level Exerted* and the *Estimated Effectiveness*. Those results are shown in table 4.22:

<table>
<thead>
<tr>
<th></th>
<th>Urban average of the means</th>
<th>Urban SD</th>
<th>Rural average of the means</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Level Exerted for Leadership Roles</td>
<td>5.900</td>
<td>0.332</td>
<td>5.733</td>
<td>0.338</td>
<td>0.235</td>
</tr>
<tr>
<td>Estimated Effectiveness for Leadership Roles</td>
<td>5.744</td>
<td>0.257</td>
<td>5.608</td>
<td>0.196</td>
<td>0.158</td>
</tr>
</tbody>
</table>

This analysis resulted in a P value of 0.235 for *Competency Level Exerted* and a P value of 0.158 for *Estimated Effectiveness*. For the hypothesis to be rejected, a P value of less than 0.05 for both components must be established. Therefore, the results
indicate that there is no significant difference between the Leadership Roles scores for urban college presidents and rural college presidents, and the hypothesis is not rejected.

**Research Question 8:**

Do the perceptions of urban North Carolina community college presidents about which leadership values and emotions are most important differ from the perceptions of rural North Carolina community college presidents?

Fourteen urban community college presidents responded and 37 rural community college presidents responded. Their responses to the *Competency Level Exerted* for specific competencies in the leadership values and emotions category are shown in table 4.23:
Table 4.23: Competency Level Exerted-Leadership Values and Emotions of Urban and Rural Presidents

<table>
<thead>
<tr>
<th>Competency</th>
<th>Urban N</th>
<th>Urban Mean</th>
<th>Urban SD</th>
<th>Rural N</th>
<th>Rural Mean</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplishment</td>
<td>14</td>
<td>5.857</td>
<td>0.949</td>
<td>37</td>
<td>6.027</td>
<td>1.158</td>
<td>.0578</td>
</tr>
<tr>
<td>Fulfillment</td>
<td>14</td>
<td>5.500</td>
<td>0.941</td>
<td>37</td>
<td>5.757</td>
<td>1.277</td>
<td>0.413</td>
</tr>
<tr>
<td>Justice in life</td>
<td>14</td>
<td>4.571</td>
<td>0.938</td>
<td>37</td>
<td>4.583</td>
<td>1.590</td>
<td>0.972</td>
</tr>
<tr>
<td>Develop themselves</td>
<td>14</td>
<td>5.500</td>
<td>1.286</td>
<td>37</td>
<td>5.784</td>
<td>1.286</td>
<td>0.486</td>
</tr>
<tr>
<td>Resolve dilemmas</td>
<td>14</td>
<td>5.643</td>
<td>1.008</td>
<td>37</td>
<td>5.595</td>
<td>0.852</td>
<td>0.879</td>
</tr>
<tr>
<td>Self esteem</td>
<td>14</td>
<td>5.571</td>
<td>1.222</td>
<td>37</td>
<td>5.622</td>
<td>1.072</td>
<td>0.894</td>
</tr>
<tr>
<td>Recognition</td>
<td>14</td>
<td>5.714</td>
<td>0.914</td>
<td>37</td>
<td>5.676</td>
<td>0.944</td>
<td>0.900</td>
</tr>
<tr>
<td>Empathy</td>
<td>14</td>
<td>5.429</td>
<td>1.158</td>
<td>37</td>
<td>5.486</td>
<td>0.745</td>
<td>0.868</td>
</tr>
<tr>
<td>Self-awareness</td>
<td>14</td>
<td>5.571</td>
<td>1.089</td>
<td>37</td>
<td>5.297</td>
<td>0.726</td>
<td>0.424</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>14</td>
<td>5.357</td>
<td>1.082</td>
<td>37</td>
<td>5.189</td>
<td>1.099</td>
<td>0.637</td>
</tr>
<tr>
<td>Motivation</td>
<td>14</td>
<td>6.429</td>
<td>0.852</td>
<td>37</td>
<td>6.324</td>
<td>0.825</td>
<td>0.700</td>
</tr>
<tr>
<td>Social Skills</td>
<td>14</td>
<td>6.143</td>
<td>0.770</td>
<td>37</td>
<td>5.676</td>
<td>1.122</td>
<td>0.083</td>
</tr>
</tbody>
</table>

For the Estimated Effectiveness for each specific leadership values and emotions competency, 14 urban college presidents and 37 rural college presidents responded.

