

ONE SCHOOL DIVISION'S EXPERIENCES IN DEVELOPING AND SUSTAINING
CAPACITY FOR SCHOOL IMPROVEMENT

by

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(ABSTRACT)

All states and the District of Columbia have embraced academic standards as a primary means for improving public education (Manzo, 2001). Virginia implemented the Standards of Learning assessments in 1998. These assessments are based on a set of standards set forth by the Virginia Board of Education, and as of 2004, these assessments played a role in determining whether students received a high school diploma and whether a school received accreditation.

The purpose of this study was to review the efforts of one Virginia school system to develop and sustain its capacity to improve student achievement in response to increased accountability. Bronfenbrenner's (1979) ecological system framework provided a lens through which to study building capacity and improving a school system, a school, and individual classrooms. This multi-level perspective provided a means to study various aspects of school improvement in response to federal, state, and local policies. This researcher utilized qualitative research methods to investigate a school division that has been successful in building and sustaining capacity to improve its schools.

The findings are presented in six major themes that describe how this system built and sustained the capacity to achieve state accreditation. These themes are (a) aligning curriculum to the state standards, (b) providing professional development, (c) fostering relationships, (d) promoting the use of technology, (e) building on strengths, and (f) sharing leadership. The six themes were evident across every subsystem in this school division, from classroom, to schoolhouse, to central office in response to state and federal policies of accountability.

DEDICATION

This work is dedicated to my son, Andrew, my mother and step father Betty and Ken, and the memory of my father, Gene. Their dedication and support for me has made all the difference.

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I am grateful to so many for their support, hard work, and dedication to me as I worked to complete this journey. To my committee co-chairs, Dr. Ted Creighton, and Dr. Lewis Wasserman, thank you for pulling it all together and helping me realize this accomplishment. To Dr. Jean Crockett, thank you for believing in me and encouraging me along the way, it made all the difference.

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CHAPTER ONE

CONTEXT OF THE STUDY

In the literature documenting the history of reform in education from 1983 to the beginning of the twenty-first century, the terms systemic reform, standards-based reforms, national standards, and accountability merge and intermingle (Chatterji, 2002). The concept of systemic reform in education emerged in the 1980s. Proponents sought to increase the authority of the states in setting educational goals and standards for accountability, as well as in providing the necessary resources and support for reforms.

The Nation at Risk report (National Commission on Excellence in Education, 1983) began the call for transformation in education, yet, change has barely touched the nation's high schools. The march toward changing organizational structures, politics, interpersonal behaviors, and cultures is a long journey that has scarcely begun despite pressure from many.

The 1990s began with a thrust to address issues of accountability and student achievement. In response, a movement to address and to assess state standards began. Despite the initial intent of giving local schools and teachers greater decision-making power in bringing about systemic reforms, the federal government in fact became more intensely involved in education in the 1990s. Important national events that influenced the standards movement were the Governors' Summit in 1989, the passage of the seven National Educational Goals by Congress in 1994 (McLaughlin & Shepard, 1995), and the reauthorization of Title I programs that was supposed to provide the fiscal means for schools to achieve Goals 2000 (Hoff, 2001). More recently, the No Child Left Behind Act of 2001 (NCLB) has left states struggling to meet the challenges it sets forth. Chatterji (2002) explained as individual states began efforts to improve schools in response to nationally set agendas, the concept of "standards-based reforms and accountability" emerged as the device for implementing systemic reform at the state level. Prompted by national initiatives the state became the larger unit of operation, or the "system" in systemic reforms; the school became the major unit of accountability. Within their geographic and political boundaries, individual states began to develop their own versions of subject area standards, teacher certification programs, and standards-based tests and accountability systems for schools (Chatterji, 2002, p. 347).

The most current thrust for national accountability is the No Child Left Behind Act of 2001 (NCLB) which is federal legislation that requires states to demonstrate progress from year

to year to (a) raise the percentage of students who are proficient in reading and mathematics and (b) narrow the achievement gap. NCLB sets five performance goals for states: (a) “all students will reach high standards”, at a minimum attaining proficiency or better in reading and language arts and mathematics by 2013-2014; (b) “all limited English proficient students will become proficient in English, reading, language arts and mathematics”; (c) all students will be taught by “highly qualified teachers”; (d) all students will learn in schools that are “safe and drug free”; (e) and all students will graduate from high school (National Association of Secondary School Principals, 2003, p. 6).

In response to the push for accountability, Virginia crafted a four-step education reform program to address both student achievement and system accountability. In 1994, the first step included developing statewide content-rich, grade-by-grade, academic standards (Standards of Learning or SOL) that defined what teachers had to teach and what students were expected to learn. In 1998, the Commonwealth initiated the second step of the reform movement. The State Board of Education ensured local school personnel would focus on the new standards by issuing a set of annual criterion-referenced tests aligned specifically to Virginia’s SOLs that would assess the extent to which students mastered the academic standards. The tests were given in Grades 3, 5, and 8. A series of SOL end of course assessments are given at the completion of certain high school courses. (Retrieved October 31, 2007, from <http://www.doe.virginia.gov/VDOE/Accountability/soa-guidance-doc.pdf>). The state designed an accreditation system that required schools to show adequate performance on the standards-related tests to earn state accreditation. Standards of Accreditation are known in Virginia as SOAs. Each one of Virginia’s public schools is assigned an annual rating based in large part on the extent to which it meets the pass rates. To be rated fully accredited, the schools must meet a 70% pass rate in all core areas with a few exceptions. As of the 2003-2004 school year, a combined accreditation pass rate of at least 75% is required for full accreditation in grades 3 and 5 in English, and pass rates of at least 50 percent in grade 3 science and grade 3 history. To add teeth to this system of standards-tests-accreditation, the Commonwealth completed step four, which required the results of all tests and accreditation levels to be made public in the School Performance Report Card, which is annually made available to parents (Retrieved October 31, 2007, from <http://www.doe.virginia.gov/VDOE/Accountability/soa-guidance-doc.pdf>).

Ultimately, schools had until 2006-2007 to reach full accreditation. In hopes of attaining full accreditation, many school divisions were struggling to improve instruction and ensure students' success on the Standards of Learning assessments. Some divisions were quite successful, while others continue to struggle. An in-depth look at the experience of one school division should provide insight into practices that support student success.

Statement of the Problem

Under NCLB the state is the larger system comprising numerous school divisions. Each division is accountable for demonstrating to the public and the federal government that its schools are making continuous progress. In this way, as Chatterji (2002) suggested, "The state became the larger unit of operation, or the "system" in systemic reforms; the school became the major unit of accountability" (p. 347). Consequently, a problem ripe for research involves the study of schools within a system that have demonstrated continuous and sustained improvement over the years. Providing insight into what these schools did and how they continue to do it could help other similarly situated schools achieve higher gains.

Current Context of Reform

The drive to reform public schools has been one of the most compelling trends in education and public policy in recent decades. After the publication of the highly influential report *A Nation at Risk* (National Commission on Excellence in Education, 1983), the number of reform programs used in schools across the country increased by 50%. Most of this growth has come from whole-school reform programs, which have increased by 130% since 1983 (Herbert & Hatch, 2001). Schools have more options available for improving their practices than ever before.

Schools often struggle with how to make their improvement efforts more consistent and efficient. When districts or states mandate programs, schools have little choice but to comply. Voluntary programs can be difficult to eliminate because of the loss of funding or resources that can result. In many cases, though, schools continue participating in, and adding on, improvement programs because they lack adequate knowledge or wherewithal to initiate improvements on their own. Without their own developed theories of learning, schooling, and change to guide actions, schools are unable to select those programs that fit their needs and to eliminate those that do not. Consequently, school leaders face a paradox: the effectiveness of their improvement

programs depends, in part, on their own capacity to use those programs effectively (Hatch, 2001).

Policymakers across the nation are determined to shift the focus of educational reform from rules and processes to student achievement and accountability. In this high-tech, high-information century, educators face the challenge of ensuring that all students demonstrate higher levels of learning than ever before. Kuhn (1962) described how old paradigms frequently blind one to new approaches that could greatly enhance progress. Kuhn explained that crisis is often the only thing that brings about major change. That is precisely the predicament in which educators and others associated with the education enterprise find themselves today. The old way of doing things is so ingrained in people's minds and habits that change is blocked, leading to even greater problems.

Improving student achievement is a concept of paramount importance for systems trying to become fully accredited. It is not just a *Virginia* issue. Another example is in Chicago Public Schools, where the number one goal is *building instructional capacity* (Chicago Public Schools Education Plan, 2003). School leaders have implemented effective strategies for increasing capacity by organizing the schools and school systems around instruction and student achievement. Everything they do will directly relate to improving student achievement. Chicago's key strategies include (a) developing leadership for instruction, (b) adopting coherent frameworks and standards-based curriculums, (c) developing data-driven practice, (d) providing time and an infrastructure of support for teachers to work together, (e) investing in principle-based professional development, (f) increasing time on task, (g) developing strong academic supports for students and parents, (h) integrating technology into the curriculum, (i) and making accountability a core focus (http://edplan.cps.k12.il.us/strategies_3.html). These goals could be written for any school system in the country. All schools are facing accountability levels never before seen.

Schools must improve in this era of accountability, and the bottom line is simple. To improve, it takes effort. Building capacity means using effort to elicit effort from others. All members of the education community play important roles. School boards promote programs and activities that encourage and support effort by the community. Administrators exhibit day-to-day behaviors that encourage and support effort by teachers and students. Teachers challenge students with rigorous, meaningful assignments and provide the extra time and support for

students to complete them. Students understand that today's effort leads to tomorrow's successes. While it is simplistic, the current context of accountability raises the following question: What might a school system do to build capacity and spur student achievement?

Examining the Issues Related to Academic Achievement

The purpose of instruction and supervision is to improve the academic achievement of students. This task is becoming more problematic and pressing as disparities in the academic achievement of students of color, low socio-economic status, and between males and females continue to be an issue. The increasing ethnic, racial, cultural, linguistic, and social diversity of the U.S. student population further complicates the landscape. Students are not doing as well as they could, and schools are affected in some way by the total complex of educational disparities. A case in point is the proficiency test scores in academic core subjects. According to Firth and Pajak (1998) there were no ethnic groups at any age tested in the 1990s which reached advanced level proficiency in the core academic subjects.

Despite existing challenges, one school district is achieving high marks on Virginia's standards-based assessments. This district has little reason to be successful if demographics and past achievements are the only issues focused upon. However, it is making impressive strides on Virginia's standards-based assessments. It seems it is doing something right. I expect to discover the impetus for success in hopes of replicating that success in my school and my district.

Anchoring the Problem

The United States is currently committed to major education reform. This commitment has resulted from claims that a substantial proportion of the nation's students appears to be headed for school failure, while the academic and intellectual demands of the workplace are expanding and international economic competition is increasing (Ravitch, 2001). At the same time, the ratio of workers to retired persons is decreasing. The current goal for school reform is the most ambitious in the history of the country: it aims to provide virtually all students with in-depth understanding of subject matter and strong problem-solving skills. Although there is considerable enthusiasm for these ambitions, it is important to note that the country has a long history of launching education reforms that are soon abandoned (Ravitch, 2001).

