

A COMPARATIVE STUDY OF LEADERSHIP CHARACTERISTICS OF VIRGINIA  
REGIONAL TECHNICAL CENTER PRINCIPALS

Bernard S. Davis III “Trey”

Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in  
partial fulfillment of the requirements for the degree of

Doctor of Education

In

Educational Leadership and Policy Studies

Ted S. Price, Chair

Carol S. Cash

Michael E. Thornton

Travis W. Twiford

June 2, 2015

Blacksburg, Virginia

Keywords: CTE, leadership, education, characteristics

Copyright 2015, Bernard S. Davis III

All Rights Reserved

A COMPARATIVE STUDY OF LEADERSHIP CHARACTERISTICS OF VIRGINIA  
REGIONAL TECHNICAL CENTER PRINCIPALS

Bernard S. Davis III “Trey”

**Abstract**

The purpose of this study was to identify leadership characteristics of technical school principals as perceived by technical center school principals, the superintendents, and the center’s Joint Control Board of the regional technical centers of the Commonwealth of Virginia. A regional technical center principal position deals with a different administrative governing board, students from different high schools, and courses in the field of career and technical education. This study gathered and evaluated perspectives from the participating superintendents, Joint Control School Board members, and regional technical center principals to determine similarities and differences between the perceptions among these groups.

The population selected for this study was comprised of the participating superintendents, school board members, and principals from all ten K-12 public school regional technical centers in the Commonwealth of Virginia during the 2014-15 school year. The results showed that the survey respondents ranked visionary and instructional leader as the top two characteristics for regional technical center principals. The results showed that superintendents and Joint Control School Board members ranked having a background or experience in career and technical education higher than principals ranked that characteristic. Joint Control Board Members ranked having a CTE degree significantly higher than principals and superintendents. Superintendents and Joint Control Board Members rated the principal’s ability to articulate an instructional vision as having a significant relation to academic success higher than principals rated that characteristic. Survey respondents rated statement ten; persuasion is the ultimate tool for a technical center principal of public education, mean responses the lowest. All three survey respondents rated statement six; personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal, mean responses the highest.

Open-ended question sixteen, what other characteristics that are needed for the CTE leader of a regional technical center that have not been addressed?, revealed results that superintendents and principals indicated that personnel management was a valuable skill, that

superintendents believed that building relationships with students and recruiting students along with having the ability to work with various stakeholders was important.

## Dedication

I dedicate this dissertation to my loving wife, Mary Davis, my daughter Anne Claire Davis, and my son, Clayton Jack Davis. Their never ending support given to me through this process has been a major motivator and the reason it has been completed. I am forever grateful to their dedication, support, and love.

I dedicate this dissertation to my cohort as they have been a very supportive group of leaders and have shared in my educational knowledge and growth. Thanks for all the late nights, laughs, struggles, and support. I wish you all the best in your educational endeavors.

I dedicate this dissertation to the many Virginia Tech faculty members who were very supportive, knowledgeable, and visionary. Only with your continued guidance, structure, and support could this dissertation have been completed.

*The function of education is to teach one to think intensively and to think critically. Intelligence plus, character that is the goal of a true education.*

*Martin Luther King, Jr. 1929-1968*

## **Acknowledgments**

To Dr. Ted Price, my committee chairman: thank you for your continued leadership, support, and wisdom. Your passion and knowledge for my subject matter were a true help with completing this dissertation.

To committee members, Dr. Carol Cash, Dr. Michael Thornton, and Dr. Travis Twiford. Thank you for your professionalism, wisdom, dedication, and positive criticism. Your guidance and support will forever be appreciated.

To the participating regional technical center principals, regional technical center superintendents, and regional technical center Joint Control School Board Members: Thank you for your prompt attention to my survey, your insight and suggestions, and dedication to career and technical education.

To my adorable and caring wife, Mary: thank you for supporting me and believing me through the completion of this dissertation. Your sacrifices of many late nights, personal time, and professional time is surely appreciated. Thanks for all of those first draft revisions.

To my cohort support group: Thanks for all of the support, laughs, smiles, talks, and motivational speeches. Each of you has made a positive impact on my professional career.

## Table of Contents

Abstract.....	ii
Dedication.....	iv
Acknowledgments.....	v
List of Tables .....	ix
List of Figures.....	x
Chapter One Introduction .....	1
Statement of the Problem.....	1
Purpose of the Study .....	2
Significance of the Study .....	2
Theoretical Framework.....	4
Research Questions.....	4
Definition of Key Terms.....	5
Delimitations and Limitations.....	6
Summary .....	6
Organization of the Study .....	7
Chapter Two Review of Literature .....	8
Introduction.....	8
Search Procedures.....	8
Educational Leadership.....	9
The Role of the Principal .....	10
Characteristics of School Principal.....	10
ISLLC Standards.....	13
Needed Skills and Competencies for CTE Administrators.....	15
Licensure.....	16
Lack of Technical Center Principal Training Programs in the Commonwealth of Virginia ....	17
Historical Perspective of Career and Technical Education.....	19
Future Trends of Career and Technical Education .....	20
Regional Technical Center Attributes.....	21
The Technical Center Instructor .....	23
Technical Center Curriculum.....	24
Summary of Review of Literature .....	25
Chapter Three Methodology .....	27
Research Design.....	27

Description of Population .....	29
Instrumentation .....	29
Data Collection Strategies.....	31
Response Rates .....	31
Data Analysis .....	32
Summary of Methodology .....	34
Chapter Four Analysis of Data .....	35
Results of Data Collection .....	35
Question Sixteen Comparisons .....	60
Summary .....	62
Chapter Five Findings.....	63
Review of Study.....	63
Summary of Findings.....	64
Finding one. ....	64
Finding two. ....	64
Finding three. ....	65
Finding four. ....	65
Finding five.....	66
Finding six. ....	66
Finding seven.....	66
Finding eight. ....	67
Finding nine. ....	67
Implications for Practice.....	68
Recommendations for Further Research.....	71
Reflections of Analysis.....	72
References.....	74
Appendix A ISLLC Standards .....	80
Appendix B Technical Center Principal Survey Instrument.....	81
Appendix C Technical Center Superintendent Survey Instrument.....	84
Appendix D Technical Center School Board Survey Instrument.....	87
Appendix E Technical Center Principal’s Cover Letter .....	90
Appendix F Technical Center Superintendent Cover Letter.....	91
Appendix G Technical Center School Board Cover Letter .....	92
Appendix H Technical Center Principal’s Follow Up Cover Letter.....	93

Appendix I Technical Center Superintendent Follow Up Cover Letter ..... 94  
Appendix J Technical Center School Board Follow Up Cover Letter ..... 95  
Appendix K Institutional Review Board Approval Letter ..... 96  
Appendix M Principal Telephone Script ..... 98

## List of Tables

Table 1 <i>Mean Responses of Regional Technical Center Principals to the Survey</i> .....	37
Table 2 <i>Ranked Means of Regional Technical Center Principal Leadership Characteristics by Principals</i> .....	40
Table 3 <i>Mean Responses of Superintendents to the Survey</i> .....	43
Table 4 <i>Ranked Means of Regional Technical Center Principal Leadership Characteristics by Superintendents</i> .....	46
Table 5 <i>Mean Responses of Joint Control School Board Members to the Survey</i> .....	48
Table 6 <i>Ranked Means of Regional Technical Center Principal Leadership Characteristics by Joint Control School Board Members</i> .....	51
Table 7 <i>Mean Responses of Principal Leadership Characteristics of All Groups</i> .....	53
Table 8 <i>F Values and Significance for the Fifteen Survey Statements</i> .....	55
Table 9 <i>ANOVA - Analysis of Variance of Statement Two, Experience in Career and Technical Education is Essential for the Position of a Technical Center Principal.</i> .....	56
Table 10 <i>Tukey - Multiple Comparisons for Statement Two, Experience in Career and Technical Education is Essential for the Position of a Technical Center Principal.</i> .....	56
Table 11 <i>ANOVA - Analysis of Variance of Statement Five, Technical Center Principals Along with Their School Board Members Can Have an Impact on Achieving and Sustaining School Wide Success</i> .....	57
Table 12 <i>Tukey – Multiple Comparisons for Statement Five, Technical Center Principals Along with Their School Board Members Can have an Impact on Achieving and Sustaining School Wide Success.</i> .....	57
Table 13 <i>ANOVA - Analysis of Variance of Statement Nine, the Technical Center Principal’s Ability to Articulate an Instructional Vision has a Significant Relationship to the County’s Division Wide Academic Success.</i> .....	58
Table 14 <i>Tukey – Multiple Comparisons for Statement Nine, the Technical Center Principal’s Ability to Articulate an Instructional Vision has a Significant Relationship to the County’s Division Wide Academic Success.</i> .....	58
Table 15 <i>Ranked Mean of Principal Leadership Characteristics by all Groups</i> .....	59
Table 16 <i>Ranked Average of Principal Leadership Characteristics by all Groups</i> .....	60
Table 17 <i>Characteristic Listed Amongst Multiple Surveyed Populations.</i> .....	61

## List of Figures

<i>Figure 1.</i> The Conceptual Framework.....	4
--	---

## **Chapter One**

### **Introduction**

The widespread shortage of qualified principals has created a strain on the instructional leadership of the nation's schools, and is seriously affecting efforts in whole-school academic improvement according to a new report conducted by the Educational Research Service (ERS) at the request of the National Association of Elementary School Principals (NAESP) and the National Association of Secondary School Principals (NASSP) (Million & Carr, 2014). With these reports, it is important to understand the desired characteristics that demonstrate a strong and valuable principal. According to Blasé and Blasé (2001), Career and Technical Education (CTE) principals and supervisors of today should be leaders more than managers. Blasé and Blasé (2001) believe that a manager controls people and initiatives, but a leader inspires and encourages a collaborative approach, along with empowering teachers and fostering self-governance.

This study focused on the technical center principal and the characteristics associated with a career and technical center principal position. The role of the principal is critical to the success of the school and to the needs of its educational programs. According to the Bureau of Labor Statistics Occupational Outlook Handbook (2014), the forecasts for career and technical education jobs are steadily rising. Training for ten out of the top twenty fastest growing occupations can be found at secondary technical centers across the United States. With this increase in occupations, having qualified leadership will be important.

After nineteen years in public education, eleven of those years involved in career and technical education, this researcher has had the opportunity to work for many different principals who have demonstrated a variety of leadership characteristics. In these experiences, the leadership characteristics of the principals have made both positive and negative impacts on the school goals and initiatives.

#### **Statement of the Problem**

According to the Institute for Educational Leadership (2000), the paradigm shift from school manager to school leader has forced next-generation school principals to create and maintain a delicate balance among managing effectively, leading instructionally, and developing

all school stakeholders as collaborative partners and leaders in the learning process. As the responsibilities and job descriptions change, so do the needed characteristics of a principal. There is limited research in the field of career and technical education regarding administration characteristics of technical center principals. As the responsibilities of a technical center principal expand, so does the importance of hiring skilled administrators with needed technical center qualities and traits. Thus, it could be beneficial to leaders in education to compile a list of these CTE leader qualities and traits.

School principals have been thrust into a brighter spotlight by the No Child Left Behind Act (NCLB) and by corresponding state regulations that impose sanctions for poor student achievement. According to the US Department of Education (2003), under current United States laws, schools that fail to maintain adequate yearly progress, now annual measurable objectives, are faced with possible corrective actions such as the replacement of those staff associated with the failure; enactment of a new curriculum; a significant decrease in the management authority of the principal; assignment of outside experts; extension of the school day or year; and a restructuring of the school.

### **Purpose of the Study**

The purpose of this study was to identify leadership characteristics of technical school principals as perceived by technical center school principals, the superintendents, and the centers Joint Control School Board. In this study, the researcher has organized and collected data that will assist in forming a list of effective characteristics of technical center principals. The study examined the characteristics that principals, superintendents, and Joint Control School Board Members perceive as being indicative of an effective technical school principal. The uniqueness of this research study is that it has examined leadership qualities from the leadership position of principals at technical schools in the Commonwealth of Virginia. The results will provide insight to those responsible for principal preparation programs and those developing professional education activities for principals whose careers lay in the area of career and technical education.

### **Significance of the Study**

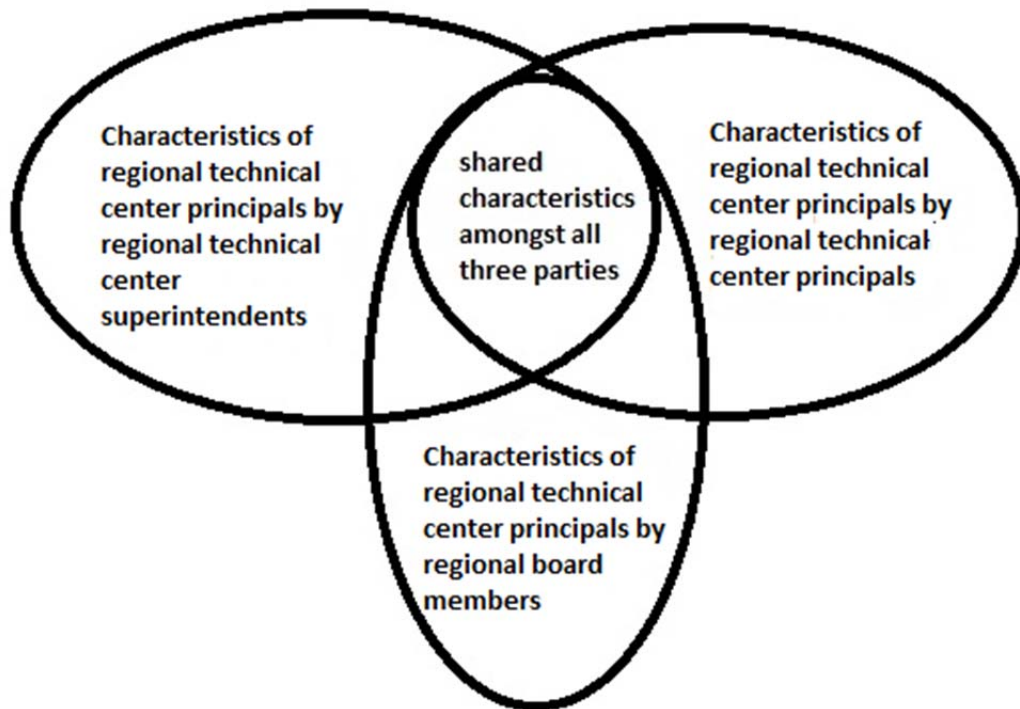
The intensified demands now placed on school principals due to the No Child Left Behind Act of 2001 (US DOE, 2015) have made a strong impact with regard to principal

leadership, job satisfaction, and teacher retention. According to Popham (2004), the requirements listed under the NCLB Act have indeed created many daunting challenges for teachers and principals alike.

This study is significant because there are few research studies in the current review of literature that specifically link career and technical leadership characteristics to the position of principal at a technical center. A scan of Eric, ProQuest, Google Scholar, Virginia Tech database, and other databases illustrated that little research exists on the effectiveness of school principals in the context of the area of career and technical education school. Additionally, while there is evidence of research studies that have been conducted investigating the characteristics of elementary, middle, and high school administrators this researcher could find few studies and journal articles that looked at leadership research conducted in the area of career and technical education. Therefore, this research study would serve to augment the limited body of literature and research in determining the preferred characteristics of a regional technical center principal. According to The Association for Career and Technical Education Virginia Fact Sheet (2014), a growing skills deficit endangers U.S. economic competitiveness and the American way of life. Economic, workforce and educational realities offer ample evidence that higher skills, deeper knowledge, and career readiness are fundamental to success in a knowledgeable economy. The educational learning environment of the career and technical education field is unique for several reasons. First, the educational context is unique because of the career and technical education curricular content. Second, the student population caters to the juniors and seniors of high schools. Because of the education environment, the outcome of this research is significant in determining the skills of principals in the context area of career and technical education schools leadership. The education environment of regional technical centers deals with students learning workplace skills pertaining to the career and technical education programs offered at each center. Many students will have the opportunity to use these skills to become employed in their program area, continue to higher education, or enter the armed forces. These education and employment options for students also give insight on the needed skills of the principals, as they will need to be knowledgeable about occupational and technical studies.

## Theoretical Framework

The Theoretical Framework, Figure 1, serves as the guide for this study. The principals, superintendents, and board members have their perceptions and recommendations of what characteristics a regional technical center should possess for the position of principal. The theoretical framework is a figure that displays the idea that there are leadership characteristics that are specific to the position of a regional technical center principal. The perceptions of the regional principals, superintendents, and board members will be analyzed and compared to show similarities and differences, if any, in opinions of the necessary leadership characteristics. Upon completion of this study, the results should provide data that will give valuable insights into the characteristics of an effective regional technical center principal.



*Figure 1.* The Conceptual Framework

## Research Questions

Research Question 1: What characteristics do technical center principals identify as important for the position of the technical center principal?

Research Question 2: What characteristics do the technical center Superintendents identify as important for the position of the technical center principal?

Research Question 3: What characteristics do the technical center board members identify as important for the position of the technical center principal?

Research Question 4: How do these perceptions of characteristics compare among the principals, superintendents, and the board members?

### **Definition of Key Terms**

The following terms and their definitions have been selected to give a clear meaning of the terms as they are used throughout this study.

**Career and Technical Education (CTE).** Term used to describe competency based education. Career and Technical Education (vocational education) is a large and diverse educational enterprise, spanning both secondary and postsecondary education. Career and technical education (CTE) encompasses a tremendous number of programs designed to prepare students for employment and for living (Kosloski, 2013).

**Instructional Leadership.** Is defined by two core functions: providing direction to teachers and exercising influence over instruction (Seashore-Louis, Leithwood, Wahlstrom, & Anderson, 2010).

**Joint Control School Board.** School Board members who serve the participating counties who govern the regional technical center. Other terms used in this study are School Board and Board of Trustees.

**No Child Left Behind.** NCLB stands for No Child Left Behind, which refers to the No Child Left Behind Act of 2001, a federal law passed under the George W. Bush administration. NCLB represents legislation that attempts to accomplish standards-based education reform (Lewis, 2014).

**Principal.** For the purpose of this research, the term principal is used to describe the individual responsible for instructional and managerial leadership in the school. In two of the regional technical centers, both New Horizons Regional Education Centers, the administrator is not listed as a principal but as a director.

## **Delimitations and Limitations**

Delimitations are those factors that are under the control of the researcher. In this study, the following delimitations are recognized.

1. The data are limited to those collected from the regional public school technical centers serving the Commonwealth of Virginia for the 2014-15 school year.
2. The study participants are limited to principals, superintendents, and school boards. Teachers, students and community members are not part of the study.

Limitations are those factors that cannot be controlled by the researcher. The limitations for this study include the following.