The results of the t-test calculation are shown in table 4.24:
Table 4.24: Estimated Effectiveness-Leadership Values and Emotions Responses of Urban and Rural Presidents

<table>
<thead>
<tr>
<th>Competency</th>
<th>Urban N</th>
<th>Urban Mean</th>
<th>Urban SD</th>
<th>Rural N</th>
<th>Rural Mean</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomplishment</td>
<td>14</td>
<td>5.643</td>
<td>0.929</td>
<td>37</td>
<td>5.973</td>
<td>1.188</td>
<td>0.276</td>
</tr>
<tr>
<td>Fulfillment</td>
<td>14</td>
<td>5.500</td>
<td>0.941</td>
<td>37</td>
<td>5.703</td>
<td>1.490</td>
<td>0.519</td>
</tr>
<tr>
<td>Justice in life</td>
<td>14</td>
<td>4.357</td>
<td>0.842</td>
<td>37</td>
<td>4.541</td>
<td>1.604</td>
<td>0.583</td>
</tr>
<tr>
<td>Develop themselves</td>
<td>14</td>
<td>5.500</td>
<td>1.019</td>
<td>37</td>
<td>5.595</td>
<td>1.089</td>
<td>0.759</td>
</tr>
<tr>
<td>Resolve dilemmas</td>
<td>14</td>
<td>5.571</td>
<td>0.852</td>
<td>37</td>
<td>5.622</td>
<td>0.852</td>
<td>0.853</td>
</tr>
<tr>
<td>Self esteem</td>
<td>14</td>
<td>5.549</td>
<td>1.016</td>
<td>37</td>
<td>5.595</td>
<td>1.027</td>
<td>0.599</td>
</tr>
<tr>
<td>Recognition</td>
<td>14</td>
<td>5.714</td>
<td>0.611</td>
<td>37</td>
<td>5.730</td>
<td>0.944</td>
<td>0.947</td>
</tr>
<tr>
<td>Empathy</td>
<td>14</td>
<td>5.071</td>
<td>0.829</td>
<td>37</td>
<td>5.486</td>
<td>0.941</td>
<td>0.132</td>
</tr>
<tr>
<td>Self-awareness</td>
<td>14</td>
<td>5.286</td>
<td>0.825</td>
<td>37</td>
<td>5.108</td>
<td>0.893</td>
<td>0.519</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>14</td>
<td>5.214</td>
<td>0.893</td>
<td>37</td>
<td>5.216</td>
<td>1.072</td>
<td>0.955</td>
</tr>
<tr>
<td>Motivation</td>
<td>14</td>
<td>6.429</td>
<td>0.646</td>
<td>37</td>
<td>6.270</td>
<td>0.864</td>
<td>0.485</td>
</tr>
<tr>
<td>Social Skills</td>
<td>14</td>
<td>6.071</td>
<td>0.475</td>
<td>37</td>
<td>5.595</td>
<td>1.069</td>
<td>0.020</td>
</tr>
</tbody>
</table>

The data shown above in tables 4.23 and 4.24 were used to test the following hypothesis:

**Hypothesis 8:**

There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership values and emotions are most important.

To test this hypothesis, the t-test was applied to determine if the average of the urban presidents’ means of responses differed significantly from the average of the rural
presidents’ means of responses for both the Competency Level Exerted and the Estimated Effectiveness. Those results are shown in table 4.25:

<table>
<thead>
<tr>
<th></th>
<th>Urban average of the means</th>
<th>Urban SD</th>
<th>Rural average of the means</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Level Exerted for Leadership Values and Emotions</td>
<td>5.607</td>
<td>0.450</td>
<td>5.584</td>
<td>0.435</td>
<td>0.902</td>
</tr>
<tr>
<td>Estimated Effectiveness for Leadership Values and Emotions</td>
<td>5.492</td>
<td>0.511</td>
<td>5.536</td>
<td>0.436</td>
<td>0.822</td>
</tr>
</tbody>
</table>

As shown in table 4.25, the analysis of the data indicates a P value of 0.902 for Competency Level Exerted and a P value of 0.822 for Estimated Effectiveness. To warrant rejection of the hypothesis, a P value of less than 0.05 for both components must be established. Therefore, the results indicate that there is no significant difference between the Leadership Values and Emotions scores for urban college presidents and rural college presidents, and the hypothesis is not rejected.

**Research Question 9:**

Do the perceptions of urban North Carolina community college presidents about which leadership skills are most important differ from the perceptions of rural North Carolina community college presidents?
Fourteen urban college presidents returned an LCAI, and 37 rural college presidents also responded. The responses to the Competency Level Exerted for specific leadership skill competencies are shown in table 4.26:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Urban N</th>
<th>Urban Mean</th>
<th>Urban SD</th>
<th>Rural N</th>
<th>Rural Mean</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking</td>
<td>14</td>
<td>5.500</td>
<td>1.653</td>
<td>37</td>
<td>5.811</td>
<td>1.828</td>
<td>0.535</td>
</tr>
<tr>
<td>Management skills</td>
<td>14</td>
<td>6.071</td>
<td>0.829</td>
<td>37</td>
<td>5.946</td>
<td>1.737</td>
<td>0.675</td>
</tr>
<tr>
<td>Communication skills</td>
<td>14</td>
<td>6.429</td>
<td>0.646</td>
<td>37</td>
<td>5.838</td>
<td>1.828</td>
<td>0.037</td>
</tr>
<tr>
<td>Motivational Skills</td>
<td>14</td>
<td>5.786</td>
<td>1.051</td>
<td>37</td>
<td>5.676</td>
<td>1.865</td>
<td>0.754</td>
</tr>
<tr>
<td>Influencing skills</td>
<td>14</td>
<td>6.286</td>
<td>0.726</td>
<td>37</td>
<td>5.811</td>
<td>1.785</td>
<td>0.115</td>
</tr>
<tr>
<td>Cultural skills</td>
<td>14</td>
<td>6.071</td>
<td>0.997</td>
<td>37</td>
<td>5.730</td>
<td>1.729</td>
<td>0.334</td>
</tr>
</tbody>
</table>