Education reform is a difficult, complex, and lengthy process. Genuine and sustained reform requires not only a research base but federal, state, and local policies and resources to

support (a) the preparation of teachers, (b) quality curriculum and instruction across all subject areas and grade levels, (c) the structure and administration of schools, (d) learning opportunities for teachers in parent engagement and community support, in federal and state policies, and in the resources available to support these changes (Hatch, 2001). Against the odds, school systems are accomplishing their goals and improving instruction. Many school systems in Virginia have done so, attaining full accreditation, while others are still struggling to improve success on the SOL tests.

Need for the Study

Nationally, all the states and the District of Columbia have embraced academic standards as a primary means for improving public education (Manzo, 2001). Virginia implemented the Standards of Learning assessments in 1998. These assessments are based on a series of standards set forth by the Commonwealth, and since 2004 these assessments have played a role in determining whether students received a high school diploma and whether or not a school received full accreditation (Retrieved August 23, 2006, from <http://www.doe.virginia.gov/VDOE/parentshandbook.pdf>).

The issue facing school systems becomes more than just one of wanting to improve instruction and student achievement: it becomes the reality of students not graduating from high school, which is a burden to the entire system. Of particular interest in this study are the ways in which one school system addressed this issue and improved student achievement. What was done to ensure that students passed these assessments and those schools became accredited? These questions are paramount and one goal of this researcher is to provide insight to school leaders in similar systems.

Purpose of the Study

The purpose of this study is to review the efforts of one school system in developing and sustaining its capacity to improve student achievement in response to increased accountability. As an instructional leader, my interest is in instructional leaders and teachers as they engage in the day-to-day work of improving student achievement in the context of standards-based reforms. The desire is to report the experiences of a school division that has improved student achievement to illustrate the issues that confront similar school divisions working to improve achievement on standards-based assessments.

Principals are faced with the task of improving student learning in their buildings. Their goal is to enhance quality student learning that gives every child, regardless of race, ethnicity, gender, class, or disability, the knowledge, skills, and understandings needed to become a productive member of our democratic society. According to Glickman (2002) this is the primary goal of every public school.

School leaders are challenged daily with student needs, parental concerns, teachers' concerns, district and state requirements, and paperwork. At times it seems futile to think of improving the teaching of every teacher and effecting the learning of every student. Indeed, that is the task. How is it done? Can it be done well? Upon completion of this study, it is my intent to leave behind an illustration of one districts' experiences in successfully increasing student achievement on the SOLs, earning full accreditation for the district and sustaining the capacity to maintain the accreditation.

Research Questions

The guiding question for this study is: How did a school division successful in achieving state accreditation develop and sustain capacity to improve student achievement in its schools?

To address this question, the following elements and subquestions will be viewed across four levels of the educational system from the macro to the micro subsystems:

1. On the macro-system level: How do state policies and procedures influence student achievement on Virginia's standards-based assessments?
2. On the exo-system level: How do central office policies and procedures influence student achievement on Virginia's standards-based assessments?
3. On the meso-system level: How do building level policies and procedures influence student achievement on Virginia's standards-based assessments?
4. On the micro-system level: How do classroom teacher's policies and procedures influence student achievement on Virginia's standards-based assessments?

Definition of Terms

The terms used in the context of this study are as follows:

Standards of Learning (SOLs). The Standards of Learning for Virginia Public Schools describe the commonwealth's expectations for student learning and achievement in grades K-12 in English, mathematics, science, history/social science, technology, the fine arts, foreign

language, health and physical education, and driver education (Retrieved October 1, 2007, from <http://www.doe.virginia.gov/VDOE/src/terminology.shtml>).

Standards of Quality (SOQ). The Constitution of Virginia requires the Board of Education to determine and prescribe standards of quality for the public schools of Virginia, subject to revision only by the General Assembly. These standards are known as the Standards of Quality (SOQ) and form part of the Code of Virginia (Retrieved October 9, 2007 from http://www.doe.virginia.gov/VDOE/VA_Board/Standards/).

Constitution of Virginia. Declaration of rights made by the good people of Virginia in the exercise of their sovereign powers, which rights do pertain to them and their posterity, as the basis and foundation of government (Retrieved October 9, 2007 from <http://legis.state.va.us/Laws/search/Constitution.htm>).

Fully Accredited. The accreditation rating earned by a school when students achieve an adjusted pass rate of 75 percent in third-grade and fifth-grade English, 70 percent in mathematics and 50 percent in third-grade science and history/social science. Otherwise, the student results must meet the adjusted pass rate of 70 percent in each of the four core academic areas - English, mathematics, history/social science (Retrieved October 4, 2007, from <http://www.doe.virginia.gov/VDOE/src/terminology.shtml>).

School division. Areas that the Board of Education has divided by geographical areas and school-age populations as will promote the realization of the standards of quality required by Article VIII Section 2 of the Constitution of Virginia (Retrieved October 9, 2007 from <http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+22.1-25>).

Capacity. The optimal amount of production that can be obtained from a given set of resources and organizational arrangements (Corcoran & Goertz 1995).

Triangulation. The use of a combination of research methods in a study. An example of triangulation is a study that incorporates surveys, interviews, and observations (Merriam, 1998).

Sustaining. A school system attained and kept an accreditation rating of fully accredited for five years or more.

Successful. For the purposes of this study successful is narrowly defined as a school system that has met or surpassed the 70% pass rate benchmark set by the Virginia State Board of Education on the SOLs (<http://www.doe.virginia.gov/VDOE/src/index.shtml>).

Standard. Concepts that represent a broad consensus of what parents, classroom teachers, school administrators, academics, and business and community leaders believe schools should teach and students should learn (Retrieved October 9, 2007 from <http://www.doe.virginia.gov/VDOE/Superintendent/Sols/home.shtml>).

Principal preparation programs. Programs that select, prepare, and support school leaders to address the economic, social, and political environments that surround the workings of a school.

Tri-cities region. Three cities that merge to form the Virginia/Tennessee border.

Theoretical Framework

Merriam (1998) explained that the theoretical framework of a study is derived from the orientation or stance that the researcher brings to the study. It is the structure, the scaffolding, and the frame of a study. This study will be viewed through the ecological system framework developed by Bronfenbrenner (1979). The ecosystemic framework identifies multiple levels within an environment, in this case a school system.

The innermost level, the micro-system, illustrates what is happening in the various classrooms of a particularly successful school. The second level within the ecological environment, the meso-system, contains the organizational and instructional leadership practices used at the building level that relate to improving instruction. The third level of the environment, the exo-system, contains administrative and organizational practices at the central office level. The fourth level of the ecological environment is the macro-system. This level contains the policy mandates set forth by the Commonwealth of Virginia, the State Board of Education and the federal government.

Bronfenbrenner's (1979) ecological system framework provides a lens through which to study the facets of improving a school system, a school, and individual classrooms. Looking through that lens at the different levels offered the opportunity to study various aspects of school improvement practices in response to federal, state, and local policies (see Figure 1).

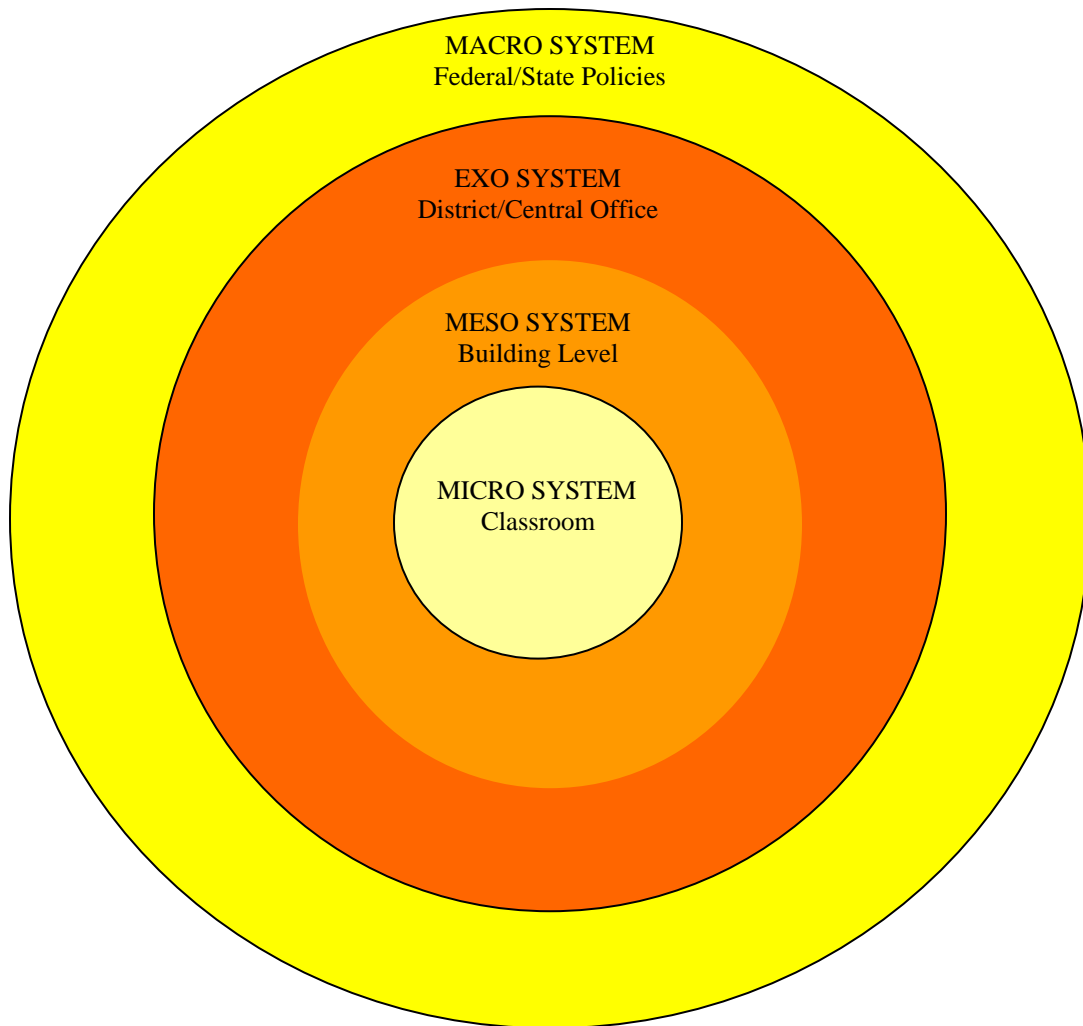


Figure 1. Systemic framework depicting levels from which to study the aspects of improving a school system. Adapted and reprinted by permission of the publishers from *The Ecology of Human Development: Experiments by Nature and Design* by Urie Bronfenbrenner, Cambridge, Mass.: Harvard University Press, Copyright 1979 by the President and Fellows of Harvard College.