1. The researcher will rely on participants to provide honest feedback.
2. The study will be limited to the possibility that principal responses may be biased due to the nature of the study being about the individual's current position

## **Summary**

“Effective education leadership makes a difference in improving learning. How do high-quality leaders achieve this impact? By setting directions – charting a clear course that everyone understands, establishing high expectations and using data to track progress and performance. By developing people – providing teachers and others in the system with the necessary support and training to succeed” (Seashore-Louis, K., Leithwood, K., Wahlstrom, K., & Anderson, W., 2010, p 2). Improving how we hire and monitor the position of the regional technical center principal of the Commonwealth of Virginia is not only important for the field of leadership but for the field of career and technical education.

This study added to findings on the sought after characteristics of a regional technical center principal in the Commonwealth of Virginia. This study also aids superintendents and Joint Control School Board Members who are dedicated to the promotion of the programs offered at the regional technical centers and to the field of career and technical education and who are responsible for the hiring of and supervising of regional technical center principals.

## **Organization of the Study**

This dissertation is organized into five chapters. Chapter one includes the introduction, statement of the problem, purpose of the study, significance of the study, conceptual framework, research questions, definition of terms, limitations, summary, and an organization of the study. Chapter 1 describes why there is a need to study the characteristics of a regional technical center principal in the Commonwealth of Virginia and how this information may be helpful to the field of education, career and education and educational leadership. Chapter two provides an introduction to the chapter along with the search procedures. Chapter two also includes a review of literature on educational leadership, the role of the principal, characteristics of school principal, ISLLC Standards, needed skills and competencies for CTE administrators, licensure, the lack of technical center training programs, the historical perspective of CTE, future trends of CTE, regional technical center attributes, the technical center instructor, technical center curriculum, summary of the literature, and conclusions. Chapter two gives the background of various career and technical education components that deal with and affect the position of the regional technical center principal. Chapter three describes the methodology including the research design, description of population, instrumentation, data collection strategies, data analysis, and a summary. Chapter three establishes the design of how this study was constructed. Chapter four reports the data collected and provides an analysis of the data. Chapter four reports response Rates, results of data collection, list emergent themes, and gives a summary of analysis. Chapter four also displays various tables that compare these data in a format that allows for comparison amongst the participating groups. Chapter five includes a review of the study, summary of the findings, implications for practice, recommendations for further research, and reflections and analysis.

## **Chapter Two**

### **Review of Literature**

The purpose of the literature review is to identify the research related to educational leadership, generally, and specifically to career and technical education. The subsequent study includes organized and collected data that assists in forming a list of effective characteristics of technical center principals. The study will examine the characteristics that principals, superintendents, and Joint Control School Board Members perceive as being indicative of an effective regional technical school principal. The uniqueness of this research study dealt with examining leadership qualities from the leadership position of a principal at a technical school in the Commonwealth of Virginia. The results provide insight to those responsible for principal preparation programs and those developing professional education activities for principals whose careers lay in the area of career and technical education.

#### **Introduction**

This literature review presents literature and research on educational leadership, the role of the principal, characteristics of the principal, eligibility of a principal, historical perspective of Career and Technical education, the technical center curriculum, the needed skills and competencies for career and technical administrators, the technical center instructor, career and technical education administrative training programs, populations of the study, summary of the literature, and a conclusion. Searches were conducted using search terms: leadership, career and technical education, principal training programs, and principal characteristics. These searches resulted in 55 studies, journals, and articles between the years of 1970 and 2014. The articles were furthered narrowed to 46 to focus on leadership, career and technical education, principal training programs, and principal characteristics.

#### **Search Procedures**

The literature search was conducted using primarily databases accessible through the Virginia Tech Libraries. Specific search engine databases included:

1. ERIC Education Recourses Information
2. Proquest's Dissertations and Theses
3. Education/ejournals

#### 4. Journal, digital libraries, and archive university libraries, Virginia Tech

In addition to searches conducted using Virginia Tech databases, searches were also conducted using the websites that houses documents produced by the United States Department of Education and select state government websites. Specific sites used to collect research included:

1. Carl D. Perkins Career and Technical Education Act of 2006 (US 109<sup>th</sup> Congress)
2. Virginia Department of Education – [www.doe.virginia.gov](http://www.doe.virginia.gov)

Sixty one entries, out of the seventy four various articles, journals, and books used to search for relative information have been listed in the references.

### **Educational Leadership**

According to Bass (1990), effective leadership is one of the world's oldest preoccupations and a universal phenomenon in humans. From 1938 to 1985, there were 29 different definitions and styles of democratic leadership. These various definitions describes leadership in general. Luthans (1998) reviewed eight different democratic leadership styles drawn from classic studies and theories of leadership. These different definitions and styles indicate that there has been no clear, well-developed definition of democratic leadership (Gastil, 1994). According to Evans and Teddie (1993) many research studies point to the building principal as the most critical leadership determinant in educational change. Evans and Teddie (1993) noted that the building principals are change facilitators. They are responsible for bringing about change in the school relating to culture, instruction, and personnel.

According to Cotton (2003), strong administrative leadership is a key component of schools with high student achievement. Many leadership traits and behaviors are positively related to student achievement, attitudes, and social behavior. Principals of high-achieving schools are effective in the following areas, among others: safe and orderly school environment; goals focused on high levels of student learning; high expectations of students; self-confidence, responsibility, and perseverance; visibility and accessibility; positive and supportive school climate; communication and interaction; interpersonal support; community outreach and involvement; rituals, ceremonies, and other symbolic actions; shared leadership and staff empowerment; instructional leadership; norm of continuous improvement; classroom

observations and feedback to teachers; teacher autonomy; support of risk taking; and professional development opportunities and resources.

According to Davis (1998), school leadership is a social endeavor that depends upon the nature and quality of human interactions and relationships. In fact, the inability to establish and maintain positive and productive relationships with stakeholders is the single most frequent reason why principals lose their jobs (Davis, 1998). Similarly, Goleman, Boyatkis, and McKee (2002) found that the most effective leaders are those who possess high levels of emotional and social intelligence. They further suggest that a failure to master the technical aspects of school leadership, although not unimportant, is generally less important to a leader's job stability and success than a failure to build strong relationships.

### **The Role of the Principal**

According to Dubois (2012),

The principal disciplined children who misbehaved and awarded certificates to those with perfect attendance, but to most students the person running the school was usually a shadowy figure, someone lurking on the periphery of their day-to-day educational lives. In the wake of school reform during the last decade, however, the role of the principal has changed dramatically. What took place was a sudden seismic shift in expectations by legislators and the public (p. 1).

Dubois (2012) also suggested that new skills, for which the administrators had not been prepared, were needed in response to this change in accountability.

### **Characteristics of School Principal**

According to Hopkins (2008), a survey of 43 principals identified what they considered to be the top ten traits of school leaders. Those traits included:

1. Has a stated vision for the school and a plan to achieve that vision;
2. Clearly states goals and expectations for students, staff, and parents;
3. Is visible -- gets out of the office; is seen all over the school;
4. Is trustworthy and straight with students and staff;
5. Helps develop leadership skills in others;

6. Develops strong teachers; cultivates good teaching practice;
7. Shows that he or she is not in charge alone; involves others;
8. Has a sense of humor;
9. Is a role model for students and staff; and
10. Offers meaningful kindnesses and kudos to staff and students. (p. 1)

In *Leader or Manager: What's the Difference?* Robinson (2010) described the managerial tasks that take up a majority of a principal's time as "taking care of stuff" (p. 1). He further indicates "Managers are not asked to take the initiative. They are asked to take care of the day-to-day stuff of doing business" (p. 1).

Cherry (2013), indicated that, as the democratic leader, a principal should include all staff members when possible in all major school and staff related decisions. He gives three characteristics of democratic leadership: 1) Group members are encouraged to share ideas and opinions, even though the leader retains the final say over decisions; 2) Members of the group feel more engaged in the process; and 3) Creativity is encouraged and rewarded (p. 2).

Cherry (2013) also stated, "Democratic leadership, also known as participative leadership, is a type of leadership style in which members of the group take a more participative role in the decision-making process" (p. 3). The role of members of the group included sharing ideas and opinions along with being engaging and creative.

Brookover and Lezotte (1982) stated the role of instructional leader is a relatively new concept that emerged in the early 1980's, which called for a shift in emphasis from principals being managers or administrators to instructional or academic leaders. This shift was influenced largely by research, which found that effective schools typically had principals who stressed the importance of instructional leadership.

Lezotte and Bancroft (1985) stated:

An effective school is able to demonstrate both quality and equity in its program outcomes. Americans continue to expect their public schools to provide an opportunity for every student to obtain a quality education and to ensure that each student is offered equal educational opportunity (p. 27).

Whitaker (1997), who wrote about instructional leadership and principal visibility, identified four skills essential for instructional leadership:

1. Principals need to be a *resource provider*. It is not enough for principals to know the strengths and weaknesses of their faculty, but also recognize that teachers desire to be acknowledged and appreciated for a job well done.
2. Principals need to be an *instructional resource*. Teachers count on their principals as resources of information on current trends and effective instructional practices. Instructional leaders are tuned-in to issues relating to curriculum, effective pedagogical strategies, and assessment.
3. Principals need to be good *communicators*. Effective instructional leaders need to communicate essential beliefs regarding learning such as the conviction that all children can learn and no child should be left behind.
4. Principals need to create a *visible presence*. Leading the instructional program of a school means a commitment to living and breathing a vision of success in teaching and learning. This includes focusing on learning objectives, modeling behaviors of learning, and designing programs and activities for instruction (p. 156).

There is a wealth of research about principal leadership. Researchers have acknowledged, however, that knowing what to do and being able to do it are two different skill sets (Huff, 2009). For example, knowing that effective communication is a key skill for principals in helping teachers improve does not mean that principals know how to communicate effectively. Additionally, while principals may believe they are effectively communicating, the participants in that communication may not agree. Assuming that principals desire to perform effectively in their roles, formative and summative feedback from those in the school environment, including supervisors and subordinates, is important for principals to assess how well their performance is meeting the expected standards of performance and the goals of the organization (Smither, London, & Reilly, 2005). The 2005 study was a follow up study from a 1995 Smither study evaluating the state of multisource feedback practice. The current article assesses progress in the field, but the author presents data that states practitioners should not expect large, widespread performance improvement after employees receive multisource feedback.

Despite the extensive research and knowledge that exists about leadership skills, principals' leadership characteristics, styles of leadership, traits, and behaviors, student achievement continues to fall short of expectations (U. S. Department of Education, 2010). In particular, this continues to be true regarding the academic achievement of students enrolled in career and technical education schools. Career and technical education participants at the secondary level have "less advantaged educational backgrounds than nonparticipants" (U.S. Department of Education, 2008, p. xi).

### **ISLLC Standards**

The ISSLC (Interstate School Leaders Licensure Consortium) Standards, recently revised and re-issued by the Council of Chief State School Officers (2008), attempt to link the school leadership research tradition to policy. The list of standards, reproduced in Appendix A, synthesizes a set of ideas about what is most important for school leaders and for what they should be held accountable. The standards say what is to be done, but leave open how this is to be accomplished.

Standard One states that, "An education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders." Teachers want to be included in the development and implementation of the school vision and mission. They want their voices to be heard and to have shared input in the direction of the school. This form of collaboration brings the teachers together for unity, clarity and accountability.

Standard Two notes that, "An education leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth." Teachers want to work in an environment of trust. They want to feel secure, valued, and appreciated. Effective principals will incorporate collaboration of teacher input on many levels especially when the input will have a direct impact on student learning in the classroom.

Standard Three states that, "An education leader promotes the success of every student by ensuring management of the organization, operation, and resources for a safe, efficient, and effective learning environment." Teachers want an effective leader who will include them in the decision making process, but will also know when a decision must be made by the principal

alone. An effective leader will take on the responsibility to ensure the school is operating smoothly and that the teachers have the necessary resources to support student learning. In order to promote the success of every student a principal will provide teachers time to focus on quality instruction with their colleagues to promote high level learning.

Standard Four notes that, “An education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources.” Teachers want a principal who is knowledgeable about the latest trends in education, can analyze data and stay current on the relevant educational research. Effective leaders will share this information with teachers while continuing to support their needs within the classroom. As well, effective leaders are visible to all stakeholders in the school and community.

Standard Five states that, “An education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner.” Teachers want a principal who is fair and just with everyone. An effective principal will not show favoritism among staff or students; thereby, valuing the uniqueness in all. As well, teachers want a principal who holds all staff members accountable for student success.

Standard Six notes that, “An education leader promotes the success of every student by understanding, responding to, and influencing the political, social, economic, legal, and cultural context.” Teachers want a principal who is an advocate for all stakeholders.

The ISLLC Standards help keep principals focused on student achievement and staff needs. As well, the ISSLC Standards establish performance expectations of effective leaders and can assist in the facilitation of curriculum development and personal accountability. Therefore, these policy standards can influence and drive training courses and principal programs, as well as, support literature and further research on effective leadership.

According to *Leadership for Learning: Making the Connections among State, District and School Policies and Practices* (Wallace Foundation, 2006), there are three core system elements (namely standards, training, and conditions) that determine the quality of school leadership. Adequate training and the right mix of incentives and conditions are needed to help facilitate strong leadership. But the most important element is “standards that spell out clear expectations about what leaders need to know and do to improve instruction and learning and that form the basis for holding them accountable for results.”

## Needed Skills and Competencies for CTE Administrators

Different school administrators deal with different functions within their job responsibilities. Wenrich and Wenrich (1974) stated the functions of administration within a vocational setting included curriculum and program planning; management of instruction; student development services; personnel administration; fiscal and physical planning and management; building and constituency; and evaluation, accountability, and research.

Bentley (1977) explained the different areas that vocational administrators should pay attention to for operating a successful vocational education program. According to Bentley, vocational administrators need to be able to,

Organize an advisory committee, determine community needs, prepare facilities, purchase and install equipment, locate and obtain funding, prepare proposals, evaluate, recruit, and train vocational personnel, develop or select curriculum, establish rapport with teachers, develop budgets and fiscal management strategies, perform periodic program evaluations and promote and update programs (p. 96).

In an article written by Callen (2013), *Role of Leadership in Vocational & Training*, vocational education and training institutions cater to a wide age range of individuals, including older adults returning to school after extended periods of absence looking to learn a new career. With that in mind, administrative leaders must present to prospective students a balanced curriculum with clear expectations and results. Administrative leaders also have a responsibility to their faculty. Callen (2012) further clarified that leadership is not the same thing as management—leadership is guidance and example of chosen strategies and expectations; management is regulation of funds, supervision of staff and general upkeep of an institution.

McGough and Finch (1991) who authored the book, *Administering and Supervising Occupational Education*, reported that, for vocational administrators to be effective, they have to effectively perform administrative, supervisory, and leadership activities and responsibilities that are central to vocational education. The authors defined the roles of vocational education leaders from a three-dimensional standpoint: the human dimension, the environmental dimension, and the task dimension. McGough and Finch (1991) identified the four basic elements of the task dimension as planning, development, management, and evaluation. Because today's

occupational education leader must often deal with problems and concerns from a conceptual as well as an experiential base, the content focuses on both of these areas.

Based on the research and findings of the previously cited researchers, the required skills of a career and technical education administrator include the skills of curriculum and program planning; management of instruction; student development services; personnel administration; fiscal and physical planning and management; building and constituency; and evaluation, accountability, and research. They must also understand the makeup of the curriculum and understand the ever-changing world in regards to competencies of the various career and technical education programs.

### **Licensure**

To be eligible to become a school administrator in the public school system of the Commonwealth of Virginia one must be licensed in many endorsement instructional areas, complete a higher education level program in educational leadership, have the necessary experience, and fill out the appropriate documentation. While there are several routes to the endorsement, there is no differentiation between the different levels of instructional leadership such as elementary, secondary, and technical.

Currently, the Commonwealth of Virginia higher education educational leadership programs do not include any certificates or degrees that focus on Technical School Principal certification; however, other states have documentation on how to achieve technical center administrative certification. According to the University of Kentucky education website (2014), the University of Kentucky offers two certificates specific to leadership for vocational education. They are the Vocational School Principal certification and the certification for Vocational Supervision and Coordination. The Vocational School Principal program at the University of Kentucky is designed for students who have completed or will complete a Master's degree program, who have a minimum of two years teaching experience in a vocational area, and who are seeking certification for employment as Principal of a Technology Center, a vocational school that enrolls secondary students.

According to the North Carolina Department of Education website (2014) there is a licensing requirement to become a Career and Technical Education Director. A candidate must have a minimum of two years in Career and Technical Education programs. They must have

examples of supervisory and administrative experience: program area director (secondary, elementary, curriculum, EC, AIG, testing/accountability, ESL, student services, human resources, technology, assistant / associate superintendent, superintendent, assistant principal, or principal). The program would include a total of 9 semester hours of coursework with a minimum of 6 semester hours per school year (or the total number if fewer than six) is required from the following elective courses to continue in this position. Course topics would include: Career and Technical Education Program Planning and Organization, Evaluation and Supervision in Career and Technical Education, Philosophy and Administration of Career and Technical Education, School Finance, School Law, and Work-based Learning Induction. The 80-hour Career and Technical Education Director Induction program approved by the North Carolina Department of Public Instruction, Division of Career and Technical Education is required. The 80-hour CTE Director Induction program includes topics such as the CTE Instructional Management System, Using Data for Performance Acceleration, and Implementing the Revised Bloom's Taxonomy Curriculum.

### **Lack of Technical Center Principal Training Programs in the Commonwealth of Virginia**

Understanding the differences in leadership, staff, and responsibilities between comprehensive and vocational schools is critical information that leads to a discussion of one of the current issues that technical instructors and principals are facing. In contrast to the many higher education preparation programs that prepare school leaders for traditional school leadership, preparation programs for non-comprehensive high school leaders are mostly non-existent. Non-comprehensive high schools can be alternative schools or technical schools. Price (2009), who wrote *We Can Do It: Preparing Leaders to Lead in Alternative Education Schools*, stated that traditional leadership preparation is being circumvented by the offerings provided through local efforts and those offered by a growing number of on line programs. He also pointed to an increase in online educational leadership programs. His study focused on alternative education programs.

Moss and Liang (1990) reported that vocational education programs did not have the number of leaders that were urgently needed, nor was there a systematic effort to develop additional leaders. The study by Moss and Liang, prepared for the National Center for Research in Vocational Education, confirmed the importance of leadership development in vocational

education on grounds that there is a consensus among practitioners that the field now lacks an adequate number of leaders and is making almost no systematic effort to develop them.

Davis and Leon (2011), who wrote “How Not To Prepare School Principals”, expressed in the article the importance of having internships and mentoring apprenticeships. Nevertheless, too many programs persist on adhering to antiquated policies and practices that rely more on theories of pedagogy than theories of andragogy and problem-based approaches to learning. Granted, some will reasonably argue that programs such as mentored apprenticeships are costly and that a thematically integrated curriculum subordinates content knowledge for problem-solving ability. The article stressed the importance of knowing ineffective as well as effective practice.