For the Estimated Effectiveness for each specific leadership values and emotions competency, 14 urban college presidents and 37 rural college presidents responded. The results of the t-test calculation are shown in table 4.27:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Urban N</th>
<th>Urban Mean</th>
<th>Urban SD</th>
<th>Rural N</th>
<th>Rural Mean</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking</td>
<td>14</td>
<td>5.537</td>
<td>1.646</td>
<td>37</td>
<td>5.676</td>
<td>1.743</td>
<td>0.516</td>
</tr>
<tr>
<td>Management skills</td>
<td>14</td>
<td>6.000</td>
<td>0.555</td>
<td>37</td>
<td>5.703</td>
<td>1.869</td>
<td>0.245</td>
</tr>
<tr>
<td>Communication skills</td>
<td>14</td>
<td>6.143</td>
<td>0.949</td>
<td>37</td>
<td>5.730</td>
<td>1.823</td>
<td>0.220</td>
</tr>
<tr>
<td>Motivational Skills</td>
<td>14</td>
<td>5.357</td>
<td>0.842</td>
<td>37</td>
<td>5.622</td>
<td>1.626</td>
<td>0.373</td>
</tr>
<tr>
<td>Influencing skills</td>
<td>14</td>
<td>6.000</td>
<td>0.679</td>
<td>37</td>
<td>5.676</td>
<td>1.742</td>
<td>0.229</td>
</tr>
<tr>
<td>Cultural skills</td>
<td>14</td>
<td>5.929</td>
<td>0.997</td>
<td>37</td>
<td>5.649</td>
<td>1.773</td>
<td>0.413</td>
</tr>
</tbody>
</table>

The above data were used to test the following hypothesis:
Hypothesis 9:

There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership skills are most important.

To assess this hypothesis, the t-test was applied to determine if the average of the urban presidents’ means of responses differed from the average of the rural presidents’ means of responses for both the *Competency Level Exerted* and the *Estimated Effectiveness*. Those results are shown in table 4.28:

<table>
<thead>
<tr>
<th></th>
<th>Urban average of the means</th>
<th>Urban SD</th>
<th>Rural average of the means</th>
<th>Rural SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency Level Exerted for Leadership Skills</td>
<td>6.023</td>
<td>0.337</td>
<td>5.802</td>
<td>0.093</td>
<td>0.171</td>
</tr>
<tr>
<td>Estimated Effectiveness for Leadership Skills</td>
<td>5.827</td>
<td>0.308</td>
<td>5.676</td>
<td>0.038</td>
<td>0.285</td>
</tr>
</tbody>
</table>

An analysis of the data shown in table 4.28 indicates a P value of 0.171 for *Competency Level Exerted* and a P value of 0.285 for *Estimated Effectiveness*. For the hypothesis to be rejected, a P value of less than 0.05 for both components must be established. Therefore, the results indicate that there is no significant difference
between the Leadership Skills scores for urban college presidents and rural college presidents, and the hypothesis is not rejected.

**SUMMARY**

This chapter began with a brief discussion of the Leadership Competencies Assessment Instrument, the instrument used to collect the data for the study. The process by which the data were collected was discussed. The overall response rate to the study was presented, as well as the specific response rates for the three categories of presidents surveyed. Also presented were the study’s research questions and their related hypotheses. The method by which those hypotheses were to be tested was detailed. Nine hypotheses were tested using the t-test for the difference between means, each at a significance level of 0.05. The results of the testing of the hypotheses are summarized in the table 4.29:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Competency Level Exerted P value</th>
<th>Estimated Effectiveness P value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.311</td>
<td>0.297</td>
<td>Not rejected</td>
</tr>
<tr>
<td>2</td>
<td>0.0008</td>
<td>0.404</td>
<td>Not rejected</td>
</tr>
<tr>
<td>3</td>
<td>0.010</td>
<td>0.904</td>
<td>Not rejected</td>
</tr>
<tr>
<td>4</td>
<td>0.335</td>
<td>0.123</td>
<td>Not rejected</td>
</tr>
<tr>
<td>5</td>
<td>0.830</td>
<td>0.908</td>
<td>Not rejected</td>
</tr>
<tr>
<td>6</td>
<td>0.421</td>
<td>0.518</td>
<td>Not rejected</td>
</tr>
<tr>
<td>7</td>
<td>0.235</td>
<td>0.158</td>
<td>Not rejected</td>
</tr>
<tr>
<td>8</td>
<td>0.902</td>
<td>0.822</td>
<td>Not rejected</td>
</tr>
<tr>
<td>9</td>
<td>0.171</td>
<td>0.285</td>
<td>Not rejected</td>
</tr>
</tbody>
</table>