A second framework was used to analyze the four dimensions depicted above and is defined in depth in chapter four. The following provides a brief description of capacity. According to Corcoran and Goertz (1995) capacity refers to “the ability to do something” (p. 28) and also to the “maximum or optimum amount of production” (p. 29). In this study capacity refers to capacity from the perspective of production. This definition focuses on the results of school reforms rather than implementing them. Capacity is viewed as the optimal amount of

production that can be obtained from a given set of resources and organizational arrangements (Corcoran & Goertz 1995). Florian, Hange, and Copeland (2000) divided capacity into four basic categories (a) human capacity (b) organizational capacity (c) structural capacity, and (d) material capacity. Each dimension of capacity will be viewed using both frameworks to allow the four dimensions of capacity building to be viewed across the four levels of Bronfenbrenner's ecological system framework.

Brief Overview of the Research Methods

Merriam (1998) compared planning a study to planning for a vacation trip. "Before starting out, you consider what sort of trip most appeals to you, what you like to do, what it might cost, where you want to go, how best to get there, and how long to stay. So too, there are things to think about before you begin a research project" (p. 3). In thinking of the method used to answer these questions a fundamental consideration is my philosophical orientation. What do I believe about the nature of reality, about knowledge, and about the production of knowledge? Qualitative research is an umbrella concept covering several forms of inquiry that help us understand and explain the meaning of social phenomena with as little disruption of the natural setting as possible (Merriam, 1998). A qualitative approach should best suit the researcher's personality and help her study the nature of reality and various sources of knowledge. I chose the case study approach because it seemed most suited to answering my questions about how one school system built and sustained capacity to achieve full accreditation. Yin (1994) defined case study in terms of the research process: "A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 21).

Case study methods should uncover the interaction of significant factors characteristic of the phenomenon of developing and sustaining capacity and improving student achievement in the school division under study. Yin (1994) noted that case study is a design particularly suited to situations in which it is impossible to separate the phenomenon's variables from their context. The context of this study necessitates going directly to the source and investigating a school division that has increased student achievement.

Significance of the Study

The desire for change within education is often driven by powerful ideas, but only rarely is attention paid to the need to build the capacity to implement those ideas. All too often, major changes have been attempted at the school level with only modest resources and commitment (Harris, 2003). As a consequence, many well intentioned school improvement initiatives and programs have floundered or failed (Cohen & Ball, 1999). The challenge of building capacity is particularly evident with respect to major reform initiatives such as school restructuring and site-based management. Such interventions necessitate far-reaching changes to school structure and school culture. Yet, insufficient attention has been paid to creating the conditions and building the capacity within schools to accommodate such major changes (Harris).

Harris (2003) explained that capacity building “is concerned with creating the conditions, opportunities, and experiences for collaboration and mutual learning” (p. 23). This perspective embraces the notion of professional community where “teachers participate in decision making, have a shared sense of purpose, engage in collaborative work and accept joint responsibility for the outcomes of their work” (p. 66). Harris commented further that building the capacity for school improvement makes it necessary to attend to how collaborative processes in schools are fostered and developed. Reform strategies should be plausible theories about how to move a system from an existing state to the desired one (Corcoran & Goertz, 1995). This study is an illustration of how one system strengthened its capacity, achieved, and sustained success on Virginia’s standards-based assessments.

The findings and conclusions developed in this case study will be based on the examination of one school division in Southwestern Virginia. Consistent with case study methodology, rich descriptions will assist readers in determining the extent to which the case matches their own situations (Merriam, 1998). Ultimately, however, it will be up to the reader to decide the transferability of the study’s findings and conclusions.

The ability to generalize is limited in selecting a successful district, it is an over simplification to assume that successes would be easily replicated. In fact, many successful schools have enjoyed enhancements such as grant funding and partnerships with higher education. In this study, I was careful to make note of such enhancements and articulate those as they occurred.

Overview of the Dissertation

This dissertation is a qualitative study of how one school division developed and sustained capacity, which enhanced student achievement on Virginia's standards-based assessments. Interviews, observations, and document analysis were used for data collection. Collection of the data and an analysis of the data supported the findings and conclusions. This document is presented in five chapters.

Chapter One contains an introduction to the topic, a description of the purpose and significance of the study, research questions, and limitations of the study. Chapter Two contains a review of the related literature concerning developing and sustaining capacity within a school system. Research studies are summarized and critically analyzed. Chapter Three contains the methodology for the study, including a rationale for the design of the study, how the sample was selected, an outline of the data collection and analysis procedures, and a plan for writing the qualitative narrative. In Chapter Four, the reader is presented with the findings analyzed from the data. Finally, conclusions, implications, and recommendations for future research are contained in Chapter Five.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The focus of this chapter is the examination of the literature related to developing and sustaining capacity for improving student achievement in one school system. This topic is of critical importance to the field of education for the following reasons: (1) helping individual students achieve in standards-based education, (2) helping school systems improve student achievement, and (3) helping school systems increase achievement on standardized tests to attain or maintain accreditation status on the local, state, and national levels. A review of the research literature that examined building capacity and improving student achievement is presented. This is followed by a synthesis of empirical studies related to these topics. In conclusion, a summary of the research and a commentary are provided.

The review of literature was supported by electronic searches of the database ERIC utilizing search terms including, but not limited to, instructional capacity, school capacity, school improvement, and student achievement. Due to recent accountability policy changes, hand searches in texts, book chapters, and journal articles were conducted dating back to 1983.

The review begins with an examination of the concept of capacity. Secondly, as illustrated by Bronfenbrenner (1979), the review continues with the macro-system where state and national procedures are discussed, proceeding to the exo-system, where literature regarding the system level is reviewed. The meso-system is considered next, where practices on the building level are examined, and, finally, the micro-system that focuses on classroom and teacher practices is reviewed.

Examining the Concept of Capacity

In the current climate of educational reform, capacity building has become a prominent issue. Standards-based reform efforts, in particular, have brought questions about the ability of schools to achieve new testing and accountability standards. Decentralization reforms, such as charter schools and site-based management, have also brought concerns about the knowledge and skills required for teachers and principals to assume greater administrative control. These different issues lead to differing definitions of capacity and different theories of its development and maintenance. Corcoran and Goertz (1995) explained that the most common use of the term refers to “the ability to do something” (p. 28), but capacity can also mean “the maximum or

optimum amount of production” (p. 29). The reform community generally has defined capacity in the former way; however, it might be fruitful to think about system capacity from the perspective of production. This definition focuses attention on the results of school reforms rather than on the means of implementing them, and it raises the issue of efficiency in the sense that capacity is viewed as the optimal amount of production that can be obtained from a given set of resources and organizational arrangements (Corcoran & Goertz 1995). Realizing the maximum level of production versus the optimal amount of production is relative when one is dealing with people. As Corcoran & Goertz commented capacity is dependent upon the set of resources given and also organizational arrangements. These aspects can vary greatly within a school district. For that reason, building capacity to the optimal amount of production should be the goal of school districts.

Defining capacity as the optimal amount of production of a school or the education system at a point in time raises the question, “What does the system produce?” The conventional wisdom is that the output of the system should be measured in terms of student achievement. Focus on results is one of the mantras of reform. However, Corcoran and Goertz (1995) argued that achievement is coproduced. It is simply not within the power of schools to ensure high performance by all students unless one assumes schools full of happy, hard-working youngsters with high aspirations or schools that function like total institutions, able to control the socialization of their charges and compel the necessary study. But there are no schools or students like this, nor is it easy to imagine social policy that would create them. So, instead, Corcoran and Goertz define the “product” of the education system as high-quality instruction, which is central to the ability of the system to help all students reach high standards. This is consistent with lay understandings of school reform. Legislators and the informed public talk about reform as a means of improving teaching, which they see as the best means of helping students (Herbert & Hatch, 2001).

One issue concerns the capacity of systems to achieve the goal of helping all students reach high standards of achievement. The task of formulating policy has been hampered by disagreement in both research and policy communities about the degree to which capacity is a problem, and if it is, what capacity or capacities are needed and therefore, what should be done (Corcoran & Goertz, 1995).

Discussions of capacity are often framed by advocates of particular reforms and their beliefs about what is essential to implementing their ideas. For example, those who advocate systemic reform focus on the capacity for policy alignment, adoption of standards, development of curriculum and assessment, and changes in governance (O'Day, Goertz, & Floden, 1995). In contrast, for those who advocate school-by-school change, capacity building means the creation of learning communities, changes in governance, and opportunities for teachers to share their craft knowledge (Darling-Hammond, 1994).

Definitions of capacity can differ greatly depending on the unit of analysis. However, at each level, building capacity is dependent on receiving resources of some sort from another level in the system. Teacher capacity is dependent on training and development opportunities provided by states, districts, and schools. School capacity is similarly dependent on states and districts for resources and authority over decision-making. Only at the school district level is capacity created rather than received from elsewhere (Herbert & Hatch, 2001). Defining the development of capacity in this way implies a hierarchical structure in which resources and opportunities are given to teachers and schools by the state, which has ultimate discretion over the goals and strategies those teachers and schools will pursue. Further, Herbert and Hatch argued that building capacity is not specific to one particular approach to teaching and learning. Schools exist within an institutionalized system of bureaucracies, yet they are highly individual organizations, each with its own unique set of needs, values, goals, and concerns. They are attended by constantly changing student bodies and operated by teachers and administrators who form their own norms and cultures. It is not realistic to think that there could be one set of guidelines that would encompass all of this diversity. Rather than simply implementing a model for whole school reform, schools might be more successful in sustaining reforms by developing their own approaches out of their goals and the knowledge that improvement programs can provide (Darling-Hammond, 1994). Using Bronfenbrenner's (1979) model to view the building of capacity illustrates the various levels at which student achievement may be improved. Whether capacity is located at the level of the teacher, school, or system influences how capacity is defined and which factors contribute to its development.

Capacity at the State Level

Nearly every state has focused on implementing a standards-based system but supports educational reform in as many different ways as there are states. In April of 2006, Education

Secretary Spellings explained that states are adopting content and performance standards that define student learning goals in the fundamental academic disciplines and they are developing related assessment programs and accountability systems (2006). Every state department of education is focused on implementing standards-based education systems and supporting districts and schools in this endeavor (Florian, Hange, & Copeland, 2000).