The principals’ perceptions of their own preparation programs are not encouraging. In a report by Public Agenda for the Wallace Foundation written by Farkas, Johnson, and Duffett (2003), 925 members of the National Association of Secondary School Principals expressed opinions through a mail survey. The survey only included middle and high school principals and not technical center principals. As a whole, these principals expressed negative opinions about their preparation and the education they received in their graduate school programs to prepare them for leadership positions. Only four percent of those surveyed felt that their graduate school programs were most valuable in preparing them for their positions. Davis, Darling-Hammond, LaPointe, and Meyerson (2005) conducted a review of research and went as far as to state that “principal candidates and existing principals are often ill-prepared and inadequately supported to organize schools to improve learning while managing all of the demands of the job” (p. 4).

Most principal preparation programs in the Commonwealth of Virginia are generic in their coursework and cater to the position of the principal and not to a particular building level leadership. Very little emphasis is placed on career and technical education instruction and leadership. According to Rodman’s (2012) *A Study of Learning-Centered Skills of Principals in Career and Technical Education Schools*, there are two avenues for increasing the effectiveness of schools through the leadership of principals. One avenue is to better prepare future principals through improvement in principal preparation programs. A second avenue is to improve the skills of the principals currently practicing in the field (p. 7).

## **Historical Perspective of Career and Technical Education**

Floyd (2005) stated that career and technical education as we know it today has its roots in the founding of the United States. From the start, a strong knowledge base and skill set were considered important for citizens. As early as the 1770s the right to a free public education for children was stressed in schools because of a need to educate future leaders. The manual training school, developed and promoted by Woodward at Washington University in St. Louis in the 1880s, was seen by many businessmen as a replacement for the apprenticeship system. In the early 19th century, the workforce and the public education system started to work together to create a continuous stream of workers for different jobs. Schools specializing in training students to enter a certain area of the workforce started to open their doors, creating the basic framework for career and technical education. The idea started to spread to women's colleges in the 1840s. The beginning of public high schools was explored to continue to educate citizens. Anderson (1926) noted that at the beginning of the 20<sup>th</sup> century, manual training came under increasing pressure to become vocational training, producing conflict between its founders and its financial supporters.

According to the National Education for Educational Research (2008), the Carl D. Perkins Vocational and Technical Education Act was first authorized by the federal government in 1984 and reauthorized in 1998 and 2006. This act aimed to increase the quality of CTE in the United States in order to assist the economy. Congress reauthorized the Carl. D. Perkins Career and Technical Education Improvement Act in July 2006.

The Virginia Department of Education (2014) website states the following about the historical perspective of career and technical education. The new vocational education is career related, more sophisticated, and more academic. Many courses offered in years past focused more on the trade industry. In the year 2014, the courses are offered with a concentration on professional certifications, industry standards, collegiate academics, and employment competencies. The programs of career and technical education in the Commonwealth of Virginia are agriculture, business and information technology (formerly business education), family and consumer sciences (formerly home economics), marketing (formerly distributive education), health, trade and industry (T&I), and technical/communications. The Virginia clusters are modeled after the National clusters as part of the Carl Perkins Act.

## **Future Trends of Career and Technical Education**

According to Viviano (2012), it is crucial for supervisors of Career and Technical Center (CTCs) to be aware of the current trends in business and industry as well as future trends. In 2009, the Executive Office of the Presidents' Council of Economic Advisors constructed a report that examined the workforce for the next 10 years (The White House: Preparing the workforce of today for the jobs of tomorrow, n.d.). There were seven major findings that would be of concern to CTE supervisors and educational leaders in general.

Healthcare is forecasted to remain a large source of job growth in the labor market. The construction industry is projected to eventually recover and add jobs in the coming decade. The Bureau of Labor Statistics Occupational Outlook Handbook (2014) forecasts higher than average growth in the following: carpenters 20 percent, electricians 23 percent, electrician helpers 37 percent, home health aides 48 percent, physician assistants 38 percent, installation workers, mechanical 47 percent, and plumbers 26 percent. Employers value workers who can think critically and solve problems. Occupations that employ large shares of workers with postsecondary education and training are growing faster than others. The U.S. post-high school education and training system provides valuable skills to those who complete programs in high-growth fields. The need is crucial for more effective systems in: a solid early childhood, elementary, and secondary education system that ensures students have strong basic skills; institutions and programs that have goals that are aligned and curricula that are cumulative; close collaboration between training providers and employers to ensure that curricula are aligned with workforce needs; flexible scheduling; appropriate curricula, and financial aid designed to meet the needs of students; incentives for institutions and programs to continually improve and innovate; and accountability for results.

Viviano (2012), who wrote a journal article about 21<sup>st</sup> century leadership in career and technical education, also added that becoming familiar with the aforementioned information will help guide program and curriculum decisions in CTE for the next 10 years. Career and Technical Education (CTE) is on track to fill voids in local industries. Building Maintenance programs have sturdy enrollment and curriculum as well as all other areas of construction. CTE teachers teach students to be analytical and problem solvers. Approximately 80 percent of CTE students are going on to some postsecondary experience and our teachers are forerunners in academic integration and stress the importance of numeracy and literacy skills in today's workforce.

The Virginia Department of Education department of Career and Technical Education periodically updates their curriculum in their various clusters. Committees are formed that include business partners, educators, and program advisors. Course competencies are evaluated and updated to reflect the most up to date knowledge and skills needs to master by the students enrolled in the CTE courses.

The Virginia Department of Career and Technical education has also added graduation requirements for those students receiving standard diplomas. Students receiving a standard diploma must obtain a credential. Many of these credentials can be obtained through CTE courses.

The Virginia Department of Education website (2014) defines a credential as:

1. State-issued Professional license, required for entry into a specific occupation as determined by a Virginia state licensing agency (Licensed Practical Nurse (LPN), Cosmetology);
2. Full Industry Certification, from a recognized industry, trade, or professional association validating essential skills of a particular occupation (A+ CompTIA, Microsoft Certified Professional (MCP));
3. Pathway Industry Certification, which may consist of entry-level exams as a component of a suite of exams in an industry certification program leading toward full certification (Automotive Service Excellence, (ASE), Microsoft Office Specialist (MOS)); or
4. Occupational competency assessment, a national standardized assessment of skills/knowledge in a specific career and/or technical area, (NOCTI).

### **Regional Technical Center Attributes**

Regional technical centers have been established to combine career and technical education resources, programs, and instructional staff from neighboring school systems. Listed below are some of the school demographics, amount of schools divisions supported, number of technical center school board members, and number of superintendents of the ten regional technical centers. This collection of information will touch on some of the dynamics of the regional technical centers.

Amelia-Nottoway Technical Center is located in Jetersville, Virginia. The center serves the two counties of Amelia and Nottoway. The school board is made up of three board members from each locality. The two superintendents rotate annually the directorship.

Bridging Communities Regional Career and Technical Center is located in New Kent, Virginia and serves the counties of Charles City, King and Queen, King William, Middlesex, and New Kent. Each of the five division Superintendents serve on the Advisory Council along with a Rappahannock Community College representative. One school board member from each of the five divisions serves on the Board of Control. Every two years, the lead superintendent changes (alphabetical order).

Charlottesville-Albemarle Technical Education Center is located in Charlottesville, Virginia and serves the students of the Albemarle County Public Schools and Charlottesville City Public Schools. The Center Board is set up with three members from each School Board plus the two superintendents. The chair of the Board is from the City one year and County the next; Vice Chair is from the opposite municipality.

Jackson River Technical Center is located in Covington, Virginia and serves two school systems, Alleghany County and Covington City. The superintendents each serve two years in a row before the other superintendent moves into that role. The JRTC Joint Board has seven members and is set up with four members from the Alleghany County School Board and three members from the Covington City School Board.

Massanutten Technical Center is located in Harrisonburg, Virginia and serves the students of Harrisonburg City and Rockingham County. The school board is made up eleven board members with six coming from Rockingham County and five from Harrisonburg City. The two superintendents are also on the board.

New Horizons Regional Education Center has two campuses. The Butler Farm campus is located in Hampton, Virginia and the Woodside Campus is located in Newport News, Virginia. NHREC is operated by six school divisions - Gloucester, Williamsburg James City County, Poquoson City, York County, Hampton City, and Newport News City with the NHREC Board of Trustees comprised of one school board member representative from each division. NSREC also serves students from Isle of Wight County in their Governor School. One Superintendent serves as the Superintendent of Record.

Northern Neck Technical Center is located in Warsaw, Virginia. The center serves six school systems from the counties of Essex, Lancaster, Northumberland, Richmond, and Westmoreland, along with the public school system of the Town of Colonial Beach. The center has one board member from each school division serve on the Joint Control Board. Each year, a superintendent is chosen to oversee the technical center.

The Pruden Center for Industry & Technology is a regional public school serving Isle of Wight County and Suffolk City schools and is located in Suffolk, Virginia. The school board is made up three members from each participating school system along with the two superintendents. One superintendent oversees the technical center in a two year basis.

Rowanty Technical Center is located in Carson, Virginia and is a jointly operated facility serving Dinwiddie, Prince George, and Sussex County Public Schools. There are three superintendents who rotate the superintendent on record every two years. There are two members from each school division board who make up the Rowanty Board of Trustees.

Valley Career and Technical Center is located in Fishersville, Virginia and is part of the public school systems of Augusta County, Staunton, and Waynesboro. Three superintendents oversee the center while one superintendent is in charge. The Board of Trustees is made up of two board members from each division.

### **The Technical Center Instructor**

The technical perspective and job descriptions of the instructors at these institutions are important to understand as they influence the decisions principals make. According to the Virginia Department of Education website, to be a qualified vocational/technical teacher the curriculum certification only requires a high school diploma and a minimum number of years of relevant work experience. Programs such as nurse aide, computer systems, engineering, and others require an associate's or bachelor's degree in a related occupational area, though this can sometimes be completed simultaneously with the certificate program.

Mahadevan and Peterson (2013) conducted a DACUM (Developing a curriculum) survey that identified thirteen critical tasks performed by professional career and technical instructors. Those tasks are instruction, rigorous and relevant curriculum, assessment and evaluation, managing student behavior, managing learning environment, student growth and development, career development, serving special populations, communication, professional development,

policy compliance, inter-departmental collaboration, and external collaboration. A DACUM survey contains three premises and they are: experts in the field/profession can describe and define their job more accurately than anyone else, an effective way to describe a job is to define the tasks that experts in the field perform, and all tasks, in order to be performed correctly, demand certain knowledge, skillsets, and attitudes.

Kosloski (2013), a professor from Old Dominion University, stated in his foundations of career and technical education course that the CTE teacher is more than a teacher. He or she is also a guidance counselor, a public relations person, an administrator, a club sponsor, and an on-the-job coordinator. In many school systems the CTE coordinator is called a "*Teacher-Coordinator*" when he or she coordinates the cooperative education method of instruction. This does not mean that coordination is more important than teaching. Teaching is the foundation of the program, but all the other functions enhance the program and administrators expect them to be performed.

### **Technical Center Curriculum**

Technical centers in the Commonwealth of Virginia provide programs comprised from various career clusters. For this reason, Virginia has adopted the nationally accepted structure of career clusters, career pathways, and sample career specialties or occupations. According to the Virginia Department of Education website (2014),

A Career Cluster is a grouping of occupations and broad industries based on commonalities. Within each career cluster, there are multiple career pathways that represent a common set of skills and knowledge, both academic and technical, necessary to pursue a full range of career opportunities within that pathway – ranging from entry level to management, including technical and professional career specialties. Based on the skills sets taught, all CTE courses are aligned with one or more career clusters and career pathways.

There are sixteen career clusters and they are; Agriculture, Food & Natural Resources, Architecture & Construction, Arts, A/V Technology & Communications, Business Management & Administration, Education & Training, Finance, Government & Public Administration, Health Science, Hospitality & Tourism, Human Services, Information Technology, Law, Public Safety,

Corrections & Security, Manufacturing, Marketing, Science, Technology, Engineering & Mathematics (STEM), Transportation, and Distribution & Logistics (Virginia Department of Education, 2014).

### **Summary of Review of Literature**

The Review of Literature includes a focus on the aspects of the principal's leadership and responsibility roles. A few themes emerged from the literature. The roles of the principal positions vary in regards to responsibilities, but share many of the same expectations. There was no single comprehensive list of leadership characteristics that emerged from the review of literature, but the various lists included many of the same core characteristics. Some of those core characteristics include: administrative, supervisory, relationship, and leaderships skills. Upon the review of the literature, additional research on the leadership characteristics of the technical center principal is needed. This study investigated the perceptions of the technical center principal, the superintendent, and Joint Control Board Members of the technical centers among the ten regional technical centers in the Commonwealth of Virginia.

Throughout the research there were few studies and information on regional technical centers in regards to the administrative leadership qualities. The literature did include many topics on career and technical education and the various aspects of programs and program curricula in the field of career and technical education.

The literature review addressed research on educational leadership, the role of the principal, characteristics of principals, administrative licensure, history of career and technical education, technical center curriculum, the CTE instructor, and principal administrative training programs. Through the studied literature much information is presented about the importance of the technical center principal and their responsibilities. However, little literature was found on characteristics needed to be perceived as being an effective principal at a technical center.

The study strived to organize and collect data that assists in forming a list of effective characteristics of technical center principals. The study examined the characteristics that principals, superintendents, and Joint Control School Board Members perceive as being indicative of an effective technical school principal. The uniqueness of this research study examined leadership qualities from the leadership position of a principal at a technical school in the Commonwealth of Virginia. The results have also provided insight to those responsible for

principal preparation programs and those developing professional education activities for principals whose careers lay in the area of career and technical education. The information for research is based on collections from the ten regional technical centers. The information was collected through the surveys given to the principals, superintendents, and participating board members.

## **Chapter Three**

### **Methodology**

The purpose of this study was to identify leadership characteristics of technical school principals as perceived by technical center school principals, the superintendents, and the centers Joint Control Board. This study has gathered and evaluated perspectives from practicing regional technical center principals, the regional technical center superintendents, and the Joint Control Boards to determine similarities and differences among these groups of individuals.

The research questions that served as the basis of this study are as follows:

Research Question 1: What characteristics do technical center principals identify as important for the position of the technical center principal?

Research Question 2: What characteristics do the technical center superintendents identify as important for the position of the technical center principal?

Research Question 3: What characteristics do the technical center Joint Control Board members identify as important for the position of the technical center principal?

Research Question 4: How do these perceptions of characteristics compare among the principals, superintendents, and the board members?

### **Research Design**

This study utilized a survey instrument to investigate the leadership characteristics of regional technical centers in the Commonwealth of Virginia. The research design was quantitative. Quantitative non-experimental research was conducted to investigate relationships between the variables. Descriptive statistics were utilized to report the points of central tendency and dispersion while inferential statistics will be utilized to make inferences about populations from the surveyed sample. Descriptive statistics, including mode, mean, and standard deviation, for the technical center principals, the superintendents, and the centers' Joint Control Board, were computed and reported in rank order of mean item responses for each of the characteristics included on the surveys. Rank order was used to average, convert into percentages, and total the 13 characteristics that were listed on the second section of the survey. The survey respondents were asked to rank in order of importance the characteristic they believed to be necessary for the position of technical center principal. The most essential/important received the numerical value of one (1) while the least important characteristic received the numerical value of thirteen (13).

These data were imported into the Statistical Package for the Social Sciences (SPSS) for data analysis purposes. Descriptive and inferential statistics were used to analyze the responses. Means and standard deviation are the two descriptive statistics used to indicate the variance of the survey responses. The mean responses for each of the survey items were reported in rank order.

Creswell (2003) recommended using six qualitative data analysis steps (a) organize and prepare the data; (b) read through all the data; (c) organize the material into chunks (coding); (d) generate a description of the categories and themes; (e) determine how the description and themes will be presented in the narrative; and (f) interpret the data.

According to Maher & Kur, (1983), a Likert scale is usually used for closed-ended questions and the quantitative statistical data is easily collected and analyzed by computer software programs. Before the statistics were calculated the data were coded, weighted, and verified. If the statistics are used for descriptive purposes, the central tendency (mean, median, mode) and variability (standard deviation, variance) are important.

In a similar study by Thornton (2009), *A Comparative Study of Superintendent Leadership characteristics of Virginia School Superintendents*, the author used similar statistical analysis to determine the leading characteristics of Superintendents. In Dr. Thornton's study, he surveyed superintendents along with the division board chair to evaluate leadership characteristics of superintendents. In 15 of the 17 Likert-scale survey statements, the composite mean score for superintendents was higher than that of responding school board chairpersons. This finding could be a reflection of and influenced by the fact that superintendents are more sensitive to the realities and expectations of the position based on their practical experience. The second part of the survey consisted of a list of ten characteristics for the respondents to rank in order of importance from 1 to 10, with 1 representing the most important characteristic. The finding that appeared most evident was that no single characteristic received a composite mean score between 1 and 2 from either group. The survey for the current research used a similar structure to determine the characteristics of regional technical principal leadership as perceived by principals, superintendents, and school board members.

## **Description of Population**

The population of this study was comprised of ten of the eleven regional technical centers. They included the principals, the superintendents, and the regional technical center Joint Control Board members. The Northern Neck Technical Center was not surveyed because the researcher was employed at the center. To alleviate any bias from the study the committee and author chose to not include this center in the study. Including the Northern Neck Technical Center in the survey might have caused the surveyed population cause to feel or show inclination for one or more of the survey responses.

The study focused on the responses of the other practicing ten regional technical center principals, the superintendents, and their Joint Control Board members during the 2014-15 school year. The names and addresses of the ten regional technical center principals, superintendents, and board members were obtained from the technical center principals and the names and addresses of the regional technical centers were obtained from the Virginia Department of Education Career and Technical Education regional technical center directory website. The link can be found in the reference (VDOE, 2015).

The author chose the population based on the level of school experience and the direct influence of hiring technical center principals. Superintendents and Joint School Board members have a direct role in supervising and hiring regional technical center principals.

## **Instrumentation**

The survey instrument in this study was a creation of the author who had analyzed various other instruments for length, clarity, value, and consistency. The survey instrument was created from research of what effective educational leaders do in their positions of principals along with the educational needs of regional technical centers in Commonwealth of Virginia. Fifteen different educational leaders and principals reviewed the survey instrument for validity and clarity. After improvement suggestions were received, the information was used to revise the questions. Statements in the survey were specific to the areas of instruction, experience, NCLB, certification testing, impact on achievement, characteristics, management, vision, ability to persuade, leadership, curriculum, relations, instructional technology, media relations, and school and community politics.