The following chapter discusses the implications of the data analysis. The study’s conclusions are presented, as are recommendations for practitioners and recommendations for future research.
CHAPTER FIVE

DISCUSSION AND RECOMMENDATIONS

Introduction

Chapter four detailed the study’s research findings. This chapter presents a discussion of the study’s results, offers suggestions for practice and recommendations for future research.

The intent of this study was to investigate the relationship between North Carolina community college presidents’ leadership styles and certain characteristics of the institutions. Those characteristics were the enrollment size of the college; the growth rate of the college; and the geographic setting of the college. These factors were considered important because of the rapidly changing nature of North Carolina. What was once a rather homogenous community college department has now become a diverse and increasingly complex community college system.

The 58 presidents in the North Carolina Community College System comprised the population for this study. Fifty-one college presidents, 87.93 percent, participated in the study by completing and returning the Leadership Competencies Assessment Instrument. Each president was asked to address three broad leadership categories: leadership roles, leadership values and emotions, and leadership skills. Within the roles category are contained 12 specific competencies. In the leadership values and emotions
section there are 12 competencies, and in the leadership skills section there are six competencies. Each competency has two components: competency level exerted and estimated effectiveness. Under the “competency level exerted” component, the participants were asked to use a Likert scale of 1-7 to estimate the degree of energy they spent in addressing a specific competency. They were also asked to indicate how successful they believed they were in achieving that particular competency, again using a Likert scale of 1-7. This response was their “estimated effectiveness” in achieving the competency. Their responses provided their perceptions about the relative importance of the competencies.

The participants were separated into three groups to be studied. Each group contained two sets of respondents. The first group consisted of the presidents of large enrollment community colleges and the presidents of small enrollment community colleges. The second group was comprised of the presidents of community colleges that experienced a high enrollment growth rate for the period of 1991-1992 through 2000-2001, and the presidents of community colleges that experienced a low enrollment growth rate for the same period. The third group consisted of the presidents of urban community colleges and the presidents of rural community colleges.

Nine hypotheses and research questions were developed to implement this study. The results of each hypothesis and related research question are presented in the following section, along with a discussion of the information provided by these results.

**Discussion of Hypotheses**

The first group researched consisted of presidents of large enrollment colleges and presidents of small enrollment colleges. Fifteen out of 18 (83.33 percent) presidents of
large colleges responded, and 10 out of 12 (83.33 percent) presidents of small colleges participated. Three hypotheses were constructed to test this group:

**Hypothesis 1:**

There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership roles are most important.

Hypothesis one tested the relationship between the size of an institution and the president’s perception of which leadership roles were most important. This hypothesis was not rejected. The Competency Level Exerted P value was 0.311, and the Estimated Effectiveness P value was 0.297.

There was a significant difference between the two groups’ response to the competency level exerted component of the Motivator competency, as the t-test revealed a P value of 0.002. This implies that the size of the institution may have an impact upon the president’s perception of the amount of energy he or she expends in establishing trust, encouraging creativity and innovation, increasing job satisfaction, rewarding appropriately and managing stress.

There was also a significant difference between the groups’ response to the estimated effectiveness component of the Advocate competency, with a P value of 0.021. One could surmise that the institution’s size might effect the president’s
perception about how successful he or she was in communicating with the community, working with the media and operating in the local, state and federal political arenas.

**Hypothesis 2:**

There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership values and emotions are most important.

This hypothesis tested whether the size of the institution had an effect on the perception of a president about which values and emotions were most important. A Competency Level Exerted P value of 0.0008 was established, and the Estimated Effectiveness P value was 0.404. As both components of the competency must have a P value of less than 0.05, the hypothesis is not rejected.

The 0.0008 P value for the Competency Level Exerted component indicates that there may be a significant difference in the perceptions about the amount of energy the presidents from the two groups expend in addressing the competencies comprising the leadership values and emotions category. This is borne out further when examining the P values established for the competency level exerted components for Accomplishment (p=0.001), Fulfillment (p=0.013), Resolving dilemmas (p=0.031), Self esteem (p=0.010) and Self regulation (p=0.034).
Hypothesis 3:

There is no statistically significant difference between the perceptions of large enrollment North Carolina community college presidents and the perceptions of small enrollment North Carolina community college presidents about which leadership skills are most important.

This hypothesis was designed to test the relationship between presidential perceptions about leadership skills and the size of the institution that the president leads. The P value for the Competency Level Exerted was 0.010, and the P value for the Estimated Effectiveness component was 0.904. Since a significance level of less than 0.05 was not determined for both components, the hypothesis is not rejected.