A state concern that directly affects capacity and student achievement is the quality of the teaching force. Raising teacher quality has become education reform's top priority. The quality of teaching is the single most important factor influencing student achievement, moving students well beyond the limitations of family backgrounds (Kaplan & Owings, 2002). Staffing all classrooms with highly qualified teachers, therefore, is a critical concern. The Educational Testing Service (ETS) as explained by Kaplan and Owings (2002), found that 42% of respondents to its survey valued teachers "having the skills to design learning experiences that inspire/interest children," whereas only 19% valued teachers "having a thorough understanding of their subject" (p.46). It seems that the survey participants believe that knowing how to teach is at least as important as knowing what to teach. When it comes to being a quality teacher, the ETS survey suggested that what makes the difference in student achievement is not just what teachers know but also how well they convey what they know to students. Unfortunately, legislators and education officials seem to be saying just the opposite. NCLB legislation defines who is a "highly qualified" teacher and seeks to overhaul how teachers are trained, recruited, inducted into the profession, and nurtured in the classroom (Kaplan & Owings, 2002). To be considered a "highly qualified teacher" according to NCLB (2001) prospective educators need (a) be able to show subject matter expertise, (b) a bachelors degree, and (c) be certified by the state. There is no mention of effective instructional or best practices in the classroom. The act has given rural districts some flexibility in how those districts meet the highly qualified standard for its teachers which has been helpful to rural districts who often struggle with securing highly qualified teachers in certain content areas. This flexibility is important to districts and enables them to reform locally districts

An examination of 16 districts located in 13 states conducted by Florian, Hange, and Copeland (2000) identified state and district policies and practices that supported local capacity for reform. Districts were nominated and selected for the study based on four factors: first, districts located in states throughout the nation with progressive reform activities were

considered; second, districts able to demonstrate high or increasing student achievement on assessments in spite of challenges were nominated (specifically, two districts had large populations of English language learners, two had populations of highly mobile students from families of migrant workers, two had large populations of students from families with incomes below the national poverty level; and six districts served either a large urban or a small town with a rural population); third, an equal distribution of geographical settings was sought; and fourth, the feasibility of collecting information was considered. In addition, five districts were located in rural areas or small towns and, therefore, faced the challenges of geographic isolation and limited financial and human resources. One district served a large urban population, five districts served central city populations, five districts served suburban populations, and five districts served small town or rural populations. Two to nine representatives from each district were interviewed to assess each district's reform path, perceptions of the state's role in that reform, and lessons learned as a result of the reform process. Documents and data were collected from the districts as an additional source of information (Florian et al).

Key state activities.

Florian et al. (2000) identified a number of specific state policies and activities that directly contributed to district-level capacity for reform. Readers are provided highlights of the key state activities that district representatives reported support local capacity for reform. Finally, an explanation of the system-level activities that were reported by these authors to support local capacity for reform is offered.

According to Florian and colleagues (2000), the key state activities that were reported as supporting local capacity for reform are the following:

- (a) *The states developed and adopted model standards in the major academic disciplines in a timely manner.* Although several districts in this study developed their own content or performance standards, this process was more often conducted by the state. Districts that constructed their own standards later aligned district standards to state standards. Thus, the timely development and adoption of standards provided a resource for districts at the front end of district implementation of standards-based reform. However, when state standards are developed after district standards are in place, districts reported that the best state policy was one that was flexible in mandating how, when, and to what extent districts adopted the standards

- (b) *State assessment programs provided districts with an impetus for reform.* State assessment programs were credited for raising teachers' expectations of students and improving educational equity. Some states disaggregated students' scores on state assessments by ethnicity and gender. Five districts in these states reported using this information when developing district and school improvement goals.
- (c) *States provided professional development activities.* Six main ways in which states supported professional development and enhanced instruction were identified by districts: (1) assistance to low-performing schools; (2) standards-based materials, workshops, and conferences; (3) regional professional development centers; (4) policy; (5) institutes of higher education; and (6) new teacher programs.
- (d) *State accountability programs include rewards and assistance components.* Representatives from three districts in high accountability states (Kentucky, Maryland, and Texas) mentioned benefiting greatly from state reward programs. Additionally, both Kentucky districts included in this study had schools that benefited from the state's Distinguished Educator program in which intensive assistance is provided to low performing schools or schools with declining performance. Thus, some districts in this study had reaped benefits from the reward and assistance components of state accountability programs. The districts surveyed for this study, perhaps because student achievement in these districts was high or increasing, did not experience the potentially negative consequences of accountability systems.

Capacity at the District Level

At the district level, discussions of capacity focus on creating conditions that will enable schools to successfully respond to reform efforts, and that will increase the abilities of schools to perform at higher levels in the future. Capacity is generally defined as the resources and materials needed by schools to achieve some set of standards, which may be defined by schools (Darling-Hammond, 1994; Newmann & Wehlage, 1995), or by states (Massell, 1998). Strategies for building capacity within a school system include: (a) ensuring adequate funding and materials (Darling-Hammond, 1994), (b) specifying clear learning standards (Newmann & Wehlage, 1995), (c) aligning instructional materials and professional development to standards, and (d) giving schools authority over decisions regarding classroom instruction (Massell, 1998).

In the previously described Florian et al. (2000) study, district practices that contributed to district-level capacity included the following:

- (a) *Districts aligned curricula to standards.* The majority of districts in this study spent resources aligning curricula to state or district standards (and at two sites, to state assessments). Four districts reported that assistance from external organizations facilitated the process of curriculum development and alignment. For example, a Colorado district worked with the Northwest Evaluation Association to develop its certified high school diploma program, which required the development of exit outcomes and aligned curricula. Because aligning curricula in all academic domains can take several years, representatives from several districts focused on only one or two subjects a year. One way they expedited the process was to use the curriculum teachers had already implemented in the classroom and later fill in gaps by addressing standards that were omitted from the original curriculum.
- (b) *Districts built instructional capacity.* Building human capacity was often accomplished through relationships with external agencies or organizations. Eight districts had extensive partnerships with external organizations or with the state department of education that helped strengthen staff skills. For example, the Florida district worked with the South Eastern Regional Vision for Education (SERVE), the state department, and with the Association for Supervision and Curriculum Development (ASCD). A second way districts reported building human capacity was by hiring highly qualified staff that were knowledgeable, if possible, about the district's reform agenda.
- (c) *Districts supported teachers in collaborating.* Strategies that engage teachers in reflection and dialogue were considered to be important by many districts. Spending time on integrating new knowledge and skills into practice through shared planning time, mentoring programs, proven instructional practices, and staff meetings focused on student learning were important strategies used by these districts to help teachers integrate new practices into the classroom. Two districts reported using weekly release time to work on standards-based curriculum and instructional strategies. These same districts reported adding a weeklong professional development session in the summer, for which participation merited a stipend. Districts in Michigan and

Oregon reported relying on a new induction program to develop the skills of first year teachers in implementing a standards-based approach. Nine out of 16 districts (56%) reported that central office staff and school-level administrators were involved in promoting standards-based instruction through modeling new instructional practices for teachers, observing in classrooms, creating curriculum materials, and participating in professional development activities. Three districts reported that staff meetings focused on student learning and instructional practices.

- (d) *Districts used student performance assessments.* Performance assessments and portfolios were a major part of most of these districts' assessment programs. Ten of the 16 districts reported including portfolios in the district assessment program. Further, many districts reported assessing students at grade levels not included in the state assessment program to hold those teachers accountable for student learning. The capacity of districts to develop, administer, score, and use information provided by performance assessments sometimes came from external sources. Eight districts reported receiving materials or assistance from an external organization or from the state. For example, the Kentucky districts used the writing and math portfolio systems developed for all districts in the state. Capacity to administer, score, and use information from performance assessments was enhanced in some districts by having teachers participate in scoring the state examinations.
- (e) *Districts evaluated teacher performance and professional development.* Districts evaluated teachers using professional standards rooted in standards-based reform. A few districts reported using district-level strategies for holding teachers accountable. For example, a Colorado district's teacher evaluation program included a professional standard that called for increases in student learning as measured by multiple assessments. Districts evaluated professional development activities. Districts in states that emphasized professional development activities were more likely to report conducting evaluations of staff development. These districts most often surveyed teachers about their attitudes toward and changes in practice resulting from staff development experiences. Some states developed guidelines for evaluating or assessing professional development activities; others adopted the professional development standards of the National Staff Development Council.

(f) *Districts fostered relationships.* Relationships were an important dimension of leadership and organizational capacity that many of the districts emphasized. Relationships promoted communication, which helped to align the goals, objectives, and actions of various constituencies. Eight types of relationships were reported as contributing to reform:

1. *Teams of staff or administrators* that focus on standards-based reform were mentioned as useful by 11 districts. Representatives from three of these districts reported that having known, respected, and credible teachers take part in initiatives increased the likelihood that other would join the effort.
2. Relationships with *external organizations or agencies* (including regional professional development centers and state departments of education) were valued by 12 districts for promoting standards-based reform.
3. Relationships with *parents and other community members* were emphasized by 10 districts. They advocated that long-term, meaningful changes cannot be made without the support of parents and other community members.
4. Relationships between the district (administrators and school board members) and the *teacher bargaining organizations or unions* were mentioned. These relationships were effective when they emphasized a shared focus on student learning and open, ongoing communication.
5. Relationships between the district *administrators and school board members* referred more specifically to educating school board members and including them in staff development activities, conferences, and instructional decision-making were mentioned as important by five districts.
6. *Networking with other districts* via state events or regional or national consortia was mentioned by four districts as valuable for sharing information about the policies and practices that work and why.
7. Representatives from four districts reported benefiting from relationships with *local businesses and governmental agencies*. In addition to funding support, such relationships helped facilitate communication with community members.

8. One district planned to work with local *institutes of higher education* so that new pre-service graduates could be more knowledgeable about and skilled at standards-based education.
- (g) Districts and states supported effective decentralized management. Eleven districts mentioned using school-based decision-making teams; some of these teams participated in staff development in action research, team facilitation, data-driven decision making, or team facilitation.
- (h) Districts consolidated and aligned funding streams. Five districts reported working to consolidate and align spending. Two districts mentioned giving schools much latitude over spending of funds, in contrast with a third district in which funds were often handed over from schools to the district to maximize the impact of resources. This finding suggested that decisions about how to use funds can be made at either the school or district level and still be effective.

The researchers in the Florian et al. (2000) study revealed that district activities that benefited schools in nearly all the states included aligning curricula to standards, building instructional capacity, supporting collaborations among teachers, adopting a district performance assessment program, evaluating reform practices, fostering relationships in and outside of the district, and supporting effective-schools goals. Some districts emphasizing professional development were more likely to evaluate it for its influence on teacher practices. Districts emphasizing accountability reported benefiting from state rewards and assistance components. Districts without an extensive accountability system were more likely to align the district's assessment program with the state's assessment program and to evaluate teachers based on their work in the standards-based system.

Florian et al. (2000) framework for understanding district capacity consisted of four types of capacity: (a) human capacity, (b) organizational capacity, (c) structural capacity, and (d) material capacity. Human capacity refers to the "knowledge, skills, dispositions, and self-perceptions of people within the school system" (p. 5). Organizational capacity refers to "relationships among individuals both within the district and with individuals outside of the district" (p. 5) (partnerships with organizations, universities, or state departments). Structural capacity refers to the "elements of the system that are independent of people such as procedures

and policies, professional development programs and curriculum frameworks” (p. 5). Material capacity refers to the “fiscal and material resources available to the system” (p. 5).