As part of the instrumentation validation process, the following questions were asked to each educational leader who reviewed the survey. In designing the validation process questions, Fowler's (1998) validation questions were applied by the author.

1. Are the written instructions clear and concise?
2. Is the content of the statements on the survey clear and understandable?
3. Did you have any difficulty in rating each of the thirteen characteristics?
4. Do you have any comments or suggestions for improvement to the survey instrument?

The survey instrument was organized into two sections, utilizing two response structures. The first section of the survey consisted of 15 statements regarding different characteristics. Respondents were asked to employ a five-point Likert scale response to rate each item, where the values corresponded to the level of agreement with the statement one (1) represents Strongly Disagree, two (2) represents Disagree, three (3) represents Neutral, four (4) represents Agree, and five (5) represents Strongly Agree. The second section of the survey consisted of a list of 13 characteristics for the respondents to rank in order of importance from 1 to 13, with 1 representing the most important characteristic.

The fifteen statements were identified from educational leadership characteristics listed in various researched leadership studies. An overview of the characteristics outlined in the ISLLC standards along with characteristics researched from the various studies were the main source for creating the questions.

In designing the survey, Fowler's (1998) five principles for developing effective survey instruments were applied by the author. These five principles are as follows.

1. The strength of survey research is asking people about their first-hand experiences.
2. Questions should be asked one at a time.
3. A survey question should be worded so that all respondents are answering the same question.
4. All respondents should understand the kind of answer that constitutes an adequate answer to a question.

5. Survey instruments should be designed so that the tasks of reading questions, following instructions, and recording answers are as easy as possible for the respondents (pgs. 365-6).

### **Data Collection Strategies**

The findings of this study were based upon data collected by means of the survey questionnaire described in the prior section. Cover letters and the survey questionnaires were mailed to the principals of the ten regional technical centers (see Appendices B through J) upon approval of the Institutional Review Board (IRB). The researcher obtained approval from the Virginia Polytechnic Institute and State University's Institutional Review Board and the approval letter is included (see Appendix K). A copy of the Human Rights Subject Protection Certificate is included (see Appendix L). A telephone script that was used when contacting the regional technical centers in order to inform the practicing principals and to obtain the needed contact information of the respondents is found in Appendix M. The survey questionnaires were completed by the regional technical center principals, the superintendents, and their Joint Control Board members of the regional technical centers of the Commonwealth of Virginia. Each mailing included a self-addressed, stamped envelope to expedite the return of the survey instrument. In addition, each questionnaire was coded for tracking purposes. This code was used to track the returned surveys, and the coding information was destroyed once the research process was completed and the survey materials were received. A follow-up letter, a second copy of the initial survey instrument, and another self-addressed stamped envelope were mailed to any regional technical center principal, superintendent, and Joint Control Board Member not responding within a three-week period from the date of the original mailing.

### **Response Rates**

The surveys were mailed to the principals (see Appendix B), superintendents (see Appendix C), and Joint Control Board members (see Appendix D) of the regional technical centers in the Commonwealth of Virginia and the data analyses presented in this chapter are comprised of the data from this population. A total of 10 out of 10 responses were received from the survey population of the Commonwealth of Virginia regional technical center principals. This represents a survey return rate of 100%. All of the surveys were completed correctly and

were completed by the survey respondents. No additional follow-up surveys were required for the population of the regional technical center principals due to the high return rate.

The study surveys were mailed to the participating superintendents of the regional technical centers of the Commonwealth of Virginia. A total of 24 of 26 responses were received from the survey population of the Commonwealth of Virginia regional technical center superintendents. This represents a survey return rate of 92%. All of the surveys were completed correctly and were completed by the survey respondents. Two additional follow-up surveys were mailed for the population of the regional technical center superintendents with no additional surveys received.

The study surveys were mailed to the participating Joint Control Board Members of the regional technical center of the Commonwealth of Virginia. A total of 34 of 49 responses were received from the survey population of the Commonwealth of Virginia regional technical center Joint Control Board Members. All of the surveys were completed correctly and were completed by the survey respondents. A second set of follow-up surveys was required for the population of the regional technical center Joint Control Board Members to obtain the reported return rate. Thirty respondents submitted their surveys within the first two weeks and four surveys were received after the second set of follow-up surveys was mailed. This represents a survey return rate of 69%.

## **Data Analysis**

The data were entered from the three groups into the SPSS program. A response containing a five-point Likert scale where 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree was utilized. Each response was assigned a numerical value between 1 and 5 that corresponds with the Likert scale response value. Data from the 15 Likert scale survey statements of each responding group of individuals were totaled, combined, and averaged. In addition, data from the rank ordering response structure were totaled, combined, averaged, and converted into percentages. These data were then imported into the Statistical Package for the Social Science (SPSS) for data analysis purposes. Responses to the survey items were analyzed using descriptive and inferential statistics. Descriptive statistics included means and standard deviations to indicate variability of responses, and reported rank order of mean item responses for each survey item.

Research Question 1: What characteristics do technical center principals identify as important for the position of the technical center principal? The survey responses were analyzed by looking at the means of the first 15 items on the Likert-scale survey. The survey items consisted of statements about different characteristics and leadership roles that a technical center principal might utilize in their position. The mean responses were generated for the first section of the questionnaire and rank order data were collected and analyzed for the second section of the questionnaire. Each group surveyed has separate tables and include a summary of the results. The results display the mean and standard deviation.

Research Question 2: What characteristics do the technical center Superintendents identify as important for the position of the technical center principal? The survey responses were analyzed by looking at the means of the first 15 items on the Likert-scale survey. The survey items consisted of statements about different characteristics and leadership roles that a technical center principal may utilize in their position. The mean responses were generated for the first section of the questionnaire and rank order data were collected and analyzed for the second section of the questionnaire. Each group surveyed has separate tables and include a summary of the results.

Research Question 3: What characteristics do the technical center board members identify as important for the position of the technical center principal? The survey responses were analyzed by looking at the means of the first 15 items on the Likert-scale survey. The survey items consist of statements about different characteristics and leadership roles that a technical center principal may utilize in their position. The mean responses were generated for the first section of the questionnaire and rank order data were collected and analyzed for the second section of the questionnaire. Each group surveyed has separate tables and include a summary of the results.

Research Question 4: How do these perceptions of characteristics compare among the principals, superintendents, and school board members? ANOVA's were used to display the means from the first portion of the survey and the final phase of the analysis process compared the rank ordering of the characteristics of the technical center principals. The survey recipients, in section two, were asked to rank in order of importance 13 regional technical center characteristics, with the value of 1 corresponding to the most important characteristic and 13 the

least important characteristic. The ratings were rank-ordered based upon the composite mean of each individual leadership characteristics rating.

### **Summary of Methodology**

The research methodology utilized in this study was a quantitative design. Such a design allowed the researcher to use numerical indices and statistics to summarize, describe, and explore relationships among characteristics. In addition, the use of a survey instrument administered to all regional technical center principals, the superintendents, and their Joint Control Board members in the Commonwealth of Virginia generated credible and reliable data for analysis. Since the results of this study were completed and validated they can serve as another source of scholarly research to assist educational leaders in becoming more informed on those leadership characteristics that are perceived to be essential for technical center principals.

## **Chapter Four**

### **Analysis of Data**

The purpose of this study was to identify leadership characteristics of technical school principals as perceived by technical center school principals, the superintendents, and the centers' Joint Control Board. This study has gathered and evaluated perspectives from practicing regional technical center principals, the regional technical center superintendents, and the Joint Control Boards to determine similarities and differences among these groups of individuals.

The research questions that served as the basis of this study is as follows.

Research Question 1: What characteristics do technical center principals identify as important for the position of the technical center principal?

Research Question 2: What characteristics do the technical center superintendents identify as important for the position of the technical center principal?

Research Question 3: What characteristics do the technical center Joint Control Board members identify as important for the position of the technical center principal?

Research Question 4: How do these perceptions of characteristics compare among the principals, superintendents, and the board members?

This chapter is organized in the following manner: response rates, results of data collection, and analysis.

### **Results of Data Collection**

Research Question 1: *What characteristics do technical center principals identify as important for the position of the technical center principal?* The fifteen survey items on the survey were analyzed by using descriptive statistics, including mean and standard deviation. For each survey statement the respondents rated their level of agreement with each statement using a five-point Likert-type scale (1 = Strongly Disagree; and 5 = Strongly Agree). The mean and standard deviation for each item from the principal survey responses can be found in Table 1.

Table 1 displays the analysis of the results of the fifteen responses from the regional technical center principals. The data reveal that most of the items received mean scores between 4 and 5, which states that the principals agree with the importance of the statements.

With a more detailed analysis, the data reveal that the top four statements with the highest mean scores are:

1. Statement six, personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal. (M = 5, SD = 0.00);
2. Statement seven, developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times (M = 4.9, SD = .32);
3. Statement twelve, finance is one of the areas of responsibility inherent in the position of technical center principal (M = 4.7, SD = .48); and
4. Statement fourteen, A technical center principal ensures that curriculum design, instructional strategies, and learning environments integrate appropriate technologies to maximize teaching and learning (M = 4.7, SD = .48) received the highest mean responses from principals.

In contrast, the four statements that received the lowest composite means scores are:

1. Statement ten, persuasion is the ultimate tool for a technical center principal of public education (M = 3.1, SD = .99);
2. Statement two, experience in career and technical education is essential for the position of a technical center principal (M = 3.5, SD = 1.08);
3. Statement nine, the technical center principal's ability to articulate an instructional vision has a significant relationship to the county's division wide academic success (M = 3.6, SD = .84); and
4. Statement three, technical center principal leadership has been influenced by the accountability mandates associated with Virginia's Standards of Learning (SOL) and No Child Left Behind (NCLB) (M = 3.8, SD = .79).

The three statements that received the highest degree of variance in mean responses are;

1. Statement two (SD = 1.08), experience in career and technical education is essential for the position of a technical center principal;

2. Statement ten (SD = .99), persuasion is the ultimate tool for a technical center principal of public education; and
3. Statement eleven (SD = .94), technical center principals are perceived to be leaders of the various communities as opposed to being led by the community.

Those three statements that received the lowest degree of variance in mean responses are;

1. Statement six (SD = .000), personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal;
2. Statement seven (SD = .32), developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times; and
3. Statement five (SD = .42), technical center principals along with their school board members can have an impact on achieving and sustaining school wide success.

Table 1 shows the results of the mean scores and the standard deviation amongst the principals' responses to the survey.

Table 1

*Mean Responses of Regional Technical Center Principals to the Survey*

Statement	Principals (n = 10)	
	Mean	Standard Deviation
1. A technical center principal must be an instructional leader.	4.4	.70
2. Experience in career and technical education is essential for the position of a technical center principal.	3.5	1.08
3. Technical center principal leadership has been influenced by the accountability mandates associated with Virginia's Standards of Learning (SOL) and No Child Left Behind (NCLB).	3.8	.79
4. Technical center principal leadership has been influenced by the accountability mandates associated with certification testing.	4.3	.67
5. Technical center principals along with their school board members can have an impact on achieving and sustaining school wide success.	4.2	.42

(table continued)

Table 1 (*continued*)

Statement	Principals (n = 10)	
	Mean	Standard Deviation
6. Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal.	5	0
7. Developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times.	4.9	.32
8. Establishing a clear vision for teaching and learning is critical to technical center principal leadership.	4.6	.52
9. The technical center principal's ability to articulate an instructional vision has a significant relationship to the county's division wide academic success.	3.6	.84
10. Persuasion is the ultimate tool for a technical center principal of public education.	3.1	.99
11. Technical center principals are perceived to be leaders of the various counties as opposed to being led by the community.	4	.94
12. Finance is one of the areas of responsibility inherent in the position of technical center principal.	4.7	.48
13. A technical center principal should inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.	4.4	.52
14. A technical center principal ensures that curriculum design, instructional strategies, and learning environments integrate appropriate technologies to maximize teaching and learning.	4.7	.48
15. A technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also are adept at developing both permanent and temporary coalitions with often disparate community groups.	4.5	.53

Table 1 displays the mean responses of regional technical center principals to the survey.

Question sixteen was an open-ended question that asked each individual in the group to include additional characteristics. What other characteristics are needed for the CTE leader of a regional technical center that has not been addressed?

The following list contains the answers from question sixteen from the principals' group. Each number is from an individual respondent.

1. Able to lead a disparate group of seasoned professionals who may be new to education.

2. Able to foster a positive, cohesive, and productive school climate.
3. Able to wear many hats and prioritize effectively.
4. Ability to develop and maintain a positive relationship with division leadership, community leadership, business, and college representatives.
5. Must be able to problem solve, delegate, and be good at personnel management.

The survey instrument included a second section that asked regional technical center principals to rank in order of importance thirteen principal leadership characteristics, with the value of 1 corresponding to the most important characteristic and the thirteenth characteristic being the least important.

Commonwealth of Virginia regional technical center principals ranked the following characteristics as the four most important: (1) Visionary Leader ( $M = 2.2$ ,  $SD = 1.87$ ), (2) Instructional Leader ( $M = 2.9$ ,  $SD = 1.66$ ), (3) Team Builder ( $M = 5.1$ ,  $SD = 3.18$ ) and (4) School/Community Advisory Builder ( $M = 5.3$ ,  $SD = 2.11$ ). The following characteristics were ranked by the principals as the four least important characteristics for regional technical center principals: (1) Facilities ( $M = 11$ ,  $SD = 2.75$ ), (2) Career and Technical Education Degree ( $M = 10.2$ ,  $SD = 2.62$ ), (3) School Law Experience ( $M = 9.2$ ,  $SD = 3.22$ ) and (4) Politically Astute ( $M = 8.4$ ,  $SD = 2.88$ ). The highest degree of variability among the composite mean scores of principals occurred in the characteristic, career and technical instructional background, ( $M = 3.5$ ,  $SD = 1.08$ ), while the lowest degree of variability among the composite mean scores of principals occurred with the lowest ranked characteristic Instructional Leader ( $M = 2.9$ ,  $SD = 1.66$ ).

The mode, or most frequently occurring value in the range of data, rated the top two characteristics as (1) visionary, with the number one rating five times and (2) facilities, with the number 13 ranking four times. The characteristic of principals by principals that received the highest percentage of number one rankings was Visionary at 55% (5/9).

Table 2 displays the rank order of principal leadership characteristics. These data give an alternate source of information to determine principal characteristics that are deemed most important to the least important.

Table 2

*Ranked Means of Regional Technical Center Principal Leadership Characteristics by Principals*

Characteristic	Principals (n = 10)		
	M	SD	Ranked M
Visionary Leader	2.2	1.87	1
Instructional Leader	2.9	1.66	2
Team Builder	5.1	3.18	3
School/Community Advisory Builder	5.3	2.11	4
School Finance Experience	6.5	1.9	5
Effective School Board Relations	6.7	2.5	6
Career and Technical Instructional Background	7	4.24	7
Intellect	7.9	3.67	8
Politically Astute	8.4	2.88	9
School Law Experience	9.2	3.22	10
Professional Development Experience	8.6	3.84	11
Career and Technical Degree	10.20	2.62	12
Facilities	11	2.75	13

Table 2 displays the ranked means of regional technical center principal leadership characteristics by principals.

Research Question 2: *What characteristics do the technical center Superintendents identify as important for the position of the technical center principal?* The fifteen survey items on the survey were analyzed by using descriptive statistics, including means and standard deviation. For each survey statement the respondent rated their level of agreement with each statement using a five-point Likert-type scale (1 = Strongly Disagree; and 5 = Strongly Agree). The means and standard deviation for each item from the superintendent survey responses can be found in Table 3.

With a more detailed analysis, the data from table 3 reveals that the top four statements with the highest mean scores to be are:

1. Statement six; Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal (M = 4.9, SD = .34);
2. Statement seven; developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times (M = 4.81, SD = .44);
3. Statement eight; establishing a clear vision for teaching and learning is critical to technical center principal leadership (M = 4.76, SD = .44);
4. Statement nine; the technical center principal's ability to articulate an instructional vision has a significant relationship to the county's division wide academic success (M = 4.62, SD = .65) received the highest mean responses from superintendents.

In contrast, the four statements that received the lowest composite means scores were:

1. Statement eleven; technical center principals are perceived to be leaders of the various counties as opposed to being led by the community (M = 3.05, SD = 1.14);
2. Statement ten: persuasion is the ultimate tool for a technical center principal of public education (M = 3.24, SD = .78);
3. Statement three; technical center principal leadership has been influenced by the accountability mandates associated with certification testing (M = 3.76, SD = .61);
4. Statement two; experience in career and technical education is essential for the position of a technical center principal (M = 3.90, SD = .78).

The three statements that received the highest degree of variance in mean responses were:

1. Statement eleven (SD = 1.14), technical center principals are perceived to be leaders of the various counties as opposed to being led by the community;
2. Statement twelve (SD = .88), finance is one of the areas of responsibility inherent in the position of technical center principal;
3. Statement fifteen (SD = .82), a technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also being adept at developing both permanent and temporary coalitions with often disparate community groups.

The three statements that received the lowest degree of variance mean responses were:

1. Statement six ( $SD = .34$ ), personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal;
2. Statement seven ( $SD = .44$ ), developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times;
3. Statement eight ( $SD = .44$ ), establishing a clear vision for teaching and learning is critical to technical center principal leadership.

Table 3 displays the analysis of the results of the fifteen responses from the regional technical center superintendents. The data reveals that most of the items received mean scores between 3 and 5 which means the superintendents agree with the importance of the statements.

Table 3

*Mean Responses of Superintendents to the Survey*

Statement	Superintendents (n = 24)	
	Mean	Standard Deviation
1. A technical center principal must be an instructional leader.	4.57	.72
2. Experience in career and technical education is essential for the position of a technical center principal.	3.90	.78
3. Technical center principal leadership has been influenced by the accountability mandates associated with Virginia's Standards of Learning (SOL) and No Child Left Behind (NCLB).	3.76	.61
4. Technical center principal leadership has been influenced by the accountability mandates associated with certification testing.	4.48	.71
5. Technical center principals along with their school board members can have an impact on achieving and sustaining school wide success.	4.57	.58
6. Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal.	4.90	.34
7. Developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times.	4.81	.44
8. Establishing a clear vision for teaching and learning is critical to technical center principal leadership.	4.76	.44
9. The technical center principal's ability to articulate an instructional vision has a significant relationship to the county's division wide academic success.	4.62	.65
10. Persuasion is the ultimate tool for a technical center principal of public education.	3.24	.78
11. Technical center principals are perceived to be leaders of the various counties as opposed to being led by the community.	3.05	1.14
12. Finance is one of the areas of responsibility inherent in the position of technical center principal.	4.43	.88
13. A technical center principal should inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.	4.52	.66
14. A technical center principal ensures that curriculum design, instructional strategies, and learning environments integrate appropriate technologies to maximize teaching and learning.	4.52	.59
15. A technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also are adept at developing both permanent and temporary coalitions with often disparate community groups.	4.38	.82

Table 3 displays the mean responses of superintendents to the survey

Question sixteen is an open-ended question that asked of each group to include additional characteristics. What other characteristics that are needed for the CTE leader of a regional technical center that have not been addressed?