The Competency Level Exerted P value of 0.010 suggests that there may be a significant difference in the presidents’ perceptions about how much energy they expend in attending to the skills necessary for effective leadership. A P value of 0.058 was noted for the Competency Level Exerted component of the Thinking competency, indicating that a difference may exist between the perceptions of presidents of large colleges and presidents of small colleges about the degree of effort expended in addressing this skill.

The second group studied consisted of the presidents of community colleges that experienced high enrollment growth for the last 10 years, and the presidents of community colleges that experienced low enrollment growth for the same period. Fifteen out of 17 (88.23 percent) presidents of schools with high growth responded, and
17 out of 20 (85 percent) presidents of colleges with low growth participated. The following three hypotheses were developed for this group.

**Hypothesis 4:**

There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership roles are most important.

This hypothesis tested whether there was a significance difference between the perceptions of the two groups about the importance of the competencies comprising the leadership roles category of the LCAI. A P value of 0.335 was calculated for the Competency Level Exerted, and a P value of 0.123 was established for the Estimated Effectiveness component. The hypothesis was not rejected. There was a significant difference in the Estimated Effectiveness score for the Disseminator competency, with a P value of 0.016. This suggests that a notable difference may exist between the perceptions of the two groups about how successful they are in communicating effectively, identifying talented staff, and constructing performance appraisal processes.

**Hypothesis 5:**

There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low
enrollment growth about which leadership values and emotions are most important.

This hypothesis tested if there is a difference between the two groups’ perceptions about leadership values and emotions and the institutions’ growth over the past 10 years. The hypothesis was not rejected, as the P value for Competency Level Exerted was set at 0.830, and a P value of 0.908 was established for the Estimated Effectiveness. Additionally, there were no P values of less than 0.05 established for any of the individual competencies comprising this leadership category, either in Competency Level Exerted of Estimated Effectiveness.

**Hypothesis 6:**

There is no statistically significant difference between the perceptions of presidents of North Carolina community colleges with high enrollment growth and the perceptions of presidents of North Carolina community colleges with low enrollment growth about which leadership skills are most important.

The final hypotheses for this group tested whether there exists a difference in the perceptions of high enrollment growth college presidents and low enrollment growth college presidents about which leadership skills are most important. A P value of 0.421 was calculated for the Competency Level Exerted component, and a P value of 0.518 was set for the Estimated Effectiveness component. Thus, the hypothesis was not rejected. No
significant differences were noted for either component of any of the specific competencies comprising the leadership skills section.

The final group researched was comprised of the presidents of urban community colleges and the presidents of rural community colleges. Fourteen of the 16 (87.50 percent) presidents of the urban colleges responded, as did 37 of the 42 (88.09 percent) rural presidents. The following hypotheses were developed for this group.

**Hypothesis 7:**

There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership roles are most important.

This hypothesis was developed to determine if there is a significant difference between the perceptions of urban presidents and rural presidents about which leadership roles are most important. The hypothesis was not rejected, as a P value of 0.235 was calculated for the Competency Level Exerted component, and a P value of 0.158 was calculated for the Estimated Effectiveness was set.

A significant difference was noted for the Competency Level Exerted section of the Advocate competency (p=0.034). This suggests that the perceptions of urban and rural presidents may differ about how successful he or she was in communicating with the community, working with the media and operating in the local, state and federal
political arenas. A significant difference was also determined for the Competency Level Exerted portion of the Change Agent competency (p=0.016). This indicates that urban and rural college presidents may have significantly different perceptions about the amount of energy they expend in setting objectives, developing strategies and plans, developing quality initiatives, making wise decisions, providing motivation for change, and seeking new opportunities for their institution.

**Hypothesis 8:**

There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North Carolina community college presidents about which leadership values and emotions are most important.

In testing this hypothesis, a P value of 0.902 was set for the Competency Level Exerted portion, and a P value of 0.822 was established for the Estimated Effectiveness section. The hypothesis was not rejected. A significant difference (p=0.020) was determined for the Estimated Effectiveness component of the Social Skills competency, suggesting that a difference might exist in the perceptions of the two groups about the success of efforts to become proficient in managing relationships.

**Hypothesis 9:**

There is no statistically significant difference between the perceptions of urban North Carolina community college presidents and the perceptions of rural North
Carolina community college presidents about which leadership skills are most important.

The final hypothesis tested for a difference in the perceptions of urban and rural precedents about which leadership skills are most important. The hypothesis was not rejected, because a P value of 0.171 was established for the Competency Level Exerted component and a P value of 0.285 was determined for the Estimated Effectiveness section. A P value of 0.037 was noted for the Competency Level Exerted part of the Communication Skills competency. This indicates that there may be a significant difference in the perceptions of urban and rural college presidents about how much effort they devote to promoting open dialog, using high impact delivery, and utilizing effective oral and written communication.