This typology of capacities was used as a lens through which to interpret the data collected from districts during the study. As a result, six areas of district activities that affected reform were identified by Florian et al. (2000):

1. curriculum and standards (structural and human capacities);
2. assessment programs and use of student achievement (structural and human capacities);
3. accountability systems (structural capacity);
4. instruction and professional development (human and structural capacities);
5. leadership and organizational capacity (organizational and human capacities); and
6. resources (material capacity).

All of these variables are important, but Corcoran and Goertz (1995) argued the variables are not of equal weight, and their relative importance is likely to vary with the context and the particular mix of factors present in a school site. Some, like teacher subject matter knowledge, have immediate and direct effects on the quality of instruction; others, like technology and access to practice, may have indirect and long-term effects. The quality of human capital and the level of the resources available can be viewed as defining the potential of a system, but this potential is unlikely to be realized unless there is an instructional culture that builds consensus, provides support, and motivates staff to make a collective effort on behalf of all students.

Florian et al. (2000) suggested that education reform requires many of the same state and district activities, regardless of whether the state is supporting standards-based reform by emphasizing professional development, accountability, or student assessment. Some practices were unique to districts in states that emphasized professional development in standards-based reform. These districts were more likely to participate in and benefit from state staff development efforts. Administrators from these districts reported that they were “enablers” and “supporters” of education reform rather than “enforcers” (p. 3).

Improving instructional performance.

Given the general model of instructional capacity, Goertz, Floden, and O’Day, (1995) suggested there are three general strategies that can be used singly or in combination to improve the instructional achievement of a system: (a) increasing the system’s potential instructional

capacity, (b) focusing existing capacity on specific goals or populations, and (c) mobilizing existing capacity so that its full potential is realized. Table 1 has some of the specific strategies in these three categories that Goertz et al. (1995) claimed are frequently used at various levels of the system. The table illustrates the different system levels and how capacity can be improved across a system by increasing the potential of existing capacities, focusing that existing capacity, and mobilizing the capacity to attain the full potential of the system. To have maximum effect policies should be linked both within and across the columns, but they seldom are. States have a particularly difficult time linking teacher policies to their standards and accountability policies. Districts seem to have difficulty linking personnel policies and professional development to standards. Schools find it easier to create structures for collaboration than they do developing effective focusing mechanisms.

The role of central office personnel.

While several studies focus on superintendents, principals, and teachers, fewer explore the realm of the central office leaders. A variety of titles such as associate or assistant superintendent for curriculum or instruction, supervisor of instruction, curriculum coordinator or director, and director of instruction, among others, are used in different school systems to describe positions that perform very similar functions (Firth & Pajak, 1998). The preponderance of research that exists on the central office supervisor has been reported in doctoral dissertations. Most of these studies sought to define the district-level supervisory role by surveying supervisors on their role with questionnaires to determine ideal supervisory duties and behaviors (Smith, 1990).

Table 1

Examples of Capacity Building Strategies at Three System Levels

System level	Increasing potential for success	Focusing efforts	Mobilization of resources
School	Hiring highly qualified staff	Achievement standards	Creating collaborative structures, teaming
	Providing higher quality professional development	Setting goals for improvement	Teacher participating in decisions
District	Increasing access to knowledge Reducing class size	Grading policies Setting content and achievement standards	Teacher developing standards Integrating categorical programs
	Increasing instructional time	Aligning curriculum, testing, and professional development	Decentralizing
State	Increasing budget for instructional materials Funding professional development	Setting content and achievement standards	Rewarding and sanctioning Establishing accountability
	Mandating professional development	State assessment	Rewarding and sanctioning
	Raising certification standards		Deregulating School networking

Note. Adapted from instructional capacity and high performance schools, by T. Corcoran and M. Goertz, 1995, *Educational Researcher*, 24, p. 29.

According to Smith (1990), interpersonal skills and response to teacher needs were generally viewed by teachers as more important than any technical skills that supervisors might possess. District office supervisors and members of their role set (teachers and administrators)

continued to agree, according to most surveys conducted during the 1970s that the primary purpose of supervision was improvement of classroom instruction (Firth & Pajak, 1998).

Esposito, Smith, and Burbach (1975), drew up a list of supervisory activities from the literature to structure a survey of 86% of all district level supervisors in Virginia. The researchers suggested that supervisory tasks fell into four categories. Two of the categories, direct assistance and indirect assistance to teachers, clearly fit the traditional view of supervision as an organizational function that supports and facilitates teaching. Two others, administration and evaluation, signaled a shift in the nature and emphasis of the district level supervisory role.

Another study of supervisors in Virginia that same year (Evans, 1975) sought to replicate research conducted almost 10 years earlier in Texas. Both studies relied on eight vignettes that described supervisory problems. Teachers, supervisors, and administrators were asked to rank responses that they considered most appropriate to each situation. In the Texas study, statistically significant differences in expectations about the role of instructional supervisor were not found, though some limited disagreement between teachers and supervisors was apparent. The 1975 Virginia study, however, revealed greater differences. Elementary supervisors were distinguished from teachers at a statistically significant level in placing greater importance on “organizing for instruction” and “evaluating instruction tasks.” Teachers, in contrast, placed greater importance on the supervisory tasks of “curriculum development” and “providing materials” (Evans, 1975).

There seemed to be a shift from a focus of instruction to a focus on managerial skills during the 1970s and early 1980s, the trend shifted farther again in the 1990s due to the emphasis on accountability. Drawing data from 12 case studies, Huberman and Miles (1984) observed that district-level supervisors were very closely involved in the adoption and implementation of innovations to improve student learning. The authors reported,

Much of the district-level dynamism for school improvement came from the central office administrators, often coordinators or assistant superintendents for curriculum and instruction, who kept their eyes open for promising practices outside the district energetically promoted a local product. The central office administrator thus became the prime advocate of the new practice, often reaching directly into the schools to implement it and thereby leaving the building-level principals to play a secondary role. (p. 271)

With American education in the midst of a restructuring movement, it appears that district-level supervisors of curriculum and instruction can still play an important part in supporting the improvement efforts of schools. As districts adopt decision-making shifts to the local schools, however, the prescriptive and inhibiting rule orientation that gained ascendancy during the 1970s is being abandoned in favor of approaches that support school-based improvement efforts. At the same time that teachers are participating more in school governance and the principal's role is changing from instructional leader to leader of instructional leaders, the district-level supervisory role is returning to its original function of supporting the efforts of principals and teachers. District-level supervisors are again called upon to be supportive facilitators who are committed to sharing leadership while motivating teachers to pursue their school's mission in conjunction with the district's vision.

Change agency at the district level.

Effective school improvement involved building capacity for change and development. Capacity building required pressure and support from external and internal sources (Harris, 2003). Although the need for "change agency" is well established in the literature, relatively little has been written about the role of the district as an external agent of change. Harris reviewed a project that focused on the role of the district in building capacity for school improvement in the United Kingdom. School districts in the United Kingdom are similar to those in the United States. Harris focused on a highly successful school improvement project and drew upon related empirical evidence to explore the district's role as an agent of change.

According to Harris (2003), the Improving the Quality of Education for All (IQEA) Project is one of the most successful improvement projects in the UK. The project focused on building capacity in schools from existing capacity, for example, using existing school personnel. The project centered on the process of teaching and learning and the conditions within the school and classroom that supported and sustained school improvement. All IQEA schools identified a small group of staff, called a school improvement group (SIG), to manage the project. Typically, the SIG was a team of between four and six members of the staff. They were a non-permanent group within the school and membership on the teams changed as the project evolved and developed. Harris (2003) explained the project participants did not seek to "impose priorities for improvement in the school, but rather encouraged the school to review its own problems and opportunities and to select priorities for development" (p. 87). The SIG was

expected to take a lead in this process. The team acknowledged that without an equal focus on the development capacity or internal conditions of the school, innovative work would soon become marginalized. Harris explained that these conditions were viewed in the IQEA Project as the “internal features of the school that build capacity for change and development” (p. 89). One of the most important conditions at the school level was teacher collaboration. However, project personnel recognized that schools, as organizations tend to minimize collective, collegial behavior on the part of teachers. Consequently, to create the structural and cultural changes necessary for teacher collaboration to occur, change agents provided much needed pressure and support (Harris, 2003).

The function of the district as a change agent is to prepare and organize the school for change, to identify where teachers need support, and to keep the focus of activity on improved student achievement. Change agents assist schools in establishing the right pace of change and to identify potential barriers that are particular to the school. Harris (2003) further explained that evaluative evidence illustrates that school improvement cannot progress very far without the influence of external and internal agency. The external agency is provided by the district. The district is looking into the schools, in this case, the internal agency. There is increasing evidence that highlights the particular contribution of the district in school improvement.

Within the IQEA project, data were routinely collected from all participating schools to chart progress and to gauge levels of improvement. This involved collecting the views of participants about the nature and quality of support they have received. From this data source, Harris (2003) explained it is possible to explore the specific contribution and role of the district as an external change agent and she provided highlights that effective district support contributed to effective school improvement groups and also contributed to building the internal capacity for change in a number of ways:

- (a) *Contextualizing school improvement.* The district-level leader has an important role in providing school based groups with a coherent framework for improvement that takes account of individual school context. The district-level leader is well placed to understand the individual demands and needs of different schools. Consequently, district level leaders can ensure that school improvement is approached in a way that addresses the particular needs of individual schools.

- (b) *Thinking school and project.* The district-level leader plays a central role in encouraging school improvement members to think at the school level as well as the improvement project level. Although there are some generic features of school improvement, their translation into practice depends upon their adaptation at the individual school level. In this respect, the district adviser has a role in ensuring that the school improvement group focuses on individual school development but links this to wider developments at the level of the whole project.
- (c) *Developing a bias for action.* In the initial stages, improvement members can spend a large amount of time planning with little emphasis upon action. It is important therefore, that some external pressure is exerted to encourage them to put their plans into action. There is evidence to suggest that the district adviser can influence school improvement, move towards action, and assist the improvement group members in developing a bias for action that will lead to successful innovation and development.
- (d) *Linking school development to local and national priorities.* In the IQEA Project, schools that improved matched internal development needs to external demands or priorities. External, and sometimes competing, demands arose from local and national priorities. The district advisers provided schools with perspective on these competing priorities and ensured that school-level developments reflected and, where possible, complemented the developmental initiatives at the local and national events.

The studies discussed in this section revealed the importance of a core set of district and state level practices in facilitating local reform. Although these results underscore the district's role in reform and contribute to define this role, it is important to examine policies and practices at the school level to understand the impact and effect of these district practices.

Capacity at the School Level

Building capacity at the school level has received considerable attention in debates of school effectiveness and school organization. Research on school effectiveness has identified such factors as principal leadership, clear goals for learning, a climate of discipline, and parent involvement as contributing to successful student outcomes (Purkey & Smith, 1983).