The following list contains the answers from question 16 from the superintendents group. Each number is from an individual respondent.

1. Must be aware of national trends in technical education.
2. Must have a keen sense of the business needs and opportunities in the community.
3. Must engage students and their parents in marketing the potential of a good technical education.
4. Collaboration with comprehensive schools and programs.
5. Ability to address program evaluation using metrics, data, and research.
6. Ability to do web design
7. Articulate with colleges regarding dual enrollment courses.
8. Recruiting students and staff
9. Building relations in the community
10. Cooperation with superintendents
11. Technical center principals must possess the ability to communicate with various constituencies – multiple school division administrators, boards, business and community leaders, staff, and students.
12. Technical center leaders should provide each student with high-quality studies and support each teacher's programs.
13. Clear understanding of changing regulations and standards at the state and federal levels.
14. Working with technical center boards and understanding the politics of a county and city.

The survey instrument included a second section that asked regional technical center superintendents to rank in order of importance thirteen principal leadership characteristics, with the value of 1 corresponding as the most important characteristic and the thirteenth characteristic being the least important. Table 4 displays the rank order of principal leadership characteristics.

This data give an alternate source of information to determine principal characteristics that are deemed most important to least important.

Commonwealth of Virginia regional technical center superintendents ranked the following characteristics as the four most important:

1. Instructional Leader (M = 2.76, SD = 2.79)
2. Visionary Leader (M = 3.9, SD = 2.82)
3. Career and Technical Instructional Background (M = 5.24, SD = 3.49)
4. School/Community Advisory Builder (M = 5.48, SD = 2.5)

The following characteristics were ranked by the superintendents as the four least important characteristics for regional technical center principals:

1. School Law Experience (M = 10.29, SD = 3.23)
2. Facilities (M = 10.14, SD = 2.75)
3. Career and Technical Degree (M = 9.33, SD = 3.97)
4. Politically Astute (M = 9.0, SD = 3.02)

The highest degree of variability among the composite mean scores of principals occurred in the characteristic, Career and Technical Degree, (M = 9.33, SD = 3.97), while the lowest degree of variability among the composite mean scores of principals occurred with the lowest ranked characteristic school/community advisory builder (M = 5.48, SD = 2.5).

The mode, most frequently occurring value in a range of data, rating of the two characteristics were (1) Instructional Leader with 12 number one ratings and (2) Visionary with the five number two rankings. The characteristic of principals perceived by superintendents that received the highest percentage of number one rankings was Instructional Leader at 50% (12/24).

Table 4 displays the ranked means and standard deviations of superintendent survey responses of regional technical center principal leadership characteristics.

Table 4

*Ranked Means of Regional Technical Center Principal Leadership Characteristics by Superintendents*

Characteristic	Superintendents (n = 24)		
	M	SD	Ranked M
Instructional Leader	2.76	2.79	1
Visionary Leader	3.9	2.82	2
Career and Technical Instructional Background	5.24	3.49	3
School/Community Advisory Builder	5.48	2.5	4
Team Builder	5.62	2.81	5
School Finance Experience	6.67	3.29	6
Intellect	7.33	2.63	7
Effective School Board Relations	7.38	3.48	8
Professional Development Experience	7.86	2.66	9
Politically Astute	9.00	3.02	10
Career and Technical Degree	9.33	3.97	11
Facilities	10.14	2.75	12
School Law Experience	10.29	3.23	13

Table 4 displays the ranked means of regional technical center principal leadership characteristics by superintendents.

Research Question 3: *What characteristics do the technical center joint control board members identify as important for the position of the technical center principal?* The fifteen survey items on the survey were analyzed by using descriptive statistics, including means and standard deviation. For each survey statement the respondent rated their level of agreement with each statement using a five-point Likert-type scale (1 = Strongly Disagree; and 5 = Strongly Agree). The means and standard deviation for each item from the Joint Control Board member’s survey responses can be found in Table 5.

Table 5 displays the analysis of the results of the fifteen responses from the regional technical center Joint Control Board members. The data reveals that most of the items received mean scores between 3 and 5 which states that the Joint Control Board members agree with the importance of the statements.

With a more detailed analysis, the data reveals that the top four statements with the highest mean scores to be are:

1. Statement six; Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal (M = 4.94, SD = .24)
2. Statement five; Technical center principals along with their school board members can have an impact on achieving and sustaining school wide success (M = 4.76, SD = .43)
3. Statement fifteen; A technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also are adept at developing both permanent and temporary coalitions with often disparate community groups (M = 4.74, SD = .45)
4. Statement seven; Developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times (M = 4.65, SD = .49) and statement eight; Establishing a clear vision for teaching and learning is critical to technical center principal leadership (M = 4.65, SD = .49).

In contrast, the three statements that received the lowest composite mean scores were;

1. Statement # 11; Technical center principals are perceived to be leaders of the various counties as opposed to being led by the community (M = 3.26, SD = .99),
2. Statement ten; Persuasion is the ultimate tool for a technical center principal of public education (M = 3.5, SD = 1.16),
3. Statement three Technical center principal leadership has been influenced by the accountability mandates associated with Virginia's Standards of Learning (SOL) and No Child Left Behind (NCLB) (M = 3.91, SD = .75).

The three statements that received the highest degree of variance in mean responses were;

1. Statement ten (SD = 1.16), persuasion is the ultimate tool for a technical center principal of public education,

2. Statement eleven (SD = .99) technical center principals are perceived to be leaders of the various counties as opposed to being led by the community,
3. Statement two (SD = .79), experience in career and technical education is essential for the position of a technical center principal.

Those three statements that received the lowest degree of variance mean responses were;

1. Statement six (SD = .24), personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal,
2. Statement five (SD = .43), Technical center principals along with their school board members can have an impact on achieving and sustaining school wide success,
3. Statement fifteen (SD = .45), a technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also are adept at developing both permanent and temporary coalitions with often disparate community groups.

Table 5 displays the analysis of the results of the fifteen responses from the regional technical center Joint Control Board members. The mean scores along with the standard deviations are listed for each statement.

Table 5

*Mean Responses of Joint Control School Board Members to the Survey*

(Joint Control School Board Members n = 35)

Statement	Mean	Standard Deviation
1. A technical center principal must be an instructional leader.	4.68	.53
2. Experience in career and technical education is essential for the position of a technical center principal.	4.26	.79
3. Technical center principal leadership has been influenced by the accountability mandates associated with Virginia's Standards of Learning (SOL) and No Child Left Behind (NCLB).	3.91	.75
4. Technical center principal leadership has been influenced by the accountability mandates associated with certification testing.	4.47	.61

(table continued)

Table 5 (continued)

(Joint Control School Board Members n = 35)

Statement	Mean	Standard Deviation
5. Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal.	4.94	.24
6. Developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times.	4.65	.49
7. Establishing a clear vision for teaching and learning is critical to technical center principal leadership.	4.65	.49
8. The technical center principal's ability to articulate an instructional vision has a significant relationship to the county's division wide academic success.	4.44	.70
9. Persuasion is the ultimate tool for a technical center principal of public education.	3.50	1.16
10. Technical center principals are perceived to be leaders of the various counties as opposed to being led by the community.	3.26	.99
11. Finance is one of the areas of responsibility inherent in the position of technical center principal.	4.38	.55
12. A technical center principal should inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.	4.59	.50
13. A technical center principal ensures that curriculum design, instructional strategies, and learning environments integrate appropriate technologies to maximize teaching and learning.	4.56	.56
14. A technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also are adept at developing both permanent and temporary coalitions with often disparate community groups.	4.74	.45

Table 5 – displays the mean responses of joint control school board members to the survey

Question sixteen is an open-ended question that asked of each group to include additional characteristics. What other characteristics that are needed for the CTE leader of a regional technical center that have not been addressed?

The following list contains the answers from question 16 from the Joint Control School Board Members group. Each number is from an individual respondent.

1. Be aware of research trends in industry and business for future disciplines to teach/offer.
2. Step outside the box sometimes.

3. Ask for funding and be able to back the request up with data.
4. Recruit, sell programs, and beat the bushes.
5. It is essential that the CTE leader be proficient in navigating through the multi governmental entities.
6. Create a working relationship with businesses.
7. Have excellent communication skills and have the ability to collaborate with all stakeholders (school division, parents, superintendents).
8. CTE leaders need to have a good relationship with students and local businesses to help advance current programs and help students pursue career opportunities.
9. Good at presentations
10. Needs to be a people person.
11. They must have the ability to relate to and inspire students.
12. Developing relationships with business and industry leaders in the communities served.
13. The value of a technical education must be shown to students to overcome the stigma often felt by students who feel college is the only way to success!
14. Friendly, approachable, and have a pleasant personality.
15. Knowing your county government members so you can relate the centers needs to them so they will understand requests. Plus knowing the technical needs of the community businesses.
16. Build relationships with parents and children to be sure to move in a supportive direction.

The survey instrument included a second section that asked regional technical center Joint Control School Board Members to rank in order of importance thirteen principal leadership characteristics, with the value of 1 corresponding to be the most important characteristic and the thirteenth characteristic being the least important. Table 6 displays the rank order of principal leadership characteristics. This data gives an alternate source of information to determine principal characteristics that are deemed most important to the least important.

Commonwealth of Virginia regional technical center Joint Control School Board Members ranked the following characteristics as the four most important:

1. Visionary Leader (M = 3.35, SD = 2.59)
2. Instructional Leader (M = 3.94, SD = 3.14)
3. Career and Educational Instructional Background (M = 4.79, SD = 3.12)
4. Team Builder (M = 5.15, SD = 2.69)

The following characteristics were ranked by the Joint Control School Board Members as the four least important characteristics for regional technical center principals:

1. School Law Experience (M = 11.09, SD = 1.9)
2. Facilities (M = 11.06, SD = 2.28)
3. Politically Astute (M = 8.94, SD = 3.62)

The highest degree of variability among the composite mean scores of principals occurs in the characteristic, Career and Technical Degree, (M = 7.56, SD = 3.76), while the lowest degree of variability among the composite mean scores of principals occurred with the lowest ranked characteristic school/community advisory builder (M = 11.09, SD = 1.9).

The modes of the top two characteristics were (1) Instructional Leader and (2) Vision. The characteristic of principals by Joint Control School Board Members that received the highest percentage of number one rankings was Instructional Leader at 37% (13/35). Vision received the second highest percentage of number one rankings at 31% (11/35).

Table 6 displays the rank order of principal leadership characteristics as surveyed by the Joint Control School Board Members. This data gives an alternate source of information to determine principal characteristics that are deemed most important to the least important.

Table 6

*Ranked Means of Regional Technical Center Principal Leadership Characteristics by Joint Control School Board Members*

Characteristic	Joint Control School Board Members (n = 35)		
	M	SD	Ranked M
Visionary Leader	3.35	2.59	1
Instructional Leader	3.94	3.14	2

(table continued)

Table 6 (continued)

Characteristic	Joint Control School Board Members (n = 35)		
	M	SD	Ranked M
Career and Technical Instructional Background	4.79	3.12	3
Team Builder	5.15	2.69	4
Effective School Board Relations	5.79	2.60	5
School Finance Experience	6.15	3.11	6
School/Community Advisory Builder	6.59	2.73	7
Career and Technical Degree	7.56	3.76	8
Professional Development Experience	7.76	3.06	9
Intellect	8.82	2.82	10
Politically Astute	8.94	3.62	11
Facilities	11.06	2.28	12
School Law Experience	11.09	1.90	13

Table 6 displays the ranked means of regional technical center principal leadership characteristics by joint control school board members

Research Question 4: *How do these perceptions of characteristics compare among the principals, superintendents, and the board members?*

Table 7, provides the side-by-side display of the means of the three survey respondents to the 15 Likert-response survey statements. The mean responses of the three survey respondent groups reveal that the three highest mean responses based on the average of the three groups were:

1. Statement six (4.95) Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal,
2. Statement seven (4.79) Developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times,
3. Statement eight (4.67) establishing a clear vision for teaching and learning is critical to technical center principal leadership.

The mean responses of the three survey respondents groups reveal that the three lowest mean responses based on the average of the three were:

1. Statement ten (3.28) persuasion is the ultimate tool for a technical center principal of public education,
2. Statement eleven (3.44) technical center principals are perceived to be leaders of the various counties as opposed to being led by the community,
3. Statement two (3.89) experience in career and technical education is essential for the position of a technical center principal.

Table 7, provides the side-by-side display of the means of the three survey respondents to the 15 Likert-response survey statements.

Table 7

*Mean Responses of Principal Leadership Characteristics of All Groups*

Characteristic	Principal	Supt.	JCSBM	Average
1. A technical center principal must be an instructional leader.	4.4	4.57	4.68	4.55
2. Experience in career and technical education is essential for the position of a technical center principal.	3.5	3.90	4.26	3.89
3. Technical center principal leadership has been influenced by the accountability mandates associated with Virginia's Standards of Learning (SOL) and No Child Left Behind (NCLB).	3.8	3.76	3.91	3.94
4. Technical center principal leadership has been influenced by the accountability mandates associated with certification testing.	4.3	4.48	4.47	4.42
5. Technical center principals along with their school board members can have an impact on achieving and sustaining school wide success.	4.2	4.57	4.76	4.51
6. Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal.	5	4.90	4.94	4.95

(table continued)

Table 7 (continued)

Characteristic	Principal	Supt.	JCSBM	Average
7. Establishing a clear vision for teaching and learning is critical to technical center principal leadership.	4.6	4.76	4.65	4.67
8. The technical center principal's ability to articulate an instructional vision has a significant relationship to the county's division wide academic success.	3.6	4.62	4.44	4.22
9. Persuasion is the ultimate tool for a technical center principal of public education.	3.1	3.24	3.50	3.28
10. Technical center principals are perceived to be leaders of the various counties as opposed to being led by the community.	4	3.05	3.26	3.44
11. Finance is one of the areas of responsibility inherent in the position of technical center principal.	4.7	4.43	4.38	4.5
12. A technical center principal should inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.	4.4	4.52	4.59	4.50
13. A technical center principal ensures that curriculum design, instructional strategies, and learning environments integrate appropriate technologies to maximize teaching and learning.	4.7	4.52	4.56	4.59
14. A technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also are adept at developing both permanent and temporary coalitions with often disparate community groups.	4.5	4.38	4.74	4.54

Table 7 displays the mean responses of principal leadership characteristics of all groups

In comparing the results of the three populations, an analysis of variance was done, with the resulting *f* values and significance being noted in Table 8. An analysis of variance was done to establish a collection of statistical models used in order to analyze the differences between group means and to establish *f* values to determine if the variances between the means of two populations are significantly different.

Table 8

*F Values and Significance for the Fifteen Survey Statements*

	Statement	F	Sig.
1.	A technical center principal must be an instructional leader.	.766	.469
2.	Experience in career and technical education is essential for the position of a technical center principal.	3.608	.033*
3.	Technical center principal leadership has been influenced by the accountability mandates associated with Virginia's Standards of Learning (SOL) and No Child Left Behind (NCLB).	.381	.684
4.	Technical center principal leadership has been influenced by the accountability mandates associated with certification testing.	.317	.729
5.	Technical center principals along with their school board members can have an impact on achieving and sustaining school wide success.	5.241	.008*
6.	Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal.	.901	.411
7.	Developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times.	1.300	.280
8.	Establishing a clear vision for teaching and learning is critical to technical center principal leadership.	.482	.620
9.	The technical center principal's ability to articulate an instructional vision has a significant relationship to the county's division wide academic success.	7.168	.002*
10.	Persuasion is the ultimate tool for a technical center principal of public education.	.899	.412
11.	Technical center principals are perceived to be leaders of the various counties as opposed to being led by the community.	2.797	.068
12.	Finance is one of the areas of responsibility inherent in the position of technical center principal.	.870	.424
13.	A technical center principal should inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.	.618	.542
14.	A technical center principal ensures that curriculum design, instructional strategies, and learning environments integrate appropriate technologies to maximize teaching and learning.	.448	.641
15.	A technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also are adept at developing both permanent and temporary coalitions with often disparate community groups.	2.482	.091

\* P < .05 Table 8 displays the F values and significance for the fifteen survey statements

Among the 15 statements, twelve statements saw no significant differences. There were only three statements that showed a significant difference at the .05 level.

Statement two, experience in career and technical education is essential for the position of a technical center principal, there was a significant difference at the .05 level between the principal mean rating (3.50) and the Joint Control School Board Members (4.26). Principals didn't feel as strongly about a regional technical center having a background in career and technical education as a needed characteristic as the Joint Control School Board Members. Table 9 displays the analysis of variance of statement two. Table 10 reflects the multiple comparisons that display the mean scores along with the significance levels.

Table 9

*ANOVA - Analysis of Variance of Statement Two, Experience in Career and Technical Education is Essential for the Position of a Technical Center Principal.*

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.990	2	2.495	3.608	.033*
Within Groups	44.951	65	.692		
Total	49.941	67			

\* P < .05

Table 10

*Tukey - Multiple Comparisons for Statement Two, Experience in Career and Technical Education is Essential for the Position of a Technical Center Principal.*

(I) Role	(J) Role	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Principal	Superintendent	-.41667	.31300	.383	-1.1674	.3341
	JCSBM	-.76471	.29916	.034*	-1.4822	-.0472
Superintendent	Principal	.41667	.31300	.383	-.3341	1.1674
	JCSBM	-.34804	.22171	.266	-.8798	.1837
JCSBM	Principal	.76471	.29916	.034*	.0472	1.4822
	Superintendent	.34804	.22171	.266	-.1837	.8798

\*. p<.05

In statement five, technical center principals along with their school board members can have an impact on achieving and sustaining school wide success; there was a significant difference in the mean scores as the principals mean rating (4.2) was significantly lower than the Joint Control School Board Members (4.76). There was a significant difference at the .05 level as there was a .006 significance level. The principals agreed with the statement while the Joint Control School Board Members strongly agreed with the statement. Table 11 displays the analysis of variance of statement five. Table 12 reflects the multiple comparisons that display the means scores with the significance levels.