Conclusions and Implications

As noted, this study examined the leadership perceptions of three groups of North Carolina community college presidents. The first group consisted of the presidents of large enrollment colleges and the presidents of small enrollment colleges. The second group contained the presidents of high enrollment growth colleges and the presidents of low enrollment growth colleges. The final group was made up of the presidents of urban colleges and the presidents of rural colleges. Research questions were developed for each group, and associated hypotheses were formulated to test the relationship between the
leadership perceptions of the two sets of presidents within each group. The following conclusions and implications may be drawn from the results of the study.

Analysis of the data collected and the testing of the study’s hypotheses lead to the conclusion that no significant relationship exists between the perceptions of North Carolina community college presidents about which leadership roles, values and emotions, and skills are most important and the enrollment size of the president’s institution. However, the data do suggest that there may be a significant difference in the perceptions of the large enrollment college presidents and the small enrollment college presidents about the amount of energy they spend in motivating their colleagues. The study also suggests that there could be a notable difference of perceptions about how effective the presidents are in working with external constituencies such as the community, the media and political entities. The data do indicate that there may be a significant difference in the perceptions of large enrollment college presidents and small enrollment college presidents about how much energy they expend in addressing leadership values and emotions. Of the 12 individual competencies in the values and emotions part of the LCAI, a statistically significant difference was determined for five in the Competency Level Exerted component of the competency. The data also suggest a significant difference in the perceptions of large enrollment college presidents and small enrollment college presidents about how much energy they expend in exercising leadership skills.

There were fewer statistically different P values reported for individual competencies for the group consisting of high enrollment growth college presidents and low enrollment growth college presidents than were determined for the other two groups of presidents. The Motivator competency, found in the leadership role category, had a
significant difference for the Estimated Effectiveness component. This indicates that the perceptions of the presidents may differ about how successful they are in motivating coworkers. Otherwise, no differences were noted for any competency in any of the three leadership categories.

There were no significant differences in the perceptions of urban community college presidents and rural community college presidents about which leadership roles, values and emotions, and skills were most important. The research did suggest significant differences in components of individual competencies, however. In the leadership roles category, a difference was noted for the Competency Level Exerted section of the Advocate competency and for the Competency Level Exerted component of the Change Agent competency. Additionally, in the leadership values and emotions section, a significant difference was established for the Estimated Effectiveness component of the Social Skills competency. In the leadership skills section of the LCAI, a statistically significant difference was noted for the Competency Level Exerted part of the Communication Skills competency.

Although none of the null hypotheses were rejected, it should be noted that there appeared to be statistically significant differences in several individual leadership competencies. This suggests that the size, enrollment growth and/or urban or rural nature of an institution may indeed have an influence upon the perceptions of the presidents about the importance of certain leadership competencies.

Due to the comprehensiveness of the LCAI and the hectic schedules of those selected to participate, a response rate of 50-60 percent was anticipated for this study. As previously noted, almost 88 percent of the presidents in the North Carolina Community
College System participated in this study by completing and returning the survey instrument. Additionally, this response rate was generally consistent among the three categories studied. As the presidents were informed that the study would research the relationship between perceptions of leadership and an institution’s size, rate of growth or geographic location, one can speculate that the presidents recognize the need for greater research into the relationship between leadership and these institutional characteristics. The assumption could also be made that this high response rate is indicative of substantial support among the presidents for this type of research. This assumption is supported, albeit anecdotally, by the comment of one respondent who attached a note to the completed survey. He stated that while he did not normally respond to surveys, he was interested in contributing to a study that might enhance the leadership development and training programs of the system.

**Recommendations for Practitioners**

The practitioners for whom the findings of this study might be germane are the presidents in the North Carolina Community College System. As discussed previously, there appear to be few significant differences in perceptions about which leadership competencies might be most important. The fact that significant differences were not noted is itself important. This research suggests that in the North Carolina community college system, presidential leadership roles, values and emotions and skills may be constant, and little affected by an institution’s size, growth or location.
The population of North Carolina is projected to continue to grow at a rate above the national average, and the differences between large and small colleges, high growth and low growth colleges and urban and rural colleges will most assuredly continue to grow. It is suggested that presidents stay abreast of the social, cultural, economic and political changes created by these rapidly shifting demographics. Doing so will allow them to develop and implement long range plans, goals and objectives to insure the continuing viability of their institutions.

It is recommended that the North Carolina Community College System Presidents’ Association advocate that any statewide leadership development program include a component addressing the impact that the institutional characteristics detailed in this study have upon a president’s leadership style. The increasing diversity and heterogeneity of the state and its community college system suggest that this inclusion could strengthen the system’s leadership development efforts.