Research on private schools and restructuring public schools has focused on the broader, underlying conditions that contribute to school success. In their study of Catholic schools, Byrk,

Lee, and Holland (1993) examined ideological and cultural influences on school missions and pedagogy. The authors examined a broad range of Catholic high schools in 10 different areas of the United States to determine if students from minority and disadvantaged backgrounds were better educated in Catholic high schools than in public high schools. If differences were evident, they wanted to know the reasons why, and whether this type of success could be transferred to the public sector. They specifically identified shared values, a communal climate, and strong leadership as contributing to Catholic schools' effectiveness in achieving high academic outcomes. Newmann and Wehlage (1995) and Byrk and his colleagues in Chicago (1993) found that shared decision-making, collaboration among teachers, and clear goals for student learning were critical to the success of restructuring public schools. While these authors emphasized the internal processes that lead to school capacity, they identified autonomy in setting goals and agendas and governance structures that involve parents as important external conditions.

Herbert and Hatch (2001) conducted a study that compared four schools in the San Francisco Bay Area that built instructional capacity and demonstrated success in student achievement on California's standardized tests, known as the STAR examinations. The authors of this study provided an interesting comparison from which to examine questions regarding building capacity. The methods of this qualitative study consisted of interviews with principals, teachers, parents and other key players in the schools. The authors examined documents pertaining to the schools' curriculum, instruction, staff selection, and professional development activities. The framework used in analyzing data included such organizational features as shared values and missions, collegial and collaborative working relationships, parent involvement, and school autonomy and authority. The authors focused on the processes and structures within schools that help them to develop and sustain capacity. Therefore, the analysis emphasized the actions and perspectives of teachers, principals, and parents.

Herbert and Hatch (2001) indicated that cohesive relationships, commitment to the schools, and an understanding of the school's identity were key aspects that enabled the schools to sustain their pedagogical approaches successfully and constituted capacity at the schools. Organizational identity was a particularly important feature, because it provided for the community a sense of what the school stood for and what the school promoted. The concept of identity is advantageous for thinking about sustainability because it allows for greater flexibility than does the idea of a mission or a set of goals, which is more prescriptive. In the long term,

schools should be able to adapt to changes in their environments without completely altering the basic philosophies and ideologies that have always informed their practices (Darling-Hammond, 1994). Herbert and Hatch explained that an organizational identity guides what is important, what is appropriate, and what is effective and is a broad framework that provides flexibility for adaptation and change, while constraining choices so that practices and goals remain relatively consistent. This is a relevant study for my purposes because it closely mimics my methods and the research questions are similar to mine. However, the schools that were studied were very different from each other; one was a charter school and the other three were district alternative schools. Two were K-5, one was a K-8 and the fourth one was a high school. To draw conclusions from the comparisons, however, the study might have been more valid if schools of similar conditions were compared.

Another limiting aspect of the study was that only successful schools were studied. Including schools that are trying to build capacity alongside those that have already been successful and are attempting to sustain that capacity could strengthen the research because it is important to examine the process of building capacity as well as sustaining improvement.

One other question that comes to mind is that, although the conditions described in the study are important to take into consideration, it is unclear whether these conditions contributed to the school's capacity to sustain success, or were created by it. The relationship seems to be reciprocal, with identity contributing to structure and achievement, which in turn reinforces the school's identity and its capacity to continue its success. What this implies for the study of school capacity is that it may be best defined as a self-reinforcing process, wherein capacity builds on and sustains itself. This self-reinforcing process is key to continuous district and school improvement.

There is much in the current literature about problems indigenous to schooling in America; it would be easy for a non-native to conclude that the challenges are new ones that effective schools research is a recent phenomenon, and that issues of leadership at the building level have just been discovered. This is not correct as educators know more than they previously did and are better at applying that knowledge. The realization that effective schools are the result of the activities of effective school leaders (Hughes & Ubben, 2004) is paramount to understanding student achievement.

It is appropriate to give an overview of important research findings about the relationship between the nature of leadership at the school building level and the outcomes of schooling. The following section describes the importance of leadership and learning.

Relating leadership to learning.

The importance of good leadership at the building level and the effect of management and leadership practices of the principal on learning have been both implicit and explicit in the professional literature and research. Principal behavior does affect learner behavior even though it is difficult to identify a direct cause and effect relationship. Waters, Marzano, & McNulty (2003) examined the effects of leadership practices on student achievement. They analyzed studies conducted over a 30 year period and identified 21 leadership responsibilities that are significantly associated with student achievement. The results were translated into a comprehensive framework of leadership tools school leaders can use to positively affect student achievement.

The authors utilized their depth of knowledge to develop a balanced leadership framework. They conducted a meta-analysis of 30 years of research, performed a thorough review of literature, and combined the more than 100 years professional experiences and wisdom of the research team to attain the findings. A substantial relationship between leadership and student achievement was supported by the data in the meta-analysis (Waters et al.).

School leaders can have either a positive or negative effect on student achievement. Waters et al. (2003) concluded that there are two primary factors that determine whether that effect will be positive or negative. The first is the focus of change, whether leaders properly identify and focus on improving the school and classroom practices that are most likely to positively impact achievement in the school. The second variable is whether leaders understand the magnitude of change they are leading and adjust their leadership practices accordingly. Some changes have greater implications than others. Waters et al. used the terms “first order” and “second order” change to offer a distinction. What some may experience as a “first order” change, others may experience as a “second order” change. The implications of the change for those involved determine the order of change. Changes that are consistent with existing values and norms create advantages for those with similar interests and can be implemented with the existing knowledge, also, where agreement exists on what changes are needed and how those

changes should be implemented can be considered first order. In the realm of education, these might be instructional strategies, materials, curricular programs, and reporting systems that build on pre-existing patterns and existing knowledge. A change becomes second order when it is not obvious how it will improve things for people with similar interests, it requires stakeholders to learn new approaches, or it may conflict with the norms and values that prevail (Waters et al., 2003).

Waters et al. (2003) developed a “knowledge taxonomy” that organized research into four types of knowledge, which could be applied to leadership responsibilities and associated practices. They are experiential knowledge- knowing why this is important; declarative knowledge- knowing what to do; procedural knowledge- knowing how to do it; and contextual knowledge- knowing when to do it. The authors offered that the literature is full of examples of bright, well intentioned leaders who fail in their leadership initiatives because they did not understand what they needed to know, how to proceed with implementation, or when to use vary strategies or practices. This information is important for school leaders because educators have worked to apply theories from these domains in schools. However, there has been little consistency and structure for the application. The authors encourage school leaders to use the knowledge taxonomy as a tool for this purpose. Combining the 21 research-based responsibilities that are significantly associated with student achievement and the taxonomy for organizing the experiential, declarative, procedural, and contextual knowledge in the theoretical research, the authors put forth a “balanced leadership framework”. This framework offers a wealth of information for school leaders. The framework can act as a toolbox for enhanced success as school leaders face an onslaught of standards-based assessments and increased accountability.

Leading change of any kind is not easy. It requires new knowledge and skills. There are higher stress levels and greater conflict among teachers and between teachers and administrators in schools undergoing change than in schools that are maintaining the status quo. High school change leaders, particularly the principal, must deal with teachers who, under stress, appear to be angry, sometimes even irrational. That is just part of the job of a principal at a restructuring school. Learning to listen to the real issues and then working together to improve the situation is difficult, but in the long term, potentially more rewarding for the change process, for the education of student, and for the school at large (Tewel, 1995).

Jenkins (1997) described Edward Deming's quality views on school improvement and claimed administrators are primarily responsible for building capacity and improving student achievement, not the teachers, not the students, not the parents. Although the administrators need help from everybody, they cannot delegate responsibility for quality. Deming suggested the steps for improving a school begins with an aim for each school subject or behavior to be improved. Next, a standard should be set in both knowledge and information for each subject and each grade level. Principals should then agree, with staff input, on definitions of success and failure for each aim (Jenkins, 1997). Tewel (1995) agreed and claimed that it is up to the principal, more so than other leaders, to help connect teachers to the system by transmitting information from the district to the school and vice versa. Although teachers may not have a significant voice at the district level, principals who take the time and make the effort to listen and genuinely understand them can more effectively advocate for them and for the school.

Indicators of Effective Schools

There is a clear consensus about the characteristics of an effective school. Strong leadership; high expectations for student achievement; an orderly learning environment; focus on student acquisition of basic skills; continuous monitoring; well understood goals; and the creative use of resources sum up the characterization (Hughes & Ubben, 2004). The burden of ensuring effective schools falls ideally on many people taking part in the successes and failures of a school system and of particular schools. From the district superintendent to the support staff, the degrees of involvement vary. Yet, the goal remains constant, improving student learning and moving toward a more effective school district and more effective schools.

Until recently, many individuals believed that resources invested in schools were not related to student achievement. Following the publication of the well known Coleman Report (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld & York, 1966), many researchers attempted to relate school inputs to school outputs. However, this research ignored what took place in schools. Some argue that the utilization of resources is far more important than the level of resources available (Creemers, Peters, & Reynolds, 1989).

There is now considerable research showing that the school students attend makes a substantial difference in their education. Edmonds (1983) contended that the characteristics of effective schools are (a) leadership of the principal reflected by continuing attention to the quality of instruction; (b) a pervasive and broadly understood instructional focus; (c) an orderly,

safe climate conducive both to teaching and learning; (d) teacher behaviors that convey an expectation that all students are to achieve at least minimum mastery; and (e) the use of measures of pupil achievement as the basis for program evaluation. Rutter (1983) reported that the correlation between the combined measure of overall school process and each of the outcome measures of attendance, achievement, student conduct was much stronger than was the correlation between any single process variable and outcome measure. This empirical finding implies that various social factors may combine to create a school ethos, or a set of values and behaviors that characterizes a school.

Wolcott's (1973) portrayed the day-to-day work life of a suburban elementary school principal. The author captured a broad range of problems and pressures associated with the principalship, the endless stream of formal and informal encounters, the diverse range of activities comprising the "daily routine," and the highly verbal and interpersonal character of the work. For the principal Wolcott studied, every problem was important and this seems to be one of the major dilemmas of the principalship.

Morris (1982) conducted an ethnographic study of 16 elementary and secondary principals in Chicago. The researcher explored the principal's effect on students and teachers within the school; on parents and laypersons in the community; on their superiors in the administrative hierarchy; and on themselves as career-oriented professionals. Both elementary and secondary principals were found to spend most of their time in principal-initiated contacts with staff, faculty, and students. These principals affected their schools by balancing stabilization and enhancement, transforming attitudes that opposed school policy, and controlling the climate to foster uninterrupted learning. In the community, the principals had to diplomatically shape parent expectations of the schools' capabilities. The study revealed an endless series of brief interactions, a great variety of tasks, and a large amount of decision-making discretion associated with the principalship. School principals revealed a considerable degree of freedom in terms of following rules and policies and in terms of responding to issues and problems in unique ways. While the social situation of the principalship presents numerous constraints on action, the principals studied by Morris appear to possess and exercise a great deal of personal discretion in enacting that role, quite unlike the stereotypical idea that "the principal's hands are tied." The latter may well be a myth of convenience promulgated by principals themselves, one of many strategies principals appear to rely on in coping with their work environment.