Table 11

*ANOVA - Analysis of Variance of Statement Five, Technical Center Principals Along with Their School Board Members Can Have an Impact on Achieving and Sustaining School Wide Success*

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.508	2	1.254	5.241	.008*
Within Groups	15.551	65	.239		
Total	18.059	67			

\* P < .05

Table 12

*Tukey – Multiple Comparisons for Statement Five, Technical Center Principals Along with Their School Board Members Can have an Impact on Achieving and Sustaining School Wide Success.*

(I) Role	(J) Role	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Principal	Superintendent	-.38333	.18410	.101	-.8249	.0582
	JCSBM	-.56471	.17596	.006*	-.9867	-.1427
Superintendent	Principal	.38333	.18410	.101	-.0582	.8249
	JCSBM	-.18137	.13040	.352	-.4942	.1314
JCSBM	Principal	.56471	.17596	.006*	.1427	.9867
	Superintendent	.18137	.13040	.352	-.1314	.4942

\*.p<.05

In statement nine, the technical center principal’s ability to articulate an instructional vision has a significant relationship to the county’s division wide academic success, there was a

significant difference in the means scores as the principals mean rating (3.6) was significantly lower than the Superintendent (4.5) and the Joint Control School Board members (4.44) mean ratings. There was significant difference at the .05 level as there was a .001 significance level between the principal and superintendent comparison. There was a significant difference at the .05 level as there was a .004 significance level between the principal and the Joint Control School Board Members. Table 13 displays the analysis of variance of statement nine.

Table 14 reflects the multiple comparisons that display the mean scores with the significance levels.

Table 13

*ANOVA - Analysis of Variance of Statement Nine, the Technical Center Principal's Ability to Articulate an Instructional Vision has a Significant Relationship to the County's Division Wide Academic Success.*

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.193	2	3.597	7.168	.002*
Within Groups	32.616	65	.502		
Total	39.809	67			

\* P < .05

Table 14

*Tukey – Multiple Comparisons for Statement Nine, the Technical Center Principal's Ability to Articulate an Instructional Vision has a Significant Relationship to the County's Division Wide Academic Success.*

(I) Role	(J) Role	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Principal	Superintendent	-.98333	.26662	.001*	-1.6228	-.3438
	JCSBM	-.84118	.25483	.004*	-1.4524	-.2300
Superintendent	Principal	.98333	.26662	.001*	.3438	1.6228
	JCSBM	.14216	.18885	.733	-.3108	.5951
JCSBM	Principal	.84118	.25483	.004*	.2300	1.4524
	Superintendent	-.14216	.18885	.733	-.5951	.3108

\*. p<.05

Table 15, provides a ranked mean of principal leadership characteristics by all respondent groups. The three respondent groups rated their perceived importance of each of the thirteen regional technical center principal leadership characteristics using a rank ordering with one representing the most important leadership characteristic and 13 representing the least important leadership characteristic.

Table 15

*Ranked Mean of Principal Leadership Characteristics by all Groups*

Characteristic	Principals (n = 10)			Superintendents(n = 24)			JCSBM (n = 35)		
	M	SD	Ranked M	M	SD	Ranked M	M	SD	Ranked M
Visionary Leader	2.2	1.87	1	3.9	2.82	2	3.35	2.59	1
Instructional Leader	2.9	1.66	2	2.76	2.79	1	3.94	3.14	2
Team Builder	5.1	3.18	3	5.62	2.81	5	5.15	2.69	4
School/Community Advisory Builder	5.3	2.11	4	5.48	2.5	4	6.59	2.73	7
School Finance Experience	6.5	1.9	5	6.67	3.29	6	6.15	3.11	6
Effective School Board Relations	6.7	2.5	6	7.38	3.48	8	5.79	2.60	5
Career and Technical Instructional Background	7	4.24	7	5.24	3.49	3	4.79	3.12	3
Intellect	7.9	3.67	8	7.33	2.63	7	8.82	2.82	10
Politically Astute	8.4	2.88	9	9	3.02	10	8.94	3.62	11
School Law Experience	9.2	3.22	10	10.29	3.23	13	11.09	1.90	13
Professional Development Experience	8.6	3.84	11	7.86	2.66	9	7.76	3.06	9
Career and Technical Degree	10.2	2.62	12	9.33	3.97	11	7.56	3.76	8
Facilities	11	2.75	13	10.14	2.75	12	11.06	2.28	12

Table 16, provides a ranked average of principal leadership characteristics by all three respondent groups.

Table 16

*Ranked Average of Principal Leadership Characteristics by all Groups*

Characteristic	Average of all groups
Visionary Leader	1.33
Instructional Leader	1.66
Team Builder	4
Career and Technical Instructional Background	4.33
School/Community Advisory Builder	5
School Finance Experience	5.66
Effective School Board Relations	6.33
Politically Astute	6.66
Intellect	8.33
Professional Development Experience	9.66
Career and Technical Degree	10.33
School Law Experience	12
Facilities	12.33

**Question Sixteen Comparisons**

In evaluating the similarities of the responses to question sixteen from the principals, superintendents, and Joint Control School Board Members, there were several comments that were similar amongst the three respondents and were listed in each collection of survey answers. Table 17 reflects these data. The comments that were similar revealed the importance of building relationships with local businesses, good communication with school boards and local government agencies, building relationships with local higher education organizations, and knowing the importance of recruiting students. Other respondents from the superintendents and board members that were not included in the principal responses were the importance of public speaking, being a people person, and knowing career and technical education trends. Principal responses that were not listed on the superintendents and board members responses dealt with understanding how to manage school climate, the importance of managing instructional staff, and the understanding that a principal wears many hats and has many responsibilities.

Table 17

*Characteristic Listed Amongst Multiple Surveyed Populations.*

Additional Characteristics	JCSB	Principals	Supt.
Importance of building relationships with local businesses	X	X	X
Good communication w/ school boards & government agencies	X	X	X
Building relationships with local higher education organizations	X	X	X
Knowing the importance of recruiting students		X	X
Importance of public speaking	X		X
Being a people person		X	X
Knowing career and technical education trends	X		X

Table 17 lists the characteristics listed amongst multiple surveyed populations in the responses to question 16.

Based on question sixteen entries several themes were created amongst the comments of the three populations. The theme that was evident in the principal entries was the importance of dealing with personnel management. Three of the five entries dealt with personnel and whether it is working with the instructional faculty or the various stakeholders such as the administration, businesses, and the community the importance of working with personnel seemed to be a valid recommendation. Personnel management was also a theme from the group of superintendents surveyed. Four entries dealt with the importance of having the ability to communicate to the various stakeholders. A second theme within the superintendent group was the importance of relationships with students and the importance of recruiting students and providing a quality education as that was mentioned three times. The third theme mentioned with the superintendent group was the importance of the principal position understanding regulations and national trends that pertain to guiding a programs evaluation and design. The Joint Control School Board population had two themes. The first theme was having the ability to work with various stakeholders such as school boards, businesses, and the community in building the technical center programs. This theme was mentioned six times in the entries. The second theme that was mentioned three times was the importance of having an approachable personality. The principal position must have a personality that can work with all stakeholders of a technical center.

## **Summary**

The survey responses from the regional technical center principals, regional technical center superintendents, and the regional technical center Joint Control Board of Control of the Commonwealth of Virginia provided an overview of perceived leadership characteristics for the Commonwealth of Virginia's regional technical center principal position. Question sixteen gathered information that may not have been listed within the fifteen questions. Thirteen characteristics were given to the survey participants to rank in order of importance to least important. Chapter five gives detailed findings of the important leadership characteristics as perceived by the three survey groups.

## **Chapter Five**

### **Findings**

This study was designed to determine the characteristics that regional technical center superintendents, Joint Control Board members of regional technical centers, and regional technical center principals consider being important and necessary in the position of a regional technical center principal. This chapter is divided into nine sections. These sections include a review of study, summary of findings, implications for practice, recommendations for further research, and reflections of analysis.

#### **Review of Study**

The purpose of this study was to identify leadership characteristics of technical school principals as perceived by technical center school principals, the superintendents, and the centers Joint Control Board. This study gathered and evaluated perspectives from practicing regional technical center principals, the regional technical center superintendents, and the Joint Control Boards to determine similarities and differences among these groups of individuals.

The data collected answered the following research questions of the study:

Research Question 1: What characteristics do technical center principals identify as important for the position of the technical center principal?

Research Question 2: What characteristics do the technical center superintendents identify as important for the position of the technical center principal?

Research Question 3: What characteristics do the technical center Joint Control Board members identify as important for the position of the technical center principal?

Research Question 4: How do these perceptions of characteristics compare among the principals, superintendents, and the board members?

The principals, superintendents, and Joint Control School Board members of ten of the eleven regional technical centers of the Commonwealth of Virginia were the population selected for this study. A two-section survey questionnaire was used to collect data from the survey recipients. The data collected from the respondent surveys were tabulated, calculated, and analyzed using SPSS software used for data analysis purposes. Descriptive and inferential statistics were used to analyze the responses to the survey statements. A total of 10 principals

(100%), 24 of 26 superintendents (92%), and 34 of 39 Joint Control School Board Members (69%) responded to the survey.

## **Summary of Findings**

**Finding one. Regional technical center superintendents, Joint Control Board Members of regional technical centers, and regional technical center principals ranked visionary and instructional leader characteristics as the highest two.** Among the three populations surveyed there was a consistent ranking of the visionary and instructional leader characteristics as they either were ranked first or second amongst the top two characteristics. Visionary leader was ranked first by the mean average by the principals (2.2) and Joint Control Board Members (3.35) while visionary was ranked second by the superintendents (3.9) respondents. The instructional leader characteristic was ranked first by the mean average by the superintendent group (2.76) and second by the principal (2.9) and Joint Control School Board groups (3.94). The average mean for visionary leader was 1.33 while the instructional leader characteristic had an average of 1.66.

There is a profound interconnectedness between the leader and the whole, and true visionary leaders serve the good of the whole. They recognize that there is some truth on both sides of most polarized issues in our society today (McLaughlin, 2001). A research analysis by Leithwood, Louis, Anderson, and Wahlstrom (2004) confirmed that “leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school” (p. 3). Callen (2012) clarified earlier in chapter two that leadership is not the same thing as management—leadership is guidance and example of chosen strategies and expectations;

**Finding two. Regional technical center Superintendents, Joint Control Board Members of regional technical centers, and regional technical center Principals ranked overseeing facilities as the lowest necessary characteristic.** The facilities characteristic was ranked the lowest amongst all three groups when averaged amongst the respondents. The characteristic ranked thirteenth by principals and twelfth by the superintendent and Joint Control School Board with an average of 12.33. The facilities characteristic did not get a ranking higher than a twelve in either group mean average. Many schools have individuals whose responsibilities include facilities management and however this characteristic ranked very low in importance.

Even though there are studies that reflect poor facilities have an impact on student outcome the three survey respondents didn't list this leadership characteristic of a regional technical center principal as important or not as highly ranked as the other characteristics. A study, written by Cash (1993), examined the relationship between building condition and student achievement in small, rural Virginia high schools. Student scores on achievement tests, adjusted for socioeconomic status, were found to be as much as 5 percentile points lower in buildings with lower quality ratings. Achievement also appeared to be more directly related to cosmetic factors than to structural ones.

**Finding three. Superintendents and Joint Control School Boards ranked having a background or experience in CTE higher than principals ranked that characteristic.** The principal group only ranked having a background in career and technical education seventh while both the superintendent and Joint Control School Board groups ranked the characteristic third. Having a background in Career and Technical Education means having experience in teaching or administration in the CTE field. The mean of the characteristic was ranked a 4.79 by the Joint Control School Board members, while the mean was ranked 7 by the principals and 5.24 by the superintendents. Having a background in career and technical education may be an individual who has had instructional or administrative experience in the field of career and technical education. Superintendents and Joint Control School Board members believe that having this additional experience ranked higher in important characteristics than the principal ranking.

**Finding four. Joint Control Board Members ranked having a career and technical education degree higher than principals and superintendents.** The characteristic of a principal having a degree in career and technical education was ranked higher by the Joint Control School Board members than both the principal and superintendents groups. The mean of the characteristic was ranked a 7.56 by the Joint Control School Board members. The mean was 10.2 by the principals and 9.33 by the superintendents. To obtain a position of principal at one of the regional technical centers in the commonwealth of Virginia one must hold a degree in educational administration and meet all the additional endorsement requirements. One does not need a degree in career and technical education. However, the Joint Control School Board members believed that having a degree in career and technical education would be beneficial to the position.

**Finding five. Superintendents and Joint Control Board Members rated the principal’s ability to articulate an instructional vision as having a relationship to academic success higher than principals rated that characteristic.** The mean average of the principal for statement nine, which states the technical center principal’s ability to articulate an instructional vision has a significant relationship to the county’s division wide academic success, was 3.6 and was significantly lower than the mean average of the superintendent of 4.62 and Joint Control Board Members of 4.44. Standard Two of the ISLLC standards (see Appendix A) states, “An education leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth. (Council of Chief State School Officers, 2008).”

**Finding six. Superintendents, Joint Control Board Members, and Principals rated statement ten, persuasion is the ultimate tool for a technical center principal of public education, mean responses the lowest.** The mean score for statement ten, persuasion is the ultimate tool for a technical center principal of public education, are the lowest of all of the fifteen statements for the three survey respondents. Persuasion is not seen as a desired tool for the regional technical center principal. The mean responses were all ranked in the threes as the rankings were 3.1 for principal, 3.24 for Superintendent, and 3.50 for Joint Control Board Members and the average amongst all three groups was 3.28.

According to Bentley (1977), vocational administrators need to be able to; Organize an advisory committee, determine community needs, prepare facilities, purchase and install equipment, locate and obtain funding, prepare proposals, evaluate, recruit, and train vocational personnel, develop or select curriculum, establish rapport with teachers, develop budgets and fiscal management strategies, perform periodic program evaluations and promote and update programs (p. 96).

**Finding seven. Superintendents, Joint Control Board Members, and Principals rated statement six; personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal, mean responses the highest.** Principals had a mean average of 5, superintendents had a mean average of 4.90, and the Joint Control School Board Members have a mean average of 4.94. The overall average amongst the groups is 4.95.

Standard Five of the ISLLC standards (see Appendix A) states, “An education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner.” Teachers want a principal who is fair and just with everyone. An effective principal will not show favoritism among staff or students; thereby, valuing the uniqueness in all. As well, teachers want a principal who holds all staff members accountable for student success.

**Finding eight. Superintendents and Principals indicated that personnel management was a valuable skill in one of the themes found in question sixteen.** Three of the five principal entries dealt with having strong relationships with personnel. Statements listed dealt with the regional principal working with the instructional faculty, and various stakeholders such as the administration, businesses, and the community. The importance of working with personnel seemed to be a valid recommendation. Personnel management was also a theme from the group of superintendents surveyed. Four entries dealt with the importance of having the ability to communicate to the various stakeholders. Based upon this data, having a good line of communications between stakeholders is important to the success of a regional technical center principal and it is important to communicate between these parties.

Standard one of the ISLLC standards (see Appendix A) states that, “An education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders (Council of Chief State School Officers, 2008).”

**Finding nine. Having the ability to work with various stakeholders such as school boards, businesses, and the community in building the technical center programs was a theme found by the Joint Control School Board population.** This theme was mentioned six times in the entries amongst the Joint Control School Board member entries pertaining to question 16, “What other characteristics that are needed for the CTE leader of a regional technical center that have not been addressed?” Building relationships amongst the many outside stakeholders helps to strengthen the overall career and technical education programs. Standard Four of the ISLLC standards notes that, “An education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources (Council of Chief State School Officers, 2008).” Teachers want a principal who is knowledgeable about the latest trends in education, can analyze data and stay current on the relevant educational research. Effective

leaders will share this information with teachers while continuing to support their needs within the classroom. As well, effective leaders are visible to all stakeholders in the school and community.

### **Implications for Practice**

The results of this study have led to formulate the following implications for practice in the field of career and technical education as it pertains to regional technical centers in the Commonwealth of Virginia.

**1. Joint control school board members, superintendents, and human resources personnel should include visionary and instructional leadership characteristics as part of the questioning techniques of the interview and selection process.**

Finding one reflected that visionary and instructional leader was consistently in the top two leader characteristics of all three surveyed respondents. The characteristics identified as important can be used to enhance human resource hiring practices and also assist also with performance evaluation tools. Below are the top four characteristics amongst all three respondents. The mean average amongst all four characteristics is listed by each characteristic. The top four characteristics are visionary (2.7), instructional leader (3.2), team builder (5.29), and being a good school/community advisory builder (5.79) for the position of principal at a regional technical center in the Commonwealth of Virginia. CTE principals and supervisors of today should be leaders more than managers. A manager controls people and initiatives but a leader inspires and encourages a collaborative approach. A leader empowers teachers and fosters self-governance (Blase & Blase, 2001). The top four characteristics listed are influenced by leadership skills and not by managerial skills. Individuals responsible for hiring technical center principals, responsible for career and technical curriculum design, and those who are involved in leadership responsibilities in the various career and technical education professional associations should use this data to make decisions regarding leadership characteristics as it relates to regional technical center principals.

**2. Professional educational leadership and career and technical education organizations should develop training programs that can provide context for**

**regional technical center principals who lack CTE background.** While the principals indicated that they did not believe background was valuable, both the joint Control School Board Members and the superintendents did place the background knowledge as valuable in finding three. Professional leadership organizations can use this study to formulate professional development opportunities for their various professional development seminars and conferences. These career and technical professional organizations structure conferences and seminars around many topics of which some are leadership training sessions. Instructional leaders across the country are facing both exciting opportunities and incredible challenges as the traditional education model in the United States is outpaced by changing technology, workforce demands and global competition (ACTE, 2015).

- 3. Master’s programs that certify principals in educational leadership administration should provide, as an option, instructional curriculum that relates to principal characteristics for individuals that aspire to become leaders in the field of career and technical education.** Career and technical education master’s programs could use this data to formulate instructional curriculum that pertain to CTE leadership training. CTE programs are designed to prepare individuals for careers in CTE and to enhance the professional development of CTE educators. Educational masters programs that are devised to give certifications to aspiring administrators should include at least a class regarding topics of career and technical education. The course should focus on the history of career and technical education, competency based education, career and technical education clubs, program building, building and maintaining advisory programs, cooperative education programs, and other related career and technical education topics.
- 4. Joint control school board members, superintendents, and human resources personnel should include personal and professional integrity, honesty, and fairness as characteristics included in the interview and selection process.** When hiring regional technical center principals including the characteristics of personal and professional integrity, honesty, and fairness as sought after characteristics within the interview questions or process. The survey data rated the mean responses the highest characteristics amongst regional technical center principals.

Standard Five of the ISLLC standards (see Appendix A) states that, “An education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner.” Teachers want a principal who is fair and just with everyone. An effective principal will not show favoritism among staff or students; thereby, valuing the uniqueness in all. As well, teachers want a principal who holds all staff members accountable for student success.

- 5. Joint control school board members, superintendents, and human resources personnel should include personnel management as a characteristic included in the interview and selection process.** When hiring regional technical center principals including the characteristic of personnel management as a sought after characteristic on the interview questions or process could be an implication for best practice. Three of the five principal entries in the responses to questions sixteen dealt with having strong relationships with personnel.