**Recommendations for Future Research**

This study was an initial investigation into the relationship between presidential leadership perceptions and certain institutional characteristics. Consequently, the need for further inquiry is obviously necessary. The following are recommendations for additional research:

1. The population for this study consisted of the presidents of the North Carolina Community College System, and the study’s causal-comparative design prevents generalization of the results beyond that population. A similar study
expanding the population to include presidents from additional community college systems would increase generalizability.

2. This study measured the perceptions of the participants about which leadership competencies were most important. Perceptions can be influenced by many variables, none of which were controlled for in this study. Future studies, using different methodologies, could increase validity and reliability by controlling these variables to a greater degree.

3. This study was causal-comparative in design, and therefore it cannot be definitely concluded that any significant differences occurred as a result of influence exerted by the institutional characteristics detailed in the study. A different research design addressing the same research questions and hypotheses would enhance the internal validity of the study.

4. While none of the hypotheses were rejected, the data did suggest that significant differences in perception do exist in several specific leadership competencies. Subsequent research could provide additional inquiry into those differences and their effect on presidential leadership.

5. This study’s research design established a significance level of 0.05. Due to the study’s small population size, further investigation at the significance level of 0.10 could yield different results.

6. A similar study investigating the relationship between presidential leadership perceptions and the length of time the president has served as CEO could provide additional insight into the area of presidential application of leadership roles, values and emotions, and skills.
7. Although there is a body of work examining large and small, high growth and low growth, and urban and rural community colleges, there is very little research into how those characteristics influence presidential leadership styles. More scholarly work in these areas would be beneficial to both new and experienced presidents.

**Summary**

This study endeavored to determine if a relationship exists between presidential perceptions of leadership styles and certain institutional characteristics. The population consisted of the presidents in the North Carolina Community College System, and a response rate of 87.93 percent was established. Three groups of presidents were studied. One consisted of presidents from large enrollment colleges and presidents from low enrollment colleges. Another group was comprised of presidents of high growth rate schools and presidents of low growth rate schools. A third group was made up of presidents from urban colleges and presidents from rural colleges. Hypotheses were developed to determine within each of the three groups if significant differences existed in the presidents’ perceptions about which leadership roles, values and emotions, and skills were most important. An analysis of the research data determined that none of the nine hypotheses were rejected, indicating that there were no significant differences in perceptions about the importance of the three leadership categories. Significant differences in presidential perceptions were indicated for several individual leadership competencies. These differences suggest that size, rate of growth and geographic location may indeed
influence the perceptions of presidents about the importance of certain leadership competencies.

It is hoped that this study will contribute to the literature and provide the impetus for further research into the relationship between the size, growth rate and geographic setting and how a president leads.


Elliot, P.G. The urban campus: educating the new majority for the new century. Phoenix: Oryx Press.


Metropolitan Area Definitions. US Office of Management and Budget. 


Appendix A: Leadership Competencies Assessment Instrument

The Leadership Competencies Assessment Instrument was developed by Dr. George A. Baker III, and was used with his permission. Those wishing to use the LCAI may contact Dr. Baker at:

College Planning Systems
33 Devon Hall Way
Taylors, NC 29687
864/322-8281
geoabaker@home.com
Appendix B: Participating Large Colleges and Small Colleges

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Caldwell</td>
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<td>Pamlico</td>
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<td>662</td>
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<td>3195</td>
<td>Roanoke Chowan</td>
<td>942</td>
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<td>Sampson</td>
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### Appendix C: Participating High Growth and Low Growth Colleges

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<thead>
<tr>
<th>High Growth College</th>
<th>Rate of Growth (percentage)</th>
<th>Low Growth College</th>
<th>Rate of Growth (percentage)</th>
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<tr>
<td>Pamlico</td>
<td>121.27</td>
<td>Beaufort</td>
<td>2.84</td>
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<tr>
<td>Cape Fear</td>
<td>71.94</td>
<td>Western Piedmont</td>
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<td>Brunswick</td>
<td>.007</td>
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<td>47.20</td>
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<td>(2.07)</td>
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<td>Vance Granville</td>
<td>45.67</td>
<td>Edgecombe</td>
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<td>Mayland</td>
<td>(3.58)</td>
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<td>(5.02)</td>
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## Appendix D: Participating Urban and Rural Colleges

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Appendix E: Initial Precontact and Letter Requesting Participation

Precontact E-mail

Hello Dr. ___________

I am a doctoral student at NC State, and my dissertation focuses on perceptions of leadership among North Carolina Community College presidents. Within the next week you should receive in the mail a survey collecting information about presidents' leadership roles, values and emotions, and skills. I would greatly appreciate you completing the survey and returning it to me in the accompanying envelope.

Thanking you in advance-

Russ Sharples

Russ Sharples
Dean of Students
141 College Drive
Stanly Community College
704/991-0238
fax 704/982-0819
Appendix E Continued: Letter Requesting Participation

Dear:

I am a doctoral student in Higher Education Administration at North Carolina State University. With the guidance of Dr. George Baker, I am conducting research addressing perceptions of North Carolina community college presidents regarding leadership. Specifically, I am investigating the perceived effect of the following upon presidential leadership:

1. a college’s urban or rural geographic setting;
2. a college’s enrollment;
3. a college’s growth over the past decade.