Blumberg and Greenfield (1986) studied eight principals who increased capacity and student achievement within their schools: five elementary principals, three male and two female. The primary criterion was improved student achievement and reputation for excellence. Interviews were purposively unstructured and consisted of individual interviews and a group interview. As expected, these principals reported both similarities and differences regarding their work world. The authors reported while they had expected some common approach to the problems encountered, they held rather idiosyncratic perspectives regarding their work worlds. One principal, referred to as the humanist, said:

I always picture school as a moving mobile. And on that mobile, hanging out there, you have the Board of Education as a group, the District Office, the parents, the faculty, subgroups of the faculty, concerns with discipline, the department chairmen, and teacher union representatives. Each group mobilizes forces to put demands on you. My job is to keep the mobile in balance and keep it moving in a direction that all these groups really want it to go. (Blumberg & Greenfield, p. 233)

All of the principals noted isolation and the fact that it is a lonely role. These principals were “people administrators” in the sense that effective interpersonal skills were a critical ingredient of successful on-the-job behavior. They were inquiring individuals and kept themselves informed of and responsive to the work world demands characterizing their particular school situation. One of the most striking observations is that while each appeared to have evolved a rather individualistic and idiosyncratic ideology toward his/her job, the types of problems he/she experienced were similar from one school to another. The “commonality” of problems encountered generally reflects the evidence reported in other studies of school organizations. However, the strikingly different yet similarly effective conceptions guiding these principals’ orientations toward their work world run counter to what seems an implicit, if not explicit, notion abounding in the literature that effective administrators hold some common viewpoint regarding their role and the nature of their work situation.

Two themes underlying this study need to be emphasized. First, while each principal held a tacit and almost unconscious understanding of factors related to his/her on-the-job behavior each had an extremely difficult time explaining specifically why they did what they did on the job. In other words, they could perform, but could not clearly explain or otherwise systematically

articulate the why and wherefore of their behavior; they just knew that it “worked.” Secondly, the socializing influence of the school situation itself appeared to have an informal and unobtrusive impact on the development of the interpersonal skills, the work-world perspectives, and the coping strategies guiding these principals.

Blumberg & Greenfield (1986) described three themes that were evident in each principal. The first was a desire and eagerness to make their schools over in “their” image, the second was they were proactive and quick to assume the initiative and lastly, they were resourceful in being able to structure their roles and the demands on their time in a manner that permitted them to pursue what might be termed their personal objectives as principals.

The focus on leading rather than administering reflects Katz and Kahn’s (1966) three types of organizational leadership behaviors: (1) the introduction of “structural change”, or “policy formulation”, (2) the “interpolation of structure”, i.e., “piecing out the incompleteness of existing formal structure”, or improvisation, and (3) the “use of structure formally provided to keep the organization in motion and in effective operation, or administration” (p. 308).

Administering, then, means maintaining things as they are, on the assumption perhaps that the system will produce what it is intended to produce of things simply run smoothly. This means that the schools are structured in a functional manner, the teachers are all competent, and the curriculum and teaching methodologies are functional and relevant to the learning needs of the students. What remains for the principal to do is to administrate, to keep things running.

However, it is commonly the goal of principals to make their school a different place from the one they found. To use Katz and Kahn’s formulation, it seems that for the most part principals engage in “the interpolations of structure” (p. 188).

One of the largest nationwide studies of accredited public schools reveals that while there is some disjointed reform activity reported in the nation’s high schools, the rate of change is sluggish at best and very uneven (Cawelti, 1994). In this study, high school principals were asked to indicate the degree to which their schools were involved in some 36 reform activities grouped under five major components of high school reform: curriculum/teaching, school organization, community outreach, technology, and monetary incentives. Results were obtained from 3,380 of the over 10,000 accredited high schools surveyed. Among the findings are that only seven high schools in the responding group reported general use of all seven critical reform elements identified as being essential for a comprehensive whole school change effort. These

elements include site-based management, setting clear achievement standards for graduation, achievement assessment, use of the block schedule, extensive involvement in business/industry collaboration, use of technology, and interdisciplinary teaching for a more integrated curriculum (Cawelti).

Capacity at the Classroom Level

At the level of the teacher, capacity refers to knowledge, skills, attitudes, and efficacy (Massell, 1998; O'Day, Goertz, & Floden, 1995). O'Day, as cited in Herbert and Hatch (2001), explained that increasing teachers' capacity involved aligning their knowledge, skills, attitudes, and efficacy toward achieving a set of goals for student learning as defined by the school, the district, or the state. Providing ongoing support for professional development and school-based inquiry into practice can help to maintain capacity (Darling-Hammond, 1994). While schools play an important role in building teachers' capacity by providing opportunities for training and development, responsibility for providing the necessary support and resources is placed on the district or state, which holds administrative authority over schools.

States' leaders have approached professional development as a demand problem, but evidence seems to indicate that supply is also a problem. The current system is badly fragmented and has weak effects on practice (Corcoran & Goertz, 1995; Goertz, Floden, & O'Day, 1995). The primary operating assumptions of policymakers about professional development are that more is better and that formal training leads directly to changes in practice. So time is increased, funding is increased, but there is seldom strategic discussion about specific targets at the state level, and usually no long run perspective at the local level. Changing teaching is primarily a matter of learning, but reformers are often focused on making specific structural changes that they believe will lead to changed behavior in the classroom rather than designing structures that meet teachers' learning needs (Peterson, McCarthy, & Elmore, 1996).

Pauly (1991) explained, "If policy makers and school officials can learn to focus their attention firmly on classrooms, they will have taken the first step toward figuring out how to correct the problems of the schools" (p.200). However, to implement instructional reforms, teachers need better resources for learning, including concrete examples of student work, opportunities to master disciplinary content required to meet new standards, and examples of how teachers have helped students like theirs meet the standards. According to Pauly (1991),

access to opportunities for learning is “inequitably distributed across urban, rural, and suburban districts” (p. 201).

Effective teachers are important for the success of a school. Youngs and King (2002) describe a school’s capacity to include the knowledge, skills, and dispositions of individual teachers. All teaching staff must be professionally competent in curriculum, pedagogy, assessment, and classroom management, and they must maintain high expectations for student learning. The influence of individual teachers’ knowledge, skills, and dispositions on student achievement is recognized in the literature on teacher education, teacher licensure, and professional development (Cohen & Hill, 1998; Darling-Hammond, 1994; Pauly, 1991). Many capacity building efforts in the past have focused on enhancing the knowledge of individual teachers of subject matter, pedagogy, and students. Corcoran and Goertz (1995) argued that policymakers often proceed with reforms without understanding what teachers need to know to be able to implement them and that the professional development “system” is fragmented, generally of low quality, and not well linked to the reforms.

When individual teacher competence is exercised in an organized, collective enterprise capacity increases. Youngs and King (2002) explained that this aspect of capacity emphasizes the educative importance of social resources in the school, which they refer to as schoolwide professional community. Youngs and King characterized a strong school wide professional community as (a) shared goals for student learning; (b) meaningful collaboration among faculty members; (c) in-depth inquiry into assumptions, evidence and alternative solutions to problems; and (d) opportunities for teachers to exert influence over their work. Collegiality, collaboration, and cooperation can be viewed as multipliers that enhance the value of human capital and instructional resources by raising morale and increasing the work effort of teachers (Corcoran & Goertz, 1995). School-based management and other forms of teacher participation in decision making can create the conditions under which professionals can reorganize instruction, redesign classrooms, and improve use of resources (Darling-Hammond, 1994). These structural changes, however, may be less powerful than interventions that directly enhance human capital and should be designed to promote learning (Peterson, McCarthy, & Elmore, 1996).

Building instructional capacity is prominently featured in the contemporary conversation about educational reform. This capacity is widely regarded as critical to good teaching and learning, and capacity building is often depicted as the key to better education (Cohen & Ball,

1999). Though reformers have frequently aimed to improve what students learn, most efforts to increase learning have concentrated on factors such as improving curriculum materials, training teachers in new methods, or adding new technology. Following this logic, reformers seem to have assumed that increasing the instructional capacity of schools depends on increasing the capacity of either teachers or the materials they use. Cohen and Ball claimed there is increasing evidence that such efforts rest on partial conceptions of instructional capacity. Cohen and Ball focused on interactions among teachers and students around educational material, rather than seeing curriculum alone or teachers alone as the main source of instruction. On this view, each of the three elements is essential, but instruction requires all three. Instructional capacity, the capacity to produce worthwhile and substantial learning, is a function of the interaction among these elements, not the sole province of any single one, such as teachers' knowledge and skill or curriculum. An illustration of Cohen and Ball's framework is in Figure 2. Following the illustration each element is discussed.

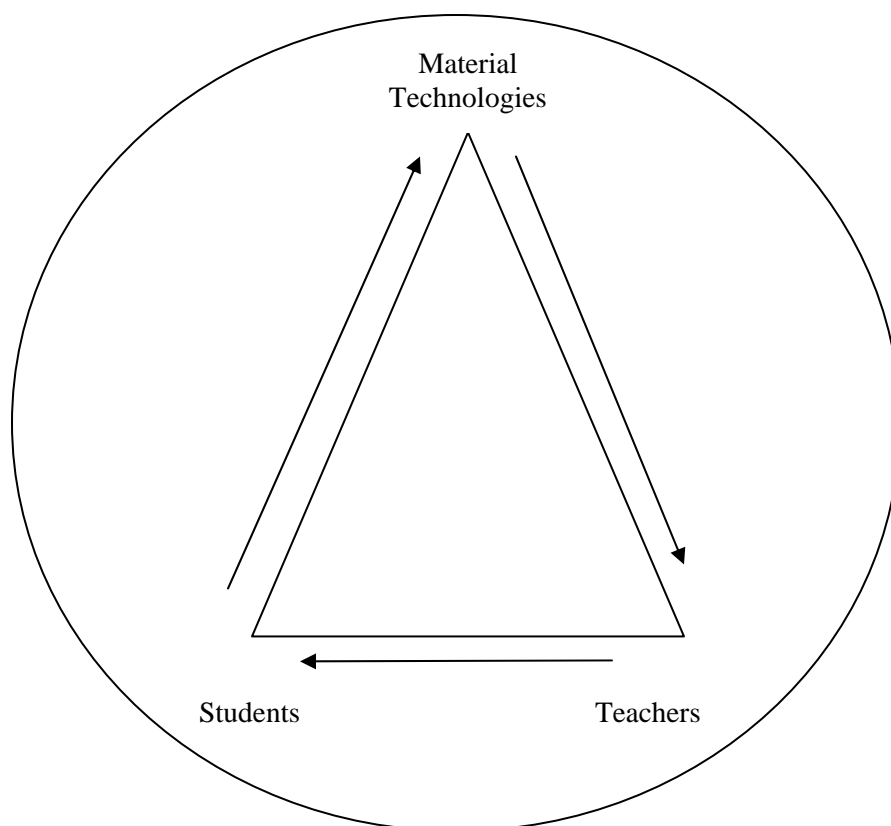


Figure 2. The internal dynamics of instructional units as depicted in Cohen and Ball's Framework (1999).