Standard one of the ISLLC standards (see Appendix A) states that, “An education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders (Council of Chief State School Officers, 2008).”

- 6. Having the ability to work with various stakeholders such as school boards, businesses, and the community in building the technical center programs should be used as a characteristic in the interview and selection process.**

When hiring regional technical center principals Joint control school board members, superintendents, and human resources personnel should include the characteristic of being able to have the ability to work with various stakeholders such as school boards, businesses, and the community in building the technical center programs.

Standard Four of the ISLLC standards notes that, “An education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources (Council of Chief State School Officers, 2008).”

- 7. The Virginia Department of Education should include an endorsement in career and technical education leadership. Having leadership curricula in career and**

**technical education could be included in a certification endorsement needed to hold a position in leadership in the field of career and technical education.** The Commonwealth of Virginia once offered an endorsement in vocational leadership in career and technical education however unlike other states such as West Virginia, North Carolina, and Pennsylvania, no longer offers an endorsement as a director of career and technical. Having a background in career and technical education, understanding the foundations of career and technical education, and understanding competency based education could be beneficial as part of this endorsement.

### **Recommendations for Further Research**

- 1. A similar study could be expanded to include a qualitative aspect that could involve interviews with practicing regional technical center principals, superintendents, and Joint Control School Board Members.** It would be important to get a detailed explanation as to why these stakeholders would answer a certain question a certain way to the survey statements. Interviews allow for detailed explanations and would allow the survey respondent to thoroughly explain the answer given. Personal interview surveys are used to probe the answers of the respondents and at the same time, to observe the behavior of the respondents.
- 2. A study could be conducted to include the instructional staff of each regional technical center along with the advisory council of each regional technical center.** The instructional staff and advisory councils are vested stakeholders that hold knowledge of what a principal's responsibilities are and the duties of the position. The instructional staff understands the daily instructional requirements of teachers and the administration while the advisory council understands the relationships amongst the various programs and the local businesses.
- 3. A similar study could be conducted to determine if the current Virginia Administrator's Evaluation system instrument is aligned with specific characteristics of a regional technical center principal's duties.** Do the characteristics and duties of a regional technical center principal vary enough from other principal positions that would possibly provide a modification of the current evaluation system due to the difference in job duties.

4. **A study can be conducted to include all of the technical centers in the Commonwealth of Virginia.** There are many other technical centers throughout the Commonwealth of Virginia and they tend to be housed within a distinct county and managed by a single county school board. However, the duties of the position may be similar minus the regional geographic limitations and characteristics of the centers. Regional technical centers deal with numerous superintendents and Joint Control Board Members from various counties or cities while individual county technical centers are supervised by one county school board. They don't have a Joint Control Board relationship as they are within the same county.
5. **A study can be conducted to determine what career and technical education professional learning experiences along with their assistant principal experiences the regional technical center principal studied leading up to them holding a position of regional technical center principal.** What formal education leadership program did they obtain their administrative endorsement through and did it have an emphasis in career and technical education. The reason this question may be important is to ask if the prior professional development administrative experiences actually better prepare a principal for a position at a regional technical center. Since the Commonwealth of Virginia doesn't have separate career and technical education leadership programs, as compared to neighboring states, this may assist in the giving related research to assist in developing or not developing programs in the Commonwealth. The study could include what components would Superintendents and Joint Control Board Members believe to be valuable in preparing technical center principals.

### **Reflections of Analysis**

Spending most of my educational career in the field of Career and Technical Education along with holding various leadership positions it became apparent I wanted to study a combination of leadership qualities along with the position of principal in the educational field of CTE. Understanding the uniqueness of the position of a regional technical center principal in the Commonwealth of Virginia, I felt it was important to study the combination of the two. I learned that the Commonwealth of Virginia does not have a focus on career and technical education in

regards to differentiating administrative endorsements. I learned that the three surveyed respondents varied in their responses. I was surprised at where certain characteristics fell in the importance rankings of the position of principal of a regional technical center. I had a personal belief that having a background in career and technical education would rank higher amongst all of the survey respondents. I suspect this ranking to be based on the fact that since many of the surveyed principals did not get a formal training in CTE since there are limited educational programs in the Commonwealth of Virginia. I added this information to possible future research studies that could be studied to compliment this study. I was surprised to find that the characteristic of vision ranked higher than the three characteristics of instructional leadership, having a background in career and technical education, and having a degree in the field of career and technical education. However, after the study has been completed along with my continued personal leadership experience, I can see why it is important to have a solid vision for the position of regional technical center principal in the Commonwealth of Virginia. The survey results also affirm my belief that personal traits (vision, team builder, community builder) are ranked in the top portion of important characteristics of a regional technical center principal.

This dissertation study has been one of the most rewarding experiences in my professional career. This personal educational opportunity will have a long lasting effect on my educational career. I hope this study has an impact in the field of career and technical education along with the field of educational leadership.

## References

- Anderson, L. F. (1926). *History of manual and industrial school education*. New York: D. Appleton and Company.
- Association for Career and Technical Education. (2014). Virginia Fact Sheet. Retrieved from [https://www.acteonline.org/general.aspx?id=814#.U77RwMvD\\_IU](https://www.acteonline.org/general.aspx?id=814#.U77RwMvD_IU)
- Association for Career and Technical Education website. *The Time is Right for CTE* (2015). Retrieved from <https://www.acteonline.org/leadership/#Professional>
- Bass, B. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research & managerial applications* (3<sup>rd</sup> ed.). New York: Free Press.
- Bentley, W. H. (1977). *Administering the successful vocational education program*. Parker Publishing Company.
- Blasé, J., & Blasé, J. (2001). *Empowering teachers* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Corwin Press.
- Brookover, W. B., & Lezotte, L. (1982). *Creating effective schools*. Holmes Beach, FL: Learning Publication.
- Bureau of Labor Statistics Occupational Outlook Handbook. (2014). Retrieved from <http://www.bls.gov/ooh/>
- Cash, C. S. (1993) *Building conditions and student achievement and behavior*. Doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA. Retrieved from: [http://scholar.lib.vt.edu/theses/available/etd-10052007-143026/unrestricted/LD5655.V856\\_1993.C379.pdf](http://scholar.lib.vt.edu/theses/available/etd-10052007-143026/unrestricted/LD5655.V856_1993.C379.pdf)
- Callen, C. J. (2013). *Role of leadership in vocational education & training*, 1-2, Retrieved from: eHow [http://www.ehow.com/about\\_5566621\\_role-leadershipvocationaleducation-training.html](http://www.ehow.com/about_5566621_role-leadershipvocationaleducation-training.html)
- Cherry, K. (2013). *What is democratic leadership?* Retrieved from <http://psychology.about.com/od/leadership/f/democratic-leadership.htm>
- Cotton, K. (2003). *Principals and student achievement: What the research says*. Association for Supervision and Curriculum Development, Alexandria, VA.
- Council of Chief State School Officers (2008). ISLLC Educational Leadership Policy Standards: 2008. Retrieved from:

- [http://www.vide.vi/data/userfiles/Educational\\_Leadership\\_Policy\\_Standards\\_2008%20\(1\).pdf](http://www.vide.vi/data/userfiles/Educational_Leadership_Policy_Standards_2008%20(1).pdf)
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed method approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Davis, S. H. (1998). Superintendents' perspectives on the involuntary departure of public school principals. *Educational Administration Quarterly*, 34, 383-404.
- Davis, S. H., & Leon, R. J. (2011). How not to prepare school principals. *Planning & Changing*, 42(3/4), 274-287.
- Davis, S., Darling-Hammond, L., LaPointe, M., & Meyerson, D. (2005). *School leadership study: Developing successful principals*. Stanford, CA: Stanford University, Stanford Educational Leadership Institute.
- Dubois, L. (2012). *Principals' leadership and leadership principles*. Retrieved from <http://www.vanderbilt.edu/magazines/peabody-reflector/2012/07/principals-leadership-and-leadership-principles/>
- Evans, L. & Teddie, C. (1993). *Principal's change facilitator styles in schools that differ in Effectiveness and SES*. Retrieved from <http://files.eric.ed.gov/fulltext/ED360727.pdf>
- Farkas, S., Johnson, J., & Duffett, A. (2003). *Rolling up their sleeves: Superintendents and principals talk about what's needed to fix public schools*. New York: Public Agenda. Retrieved from <http://www.wallacefoundation.org/knowledge-center/school-leadership/district-policy-and-practice/Pages/Rolling-Up-Their-Sleeves-Whats-Needed-to-Fix-Public-Schools.aspx>
- Floyd, B. (2005). The cultured mind, the skillful hand: Manual training schools and the democratization of the arts and crafts movement. *American Education History Journal* (January).
- Fowler, F. (1998). *Survey research methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Gastil, J. (1994). A definition and illustration of democratic leadership. *Human Relations*, 47(8), 954-971.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). *Prima leadership: The Hidden Driver of Great Performance*, Cambridge, MA: Harvard Business Press.
- Hopkins, G. (2008). Principals identify top ten leadership traits. *Education World*. Retrieved from [http://www.educationworld.com/a\\_admin/admin/admin190.shtml](http://www.educationworld.com/a_admin/admin/admin190.shtml)

- Huff, J. T. (2009). *Knowing “how” is more than knowing “that”: Efforts to measure educational leadership expertise* (Doctoral dissertation, Vanderbilt University), Retrieved from <http://etd.library.vanderbilt.edu/available/etd-03232009-131605/unrestricted/JasonHuffDissertation.pdf>
- Institute for Educational Leadership. (2000). *Leadership for student learning – Reinventing the principalship; A report of the task force on the principalship*. Washington, DC: retrieved from <http://www.iel.org/programs/21st/reports/principal.pdf>
- Kosloski, M., Ph.D (2013). *Foundations of career and technical education*. Retrieved from <http://www.lions.odu.edu/org/deca/oted401/lesson6.html>
- Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). How leadership influences student learning: Executive summary. New York: Wallace Foundation. Retrieved from: [www.wallacefoundation.org/WF/KnowledgeCenter/KnowledgeTopics/EducationLeadership/Documents/HowLeadershipInfluencesStudentLearningES.htm](http://www.wallacefoundation.org/WF/KnowledgeCenter/KnowledgeTopics/EducationLeadership/Documents/HowLeadershipInfluencesStudentLearningES.htm)
- Lewis, B. (2014). NCLB No Child Left Behind. Retrieved from <http://k6educators.about.com/od/educationglossary/g/gnclb.htm>
- Lezotte, L. W. & Bancroft, B. A. (1985). Growing use of the effective schools model for school improvement. *Educational Leadership*, 42(6), 23-27.
- Luthans, F., Peterson, S. J., & Ibrayeva, E. (1998). The potential for the dark side of leadership in post-communist countries. *Journal of World Business*, 33, 185-202.
- Maher, J. B. Jr., & Kur, C. E. (1983, June). Constructing good questionnaires. *Training and Development Journal*.
- McGough, R. C. & Finch, C. R., (1991). *Administering and supervising occupational education*. Waveland Press Inc. (November).
- McLaughlin, C (2001). *Visionary leadership*. The Center for Visionary Leadership. Retrieved from: <http://www.visionarylead.org/articles/vislead.htm>
- Million, J. & Carr, M., (2014). *Shortage of qualified candidates hindering the improvement of schools*. Retrieved from <http://www.nassp.org/Content.aspx?topic=25541>
- Moss, J., & Liang, T. (1990). *Leadership, leadership development, and the national center for research in vocational education*. Berkeley, CA: National Center for Research in Vocational Education.

- Mahadevan, L. Ph.D., & Peterson, R. Ph.D., (2013). *Identifying competencies for CTE teachers serving special populations – Validating a DACUM Survey*. Retrieved from [http://www.napequity.org/nape-content/uploads/Mahadevan.DACUM\\_.pdf](http://www.napequity.org/nape-content/uploads/Mahadevan.DACUM_.pdf)
- National Education for Educational Research. (2008). *National education foundation presents information about the U.S. Department of Education's Carl D. Perkins career and technical education improvement act of 2006 (Perkins IV)*. Retrieved from <http://www.perkins4org/perkins3-4.asp>
- North Carolina State Board of Education Website. (2015). *School-based administrators and special service personnel*. Retrieved from <http://www.dpi.state.nc.us/licensure/administrator/>
- Popham, W. J. (2004). *America's failing schools: How parents and teachers can cope with No Child Left Behind*. New York, NY. Routledge-Falmer.
- Price, T. (2009). We can do it: Preparing leaders to lead in alternative education schools. *National Forum of Educational Administration and Supervision Journal*, 26(4), 1-13.
- Robinson, J. (2010). *Leader or manager: What's the difference? The 21<sup>st</sup> Century Principal*. Retrieved from <http://the21stcenturyprincipal.blogspot.com/2010/10/leader-or-manager-whats-difference.html>
- Rodman, M. E. (2012). *A study of learning-centered leadership skills of principals in career and technical education schools*. (Order No. 3521202, The Pennsylvania State University). *ProQuest Dissertations and Theses*, 231. Retrieved from <http://ezproxy.lib.vt.edu:8080/login?url=http://search.proquest.com/docview/1038158717?accountid=14826> (1038158717).
- Seashore-Louis, K., Leithwood, K., Wahlstrom, K., & Anderson, W. (2010). *Learning from leadership: Investigating the links to improved student learning*. Center for Applied Research and Educational Improvement, University of Minnesota, and Ontario Institute for studies in education, University of Toronto. Retrieved from <http://www.wallacefoundation.org/KnowledgeCenter/KnowledgeTopics/CurrentAreasofFocus/EducationLeadership/Documents/Learning-from-Leadership-Investigating-Links-Final-Report.pdf>

- Smither, J., London, M., & Reilly, R. (2005). Does performance improve following multisource feedback? A theoretical model, meta-analysis and review of empirical findings. *Personnel Psychology*, 58(1), 33-66.
- Thornton, M. (2009), *A comparative study of superintendent leadership characteristics of Virginia school superintendents* (Doctoral dissertation, Virginia Tech University), Retrieved from <http://vtechworks.lib.vt.edu/handle/10919/37731?show=full> US Department of Education. (2003). Accountability and adequate yearly progress: Presentation from the national title I director's conference on accountability and AYP. Retrieved October 11, 2007, from: <http://www.ed.gov/admins/lead/account/ayp2003/edlite-slide06.html>
- U.S. Department of Education, National Center for Education Statistics. (2008). *Career and technical education in the United States 1990 to 2005: Statistical analysis report*. (NCES 2008-035). Retrieved from <http://nces.ed.gov/pubs2008/2008035.pdf>
- U.S. Department of Education, National Center for Education Statistics. (2010). *The condition of education*. Retrieved August 15, 2010, from <http://nces.ed.gov/programs/coe/2010/section2/indicator13.asp>
- U. S. Department of Education. (2015). *No Child Left Behind Act 2001*. Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/index.html>
- United States Department of Labor: Bureau of Labor and Statistics. (2014). *Occupational outlook handbook*. Retrieved from <http://www.bls.gov/ooh/>
- University of Kentucky (2014) *Certification for administration and supervision of vocational education programs*. Retrieved from [http://www.wku.edu/ealr/programs/voc\\_ed.php](http://www.wku.edu/ealr/programs/voc_ed.php)
- Virginia Department of Education Website (2013). *Career and technical education*. Retrieved February 12, 2014, from [http://www.doe.virginia.gov/instruction/career\\_technical/](http://www.doe.virginia.gov/instruction/career_technical/)
- Virginia Department of Education Licensure Regulations for School Personnel Manual (2014). Retrieved from [http://www.doe.virginia.gov/teaching/licensure/licensure\\_regs.pdf](http://www.doe.virginia.gov/teaching/licensure/licensure_regs.pdf) (60-62).
- Virginia Department of Education Career and Technical Regional Technical Center directory (2015). Retrieved from: <http://www.va-doeapp.com/RegionalCT.aspx?w=true>
- Viviano, T. (2012). What 21<sup>st</sup> Century Leadership in Career and Technical Education Should Look Like. *Journal of Career and Technical Education*, 27(2), Winter, 51.

- The Wallace Foundation. 2006. *Leadership for learning: Making the connections among state, district, and school policies and practices*. New York, NY: The Wallace Foundation.
- Whitaker, B. (1997). Instructional leadership and principal visibility. *The Clearinghouse: A Journal of Educational Strategies, Issues and Ideas*, 70(3), 155-156.
- Wenrich, R. C., & Wenrich, J. W. (1974). *Leadership in administration of vocational and technical education*. Columbus, OH: Merrill.

## **Appendix A**

### **ISLLC Standards**

Standard 1: An education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders.

Standard 2: An education leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.

Standard 3: An education leader promotes the success of every student by ensuring management of the organization, operation, and resources for a safe, efficient, and effective learning environment.

Standard 4: An education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources.

Standard 5: An education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner.

Standard 6: An education leader promotes the success of every student by understanding, responding to, and influencing the political, social, economic, legal, and cultural context.

Source: National Policy Board for Educational Administration (2008).

## Appendix B

### Technical Center Principal Survey Instrument

#### Section 1:

Utilizing a Likert Scale 1-5, where one (1) represents Strongly Disagree, two (2) represents Disagree, three (3) represents Neutral, four (4) represents Agree, and five (5) represents Strongly Agree, please respond to the following statements by circling your choice:

1. A technical center principal must be an instructional leader.

1      2      3      4      5

2. Experience in career and technical education is essential for the position of a technical center principal.

1      2      3      4      5

3. Technical center principal leadership has been influenced by the accountability mandates associated with Virginia's Standards of Learning (SOL) and No Child Left Behind (NCLB).

1      2      3      4      5

4. Technical center principal leadership has been influenced by the accountability mandates associated with certification testing.

1      2      3      4      5

5. Technical center principals along with their school board members can have an impact on achieving and sustaining school wide success.

1      2      3      4      5

6. Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal.

1      2      3      4      5

7. Developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times.

1      2      3      4      5

8. Establishing a clear vision for teaching and learning is critical to technical center principal leadership.

1      2      3      4      5

9. The technical center principal's ability to articulate an instructional vision has a significant relationship to the county's division wide academic success.

1      2      3      4      5

10. Persuasion is the ultimate tool for a technical center principal of public education.

1      2      3      4      5

11. Technical center principals are perceived to be leaders of the various counties as opposed to being led by the community.

1      2      3      4      5

12. Finance is one of the areas of responsibility inherent in the position of technical center principal.

1      2      3      4      5

13. A technical center principal should inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.

1      2      3      4      5

14. A technical center principal ensures that curriculum design, instructional strategies, and learning environments integrate appropriate technologies to maximize teaching and learning.

1      2      3      4      5

15. A technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also be adept at developing both permanent and temporary coalitions with often disparate community groups.