All North Carolina community college presidents have been selected to participate in this study. The Leadership Competencies Assessment Instrument (LCAI) is being used to collect the data for the study. Please complete the enclosed LCAI, seal it in the provided prepaid envelope and return it by November 1, 2001. Completing the LCAI should take no longer than 15 minutes. Your responses will be maintained with the strictest confidentiality.

Time is a precious commodity for you, and your willingness to participate in this study is greatly appreciated. I am hopeful that the results of this study can be used to strengthen and enhance our community college system’s leadership education and development efforts.

Due to the importance and potential benefit this study may provide for our system, I have asked Dr. Baker to co-sign this letter. At the conclusion of the study, you will receive an individual report of your responses with a breakdown of how your responses compare with those of the other participants.

Thank you in advance for your participation.

Sincerely,

Russ Sharples                      Dr. George A. Baker III
EdD Candidate                      Professor Emeritus
Department of Adult and            Department of Adult and
Community College Education         Community College Education
North Carolina State University    North Carolina State University
Appendix F: Second Precontact and Letter Requesting Participation

Precontact E-mail

Hello Dr.________

In mid October I mailed to all NC community college presidents the Leadership Competencies Assessment Instrument (LCAI), a survey designed to collect information about presidents' leadership roles, values and emotions, and skills. I am using the data in my dissertation studies in the Higher Education Administration EdD program at NC State. Thus far I have received a completed survey from most of the presidents in our system.

To insure that my research data are as complete and valid as possible, I would greatly appreciate you completing the survey and returning it to me at your earliest convenience. Should you need another copy of the survey, please let me know by responding to this message and I will send you one right away.

If your survey is already in the mail to me, please accept my thanks. I greatly appreciate your assistance-

Thanks,

Russ Sharples

Russ Sharples
Dean of Students
141 College Drive
Stanly Community College
704/991-0238
fax 704/982-0819
Appendix F Continued: Letter Requesting Participation

Dear_______:

As part of my EdD studies at N.C. State, I am conducting research addressing perceptions of North Carolina community college presidents regarding leadership. Specifically, I am investigating the perceived effect of the following upon presidential leadership competencies:

1. a college's urban or rural geographic setting;
2. a college's enrollment;
3. a college's growth over the past decade.

In mid October I mailed the Leadership Competencies Assessment Instrument (LCAI), the survey being used to collect the data for the study, to all North Carolina community college presidents. Thus far, I have received completed surveys from most of the presidents.

To insure that my research data are as complete as possible, I would greatly appreciate you completing and returning the enclosed LCAI by November 16, 2001. Completing the survey should take no longer than 15 minutes, and your response will be maintained with the strictest confidentiality. At the conclusion of the study, I will send you an individual report of your responses with a breakdown of how your responses compare with those of the other participants. I am hopeful that the results of my dissertation can be used to strengthen and enhance our community college system's leadership education and development efforts.

Thank you in advance for your participation.

Sincerely,

Russ Sharples
EdD Candidate
Department of Adult and Community College Education
North Carolina State University
Appendix G: Third Precontact and Letter Requesting Participation

E-mail Precontact

Hello Dr.__________

I am completing my EdD at NC State, and am surveying all NC community college presidents regarding their perceptions of leadership. Thus far I have received completed surveys from 48 of the 59 presidents in the system.

Today I have mailed to you another copy of the Leadership Competencies Assessment Instrument, the instrument I am using to gather the research data, along with a pre paid return envelope. I know you are quite busy, and would greatly appreciate you completing the LCAI and returning it to me at your earliest convenience.

If your have already completed and mailed the LCAI I sent to you previously, please accept my thanks.

Thank you for your participation-

Russ Sharples

Russ Sharples
Dean of Students
141 College Drive
Stanly Community College
704/991-0238
fax 704/982-0819
Appendix G Continued: Third Letter Requesting Participation

Dear:

As a component of my EdD studies at N.C. State, I am surveying all North Carolina Community College presidents to determine their perceptions regarding leadership. I am investigating the perceived effect of the following upon presidential leadership competencies:

1. a college’s urban or rural geographic setting;
2. a college’s enrollment;
3. a college’s growth over the past decade.

I am using the enclosed Leadership Competencies Assessment Instrument (LCAI) to collect the data for the study. Thus far, I have received responses from 48 of the 59 presidents. To insure that I have the most complete research data possible, I would greatly appreciate you completing and returning the LCAI by December 3, 2001. Doing so will take only about 15 minutes, and your response will be maintained with the utmost confidentiality. I am hopeful that this study will prove beneficial in strengthening and enhancing our system’s leadership education and development efforts.

Thank you for your participation.

Sincerely,

Russ Sharples
EdD Candidate
Department of Adult and Community College Education
North Carolina State University