1      2      3      4      5

16. What other characteristics that are needed for the CTE leader of a regional technical center that have not been addressed?

---

---

Section 2:

Please rank in order of importance the characteristic you believe to be necessary for the position of technical center principal. The most essential/important should receive the numerical value of one (1) while the least important characteristic will receive the numerical value of thirteen (13).

<b>Characteristic</b>	<b>Ranking (1 to 13)</b>
Instructional Leader	
School Finance Experience	
Career and Technical Instructional Background	
Professional Development Experience	
Effective School Board Relations	
Career and Technical Degree	
Visionary Leader	
School Law Experience	
School/Community Advisory Builder	
Politically Astute	
Team Builder	
Intellect	
Facilities	

## Appendix C

### Technical Center Superintendent Survey Instrument

#### Section 1:

Utilizing a Likert Scale 1-5, where one (1) represents Strongly Disagree, two (2) represents Disagree, three (3) represents Neutral, four (4) represents Agree, and five (5) represents Strongly Agree, please respond to the following statements by circling your choice:

1. A technical center principal must be an instructional leader.

1      2      3      4      5

2. Experience in career and technical education is essential for the position of a technical center principal.

1      2      3      4      5

3. Technical center principal leadership has been influenced by the accountability mandates associated with Virginia's Standards of Learning (SOL) and No Child Left Behind (NCLB).

1      2      3      4      5

4. Technical center principal leadership has been influenced by the accountability mandates associated with certification testing.

1      2      3      4      5

5. Technical center principals along with their school board members can have an impact on achieving and sustaining school wide success.

1      2      3      4      5

6. Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal.

1      2      3      4      5

7. Developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times.

1      2      3      4      5

8. Establishing a clear vision for teaching and learning is critical to technical center principal leadership.

1      2      3      4      5

9. The technical center principal’s ability to articulate an instructional vision has a significant relationship to the county’s division wide academic success.

1      2      3      4      5

10. Persuasion is the ultimate tool for a technical center principal of public education.

1      2      3      4      5

11. Technical center principals are perceived to be leaders of the various counties as opposed to being led by the community.

1      2      3      4      5

12. Finance is one of the areas of responsibility inherent in the position of technical center principal.

1      2      3      4      5

13. A technical center principal should inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.

1      2      3      4      5

14. A technical center principal ensures that curriculum design, instructional strategies, and learning environments integrate appropriate technologies to maximize teaching and learning.

1      2      3      4      5

15. A technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also be adept at developing both permanent and temporary coalitions with often disparate community groups.

1      2      3      4      5

16. What other characteristics that are needed for the CTE leader of a regional technical center that have not been addressed?

---

---

Section 2:

Please rank in order of importance the characteristic you believe to be necessary for the position of technical center principal. The most essential/important should receive the numerical value of one (1) while the least important characteristic will receive the numerical value of thirteen (13).

<b>Characteristic</b>	<b>Ranking (1 to 13)</b>
Instructional Leader	
School Finance Experience	
Career and Technical Instructional Background	
Professional Development Experience	
Effective School Board Relations	
Career and Technical Degree	
Visionary Leader	
School Law Experience	
School/Community Advisory Builder	
Politically Astute	
Team Builder	
Intellect	
Facilities	

**Appendix D**  
**Technical Center School Board Survey Instrument**

Section 1:

Utilizing a Likert Scale 1-5, where one (1) represents Strongly Disagree, two (2) represents Disagree, three (3) represents Neutral, four (4) represents Agree, and five (5) represents Strongly Agree, please respond to the following statements by circling your choice:

1. A technical center principal must be an instructional leader.

1      2      3      4      5

2. Experience in career and technical education is essential for the position of a technical center principal.

1      2      3      4      5

3. Technical center principal leadership has been influenced by the accountability mandates associated with Virginia's Standards of Learning (SOL) and No Child Left Behind (NCLB).

1      2      3      4      5

4. Technical center principal leadership has been influenced by the accountability mandates associated with certification testing.

1      2      3      4      5

5. Technical center principals along with their school board members can have an impact on achieving and sustaining school wide success.

1      2      3      4      5

6. Personal and professional integrity, honesty, and fairness are essential leadership characteristics for the public school regional technical center principal.

1      2      3      4      5

7. Developing and managing resources necessary to support the instructional system must be a priority for technical center principals at all times.

1      2      3      4      5

8. Establishing a clear vision for teaching and learning is critical to technical center principal leadership.

1      2      3      4      5

9. The technical center principal's ability to articulate an instructional vision has a significant relationship to the county's division wide academic success.

1      2      3      4      5

10. Persuasion is the ultimate tool for a technical center principal of public education.

1      2      3      4      5

11. Technical center principals are perceived to be leaders of the various counties as opposed to being led by the community.

1      2      3      4      5

12. Finance is one of the areas of responsibility inherent in the position of technical center principal.

1      2      3      4      5

13. A technical center principal should inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision.

1      2      3      4      5

14. A technical center principal ensures that curriculum design, instructional strategies, and learning environments integrate appropriate technologies to maximize teaching and learning.

1      2      3      4      5

15. A technical center principal must be comfortable with managing media relations, public meetings, and politically-inspired pressures, while also be adept at developing both permanent and temporary coalitions with often disparate community groups.

1      2      3      4      5

16. What other characteristics that are needed for the CTE leader of a regional technical center that have not been addressed?

---

---

Section 2:

Please rank in order of importance the characteristic you believe to be necessary for the position of technical center principal. The most essential/important should receive the numerical value of one (1) while the least important characteristic will receive the numerical value of thirteen (13).

<b>Characteristic</b>	<b>Ranking (1 to 13)</b>
Instructional Leader	
School Finance Experience	
Career and Technical Instructional Background	
Professional Development Experience	
Effective School Board Relations	
Career and Technical Degree	
Visionary Leader	
School Law Experience	
School/Community Advisory Builder	
Politically Astute	
Team Builder	
Intellect	
Facilities	

## Appendix E

### Technical Center Principal's Cover Letter

Bernard S. Davis III "Trey"  
10093 Gathright Valley Court  
Mechanicsville, Virginia 23116

(Date)

(Name of Technical Center Principal)

(Name of Regional Technical Center)

(Address)

Dear (Name of Technical Center Principal,)

My name is Bernard S. Davis III "Trey" and I am currently a doctoral candidate in the Educational Leadership and Policy Studies program at Virginia Polytechnic Institute and State University. In addition, I am currently serving as the Principal for the Northern Neck Regional Technical Center in Warsaw, Virginia where Dr. James Smith is superintendent. My purpose for writing you is to seek your participation in completing a survey to determine the leadership characteristics that practicing regional technical center principals, superintendents, and technical center school board members in the ten Commonwealth of Virginia regional technical centers deem necessary in the role of a technical center principal.

The results of this study will provide information of interest to practicing and aspiring principals, school boards, instructional staff, as well as add to the literature in the field. The questionnaire has also been reviewed by the instructional leadership at Virginia Tech.

Each survey has been coded for tracking purposes only, and the coding will be destroyed once the research process is completed and/or the survey responses are received. In addition, the coding procedure will prevent unnecessary follow-up mailings to those respondents who would have already returned their surveys. Please note that all responses will be kept strictly confidential. As such, no individual responses will be identified when analyzing the data or during the reporting of results.

If you agree to participate, please complete and return the survey questionnaire in the enclosed self-addressed, stamped envelope, the success of this study is dependent on your timely participation. Consent will be implied from the return of the questionnaire. Therefore, I would like to thank you in advance for your participation.

If you have any questions concerning the survey or the research, please do not hesitate to call me at (804) 366-2750 or email me at [bdavis@northernnecktech.org](mailto:bdavis@northernnecktech.org).

Thanks again for taking time to assist me in this research study.

Sincerely,  
Bernard S. Davis III  
Doctoral Candidate

Encl: Survey

## Appendix F

### Technical Center Superintendent Cover Letter

Bernard S. Davis III "Trey"  
10093 Gathright Valley Court  
Mechanicsville, Virginia 23116

(Date)

(Name of Regional Technical Center)

(Address)

Dear (school) Superintendent,

My name is Bernard S. Davis III "Trey" and I am currently a doctoral candidate in the Educational Leadership and Policy Studies program at Virginia Polytechnic Institute and State University. In addition, I am currently serving as the Principal for the Northern Neck Regional Technical Center in Warsaw, Virginia where Dr. James Smith is superintendent. My purpose for writing you is to seek your participation in completing a survey to determine the leadership characteristics that practicing regional technical center principals, superintendents, and technical center school board members in the ten Commonwealth of Virginia regional technical centers deem necessary in the role of a technical center principal.

The results of this study will provide information of interest to practicing and aspiring principals, school boards, instructional staff, as well as add to the literature in the field. The questionnaire has also been reviewed by the instructional leadership at Virginia Tech.

Each survey has been coded for tracking purposes only, and the coding will be destroyed once the research process is completed and/or the survey responses are received. In addition, the coding procedure will prevent unnecessary follow-up mailings to those respondents who would have already returned their surveys. Please note that all responses will be kept strictly confidential. As such, no individual responses will be identified when analyzing the data or during the reporting of results.

If you agree to participate, please complete and return the survey questionnaire in the enclosed self-addressed, stamped envelope, the success of this study is dependent on your timely participation. Consent will be implied from the return of the questionnaire. Therefore, I would like to thank you in advance for your participation.

If you have any questions concerning the survey or the research, please do not hesitate to call me at (804) 366-2750 or email me at [bdavis@northernnecktech.org](mailto:bdavis@northernnecktech.org).

Thanks again for taking time to assist me in this research study.

Sincerely,  
Bernard S. Davis III  
Doctoral Candidate

Encl: Survey

## Appendix G

### Technical Center School Board Cover Letter

Bernard S. Davis III "Trey"  
10093 Gathright Valley Court  
Mechanicsville, Virginia 23116

(Date)

(Name of Regional Technical Center)

(Address)

Dear (school) Joint Control School Board Member,

My name is Bernard S. Davis III "Trey" and I am currently a doctoral candidate in the Educational Leadership and Policy Studies program at Virginia Polytechnic Institute and State University. In addition, I am currently serving as the Principal for the Northern Neck Regional Technical Center in Warsaw, Virginia where Dr. James Smith is superintendent. My purpose for writing you is to seek your participation in completing a survey to determine the leadership characteristics that practicing regional technical center principals, superintendents, and technical center school board members in the ten Commonwealth of Virginia regional technical centers deem necessary in the role of a technical center principal.

The results of this study will provide information of interest to practicing and aspiring principals, school boards, instructional staff, as well as add to the literature in the field. The questionnaire has also been reviewed by the instructional leadership at Virginia Tech.

Each survey has been coded for tracking purposes only, and the coding will be destroyed once the research process is completed and/or the survey responses are received. In addition, the coding procedure will prevent unnecessary follow-up mailings to those respondents who would have already returned their surveys. Please note that all responses will be kept strictly confidential. As such, no individual responses will be identified when analyzing the data or during the reporting of results.

If you agree to participate, please complete and return the survey questionnaire in the enclosed self-addressed, stamped envelope, the success of this study is dependent on your timely participation. Consent will be implied from the return of the questionnaire. Therefore, I would like to thank you in advance for your participation.

If you have any questions concerning the survey or the research, please do not hesitate to call me at (804) 366-2750 or email me at [bdavis@northernnecktech.org](mailto:bdavis@northernnecktech.org).

Thanks again for taking time to assist me in this research study.

Sincerely,  
Bernard S. Davis III  
Doctoral Candidate

Encl: Survey

## Appendix H

### Technical Center Principal's Follow Up Cover Letter

Bernard S. Davis III "Trey"  
10093 Gathright Valley Court  
Mechanicsville, Virginia 23116

(Date)

(Name of Technical Center Principal)

(Name of Regional Technical Center)

(Address)

Dear (Name of Technical Center Principal,)

My name is Bernard S. Davis III "Trey" and I am currently a doctoral candidate in the Educational Leadership and Policy Studies program at Virginia Polytechnic Institute and State University. In addition, I am currently serving as the Principal for the Northern Neck Regional Technical Center in Warsaw, Virginia where Dr. James Smith is superintendent. My purpose for writing you is to seek your participation in completing a survey to determine the leadership characteristics that practicing regional technical center principals, superintendents, and technical center school board members in the ten Commonwealth of Virginia regional technical centers deem necessary in the role of a technical center principal.

As a part of the research process, you should have received approximately three weeks ago a survey questionnaire from me via the U.S. mail. I understand that it's a busy time of the year and I appreciate your support and help.

If you agree to participate, please complete and return the survey questionnaire in the enclosed self-addressed, stamped envelope, the success of this study is dependent on your timely participation. Consent will be implied from the return of the questionnaire. Therefore, I would like to thank you in advance for your participation.

If you have any questions concerning the survey or the research, please do not hesitate to call me at (804) 366-2750 or email me at [bdavis@northernnecktech.org](mailto:bdavis@northernnecktech.org).

Thanks again for taking time to assist me in this research study.

Sincerely,  
Bernard S. Davis III  
Doctoral Candidate

Encl: Survey

## Appendix I

### Technical Center Superintendent Follow Up Cover Letter

Bernard S. Davis III "Trey"  
10093 Gathright Valley Court  
Mechanicsville, Virginia 23116

(Date)

(Name of Regional Technical Center)  
(Address)

Dear (school) Superintendent,

My name is Bernard S. Davis III "Trey" and I am currently a doctoral candidate in the Educational Leadership and Policy Studies program at Virginia Polytechnic Institute and State University. In addition, I am currently serving as the Principal for the Northern Neck Regional Technical Center in Warsaw, Virginia where Dr. James Smith is superintendent. My purpose for writing you is to seek your participation in completing a survey to determine the leadership characteristics that practicing regional technical center principals, superintendents, and technical center school board members in the ten Commonwealth of Virginia regional technical centers deem necessary in the role of a technical center principal.

As a part of the research process, you should have received approximately three weeks ago a survey questionnaire from me via the U.S. mail. I understand that it's a busy time of the year and I appreciate your support and help.

If you agree to participate, please complete and return the survey questionnaire in the enclosed self-addressed, stamped envelope, the success of this study is dependent on your timely participation. Consent will be implied from the return of the questionnaire. Therefore, I would like to thank you in advance for your participation.

If you have any questions concerning the survey or the research, please do not hesitate to call me at (804) 366-2750 or email me at [bdavis@northernnecktech.org](mailto:bdavis@northernnecktech.org).

Thanks again for taking time to assist me in this research study.

Sincerely,  
Bernard S. Davis III  
Doctoral Candidate

Encl: Survey

## Appendix J

### Technical Center School Board Follow Up Cover Letter

Bernard S. Davis III "Trey"  
10093 Gathright Valley Court  
Mechanicsville, Virginia 23116

(Date)

(Name of Regional Technical Center)

(Address)

Dear (school) Joint Control School Board Member,

My name is Bernard S. Davis III "Trey" and I am currently a doctoral candidate in the Educational Leadership and Policy Studies program at Virginia Polytechnic Institute and State University. In addition, I am currently serving as the Principal for the Northern Neck Regional Technical Center in Warsaw, Virginia where Dr. James Smith is superintendent. My purpose for writing you is to seek your participation in completing a survey to determine the leadership characteristics that practicing regional technical center principals, superintendents, and technical center school board members in the ten Commonwealth of Virginia regional technical centers deem necessary in the role of a technical center principal.

As a part of the research process, you should have received approximately three weeks ago a survey questionnaire from me via the U.S. mail. I understand that it's a busy time of the year and I appreciate your support and help.

If you agree to participate, please complete and return the survey questionnaire in the enclosed self-addressed, stamped envelope, the success of this study is dependent on your timely participation. Consent will be implied from the return of the questionnaire. Therefore, I would like to thank you in advance for your participation.

If you have any questions concerning the survey or the research, please do not hesitate to call me at (804) 366-2750 or email me at [bdavis@northernnecktech.org](mailto:bdavis@northernnecktech.org).


Thanks again for taking time to assist me in this research study.

Sincerely,  
Bernard S. Davis III  
Doctoral Candidate

Encl: Survey

# Appendix K

## Institutional Review Board Approval Letter

	<p style="font-size: small; margin: 0;">Office of Research Compliance Institutional Review Board North End Center, Suite 4120, Virginia Tech 300 Turner Street NW Blacksburg, Virginia 24061 540/231-4806 Fax 540/231-0959 email irb@vt.edu website http://www.irb.vt.edu</p>
---	---

**MEMORANDUM**

**DATE:** January 29, 2015

**TO:** Ted S Price, Bernard Sydnor Davis III

**FROM:** Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

**PROTOCOL TITLE:** A COMPARATIVE STUDY OF LEADERSHIP CHARACTERISTICS OF VIRGINIA REGIONAL TECHNICAL CENTER PRINCIPALS

**IRB NUMBER:** 14-1238

Effective January 28, 2015, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

**PROTOCOL INFORMATION:**

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2,4**

Protocol Approval Date: **January 28, 2015**

Protocol Expiration Date: **N/A**

Continuing Review Due Date\*: **N/A**

\*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

**FEDERALLY FUNDED RESEARCH REQUIREMENTS:**

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

*Invent the Future*

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY  
An equal opportunity, affirmative action institution

IRB Number 14-1238
page 2 of 2
Virginia Tech Institutional Review Board

Date*	OSP Number	Sponsor	Grant Comparison Conducted?

\* Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt.edu) immediately.

**Appendix L**  
**Human Subjects Protection Certificate**



## **Appendix M**

### **Principal Telephone Script**

Hello, my name is Bernard Davis, and I am the principal of the Northern Neck Technical Center Governor's STEM Academy. Is *(name of survey respondent)* available? *(upon speaking to the survey respondent)*. Good morning/evening Mr./Mrs. *(name of survey respondent)*. My name is Bernard Davis and I am currently enrolled in the Virginia Tech doctorate program. I am calling because I am interested in doing a comparative study of leadership characteristics of Virginia regional Technical Center principals. The reason for calling you is to inform you that I want to survey the acting principals, superintendents, and Joint Control Board Members of the regional technical centers in the Commonwealth of Virginia. The survey will include fifteen questions that ask the respondent to rate the answer using a Likert survey. The second section allows the respondent to rank in order the thirteen characteristics in importance.

The results of this study will provide information of interest to practicing and aspiring principals, school boards, instructional staff, as well as add to the literature in the field. The questionnaire has also been reviewed by the instructional leadership at Virginia Tech.

I plan on obtaining the mailing addresses of the respondents so I can send the surveys directly to the respondents. I will also include a self-addressed stamped envelope so that they can send back the survey. This is where I need your help in the process. May I have permission to obtain the contact information of these individuals?

Do you have any questions at this time? *(entertain questions)* I thank you for your time and also for helping me with my dissertation study. *(offer contact information)* Thank you and have a great day.