Teachers' intellectual and personal resources influence instructional interactions by shaping how teachers obtain, interpret, and respond to materials and students. There is considerable evidence that teachers vary in their ability to notice, interpret, and adapt to differences among students (Cohen & Ball, 1999). Important teacher resources in this connection include their conceptions of knowledge, understanding of content, and flexibility of understanding; acquaintance with students' knowledge and ability to relate to, interact with, and learn about students; and their repertoire of means to represent and extend knowledge, and to establish classroom environments. Cohen and Ball explained these resources mediate how teachers shape instruction. Consequently, teachers' opportunities to develop and extend their knowledge and capabilities can considerably affect instruction by affecting how well teachers make use of students and materials.

Much of this discussion of capacity has focused on teachers, but Cohen and Ball (1999) claimed that students' experiences, understandings, interests, commitments, and engagement are crucial to instructional capacity. They explain one way to consider the matter is that the resources that students bring influence what teachers can accomplish. Students bring experience, prior knowledge, and habits of mind, and these influence how they apprehend, interpret, and respond to materials and teachers. The same mathematics problem used by the same teacher may produce a substantially different lesson with a group of students at one point than it might after students learn things that affect their approach to the task. When teachers say, "My students could never do that," they may not recognize the ways in which students could learn or change. Students, and interactions among students, shape the resources for their own learning (Cohen & Ball).

Cohen and Ball (1999) explained the term materials as the instructional topics students are engaged in, as presented in texts and other media, as well as in problems, tasks, and questions posed to students. Instructional materials can mediate students' engagements with the content to be learned, though sometimes the materials themselves are what is to be learned.

Curriculum is often developed in advance, but students' and teachers' interactions with this material comprise the enacted, which is to say, the actual or effective- curriculum. These material technologies influence instructional capacity by constraining or enabling students' and teachers' opportunities to learn and teach. Features of these technologies that seem likely to affect instructional capacity are their complexity and the design of teachers' and students' intended engagement. In the case of mathematics materials, one would expect that the nature of

the problems offered, the development of the ideas, the number and variety of representations, and the ways in which multiple representations were coordinated would shape what teachers and students could do and learn (Cohen & Ball, 1999).

This analysis shows that any given element of instruction shapes instructional capacity by the way it interacts with and influences the other elements. Thus, capacity is not a fixed attribute of interactions. One teacher's interactions with a class of fifth graders, for example, may yield greater instructional capacity than those of a colleague who works with the same class, because the first teacher may be more adept at evoking and making use of students' ideas. This leads me to believe that the importance of the amount of content or prior knowledge teachers or students "bring with them" to interactions may be misleading. In discussing what students bring to a task it is important to recognize that what they bring depends in part on what teachers can see and use in students. One reason that different teachers elicit different responses and work from the same students is that what teachers know, believe, and can do shapes their perceptions of what students bring, the opportunities they subsequently extend to students, and their interpretation of students' ensuing work.

Similarly, materials both depend on their use by students and teachers and the effect of such use. From one perspective, the use of readings would be shaped by the nature of the text they offer students, and the approaches used to develop students' reading, comprehension, and interpretation. From another perspective, materials are shaped by students' ideas and experiences. Here we can see teachers' unique position in the construction of instructional capacity. Cohen and Ball (1999) explained that "teachers' knowledge, experience, and skills affect the interactions of students and materials in ways that neither students nor materials can" (p. 67). That is because teachers mediate instruction: their interpretation of educational materials affects curriculum potential and use, and their understanding of their students' experiences affects the student's opportunities to learn.

As teachers learn new information about content and students, they notice different aspects about both, and are able to use them differently. Change in students, teachers, or materials has the potential to change the relations of teachers, students, and materials, and hence affect instructional capacity. But change in teachers has unique potential, because teachers mediate all relationships within instruction (Cohen & Ball, 1999).

It would seem that if instructional capacity is a consequence of interactions among teacher, students, and materials, then interventions are likely to be more effective if they target interactions among more elements of instruction, rather than focusing on one element in isolation from others. Interventions that focus not only on aspects of particular elements, but also on their relations, are more likely to improve capacity.

Conclusion

The tenuous relationship between educational research and educational practice has often been noted. One of the most important reasons why the impact of research on education seems so haphazard is that educational researchers are primarily engaged in a search for variables that may relate to improved outcomes across multiple settings, whereas practitioners' innovations primarily search for models that work here and now. The main task of reform is not to install new practices in schools the way one would install appliances; nor is it to overcome resistance to new knowledge. Instead, it is to foster learning, which is a very different and more complex endeavor. The researchers emphasized that successful change in schools required participants at all levels of the learning community to collaborate. Stakeholders such as policy makers, agency representatives, researchers, practitioners, and parents, must initiate and examine new ideas, share knowledge, and test, refine, and rebuild programs. Each level of the community brings its own unique contribution to the reform effort. By working and learning together the participants can create the conditions and opportunities to build and sustain school capacity and student achievement.

The studies presented here offer various results but can be divided into four basic categories as Florian, Hange, and Copeland (2000) found in their study. Their framework for understanding district capacity consisted of four types of capacity (a) human capacity (b) organizational capacity (c) structural capacity, and (d) material capacity. Human capacity referred to the knowledge, skills, dispositions, and self-perceptions of people within the school system. Organizational capacity refers to relationships among individuals both within the district and with individuals outside of the district (partnerships with organizations, universities, or state departments). Structural capacity refers to the elements of the system that are independent of people, such as procedures and policies, professional development programs, and curriculum frameworks. Material capacity refers to the fiscal and material resources available to the system.

This typology of capacities can be used to organize the findings of the studies presented here. Each area researched can fit into one of the four categories and thus the framework for my interviews and data collection reflected this. All of these elements merge to define the potential of a system, but this potential is unlikely to be realized unless there is an instructional culture that builds consensus, provides support, and motivates staff to make a collective effort on behalf of all students.

CHAPTER THREE

METHODOLOGY

This chapter contains a description of the methodology that was employed to complete a descriptive case study of how one school system built and sustained the capacity to improve student achievement on Virginia's standards-based assessments. The following sections include (a) the research design used in this study, (b) the selection of the sample, (c) the content validity instrument for interview protocols, (d) the interview protocols for inquiry, (e) the data collection process, and (f) the procedures used for data analysis. This chapter concludes with a discussion of the credibility of the research methods.

The guiding question was: How did a school division successful in achieving state accreditation develop and sustain capacity to improve student achievement in its schools? This researcher reviewed the efforts of one school system in developing and sustaining its capacity to enhance instruction in response to increased accountability. My interest is in instructional leaders and teachers as they engage in the day-to-day work of improving student achievement in the context of standards-based reforms. The purpose of this study was to use the experiences of a school division that has improved student achievement to illuminate the issues that may confront a similar school divisions that are working to improve achievement on Virginia's standards-based assessments.

Assumptions and Rationale for a Qualitative Design

Qualitative research is an umbrella concept that covers several different forms of inquiry that help us understand and possibly explain the meaning of social occurrences within natural settings with as little disruption as possible (Merriam, 1998). Merriam further explained "that upon which all types of qualitative research are based is the view that reality is constructed by individuals interacting with their social worlds" (p. 6).

Given these distinct characteristics and the need to explore the concepts in a natural setting, qualitative research is highly suited to the exploration of complex social occurrences such as building instructional capacity within a school system. In contrast with quantitative research, which breaks apart a phenomenon to examine the variables, qualitative research reveals how all the parts fit together to form the phenomenon (Merriam, 1998).

Type of Design

This investigation is a case study within one school division. Qualitative researchers seek to understand and arrive at a theory from observations and other information gained in the field. Goetz and LeCompte (as cited in Merriam, 1998) described qualitative research design in the following way. In contrast to deductive researchers who “hope to find data to match a theory, inductive researchers hope to find a theory that explains their data” (p. 7). Merriam maintained that, among the different types of qualitative research, the case study design is a particularly useful approach for studying educational innovations. She also noted “case study is a design particularly suited to situations in which it is impossible to separate the phenomenon’s variables from their context” (p. 27). This design allowed me to get as close to the subject of interest as possible by immersing myself in the natural setting to investigate the process by which a school division has built capacity. Yin (1994) explained that case studies are beneficial when “how” or “why” questions are being asked about a situation over which the investigator has little or no control. He also recommended that investigators use the case study method when they believe that contextual conditions will be highly relevant to the phenomenon under study. This type of design was needed because of the nature of the research questions.

Researcher’s Role

Merriam (1998) compared the role of the researcher in qualitative studies to that of a “detective” (p. 21). At first everything is important; everyone is suspect. It takes time and patience to search for clues, follow up leads, to find the missing pieces, to put the puzzle together. This type of research appealed to me for that very reason. As a high school principal I am often faced with bits and pieces of information and must dig deeper to give those remnants meaning. Qualitative researchers must have an interest in the process. Merriam described the process in two ways. The first is monitoring: describing the context and population of the study, discovering the extent to which the treatment or program has been implemented, providing immediate feedback of a formative type, and the like. The second is causal explanation: discovering or confirming the process by which the treatment had the effect that it did.

The qualitative researcher must be a good communicator. It is imperative that the interviewer establish rapport, ask good questions, empathize with the respondents, and listen intently. Researchers must be intuitive and sensitive to the context and variables exhibited within

the data collecting process. They must be able to identify agendas and the meaning of nonverbal behavior and be patient during the data collection process. It is important to listen for what is not being said in addition to what is being said. Seidman (1998) explained that qualitative researchers must listen on at least three levels. First, the researcher must listen to what the participant is saying and assess whether what they are hearing is as detailed and complete as needed. Secondly, the researcher must listen for the “inner voice” and encourage the participant to use language that is descriptive and not too general or vague. The third level consists of listening while remaining aware of the process as well as the substance of the information.

In comparing my own research skills to those desired qualities above, I am confident in my skills as a communicator. I am patient and observant, and am able to establish rapport and talk with individuals easily. It was important to self-monitor occasionally and focus on being the researcher and not a high school principal. The goal was to extract the information while making each participant feel at ease and valuable in the process and to remain objective as the data were collected and interpreted. A researcher’s log was used to keep track of my subjective thoughts and other important factors that were encountered. Merriam (1998) suggested an interview log to note such information as the informant’s health, mood, and any ulterior motives that may affect the quality of the data obtained.

Procedures

The selection of the school system and the individuals that took part in the study is described in this section. Access, confidentiality, and consent procedures are explained.

Setting Selection

In selecting the school system for the case study, I primarily took into consideration the accreditation status of the schools in the system as set forth by the Virginia Board of Education. A secondary factor was the primary geography of the system (because I limited my drive to approximately one and one-half hour), and a willingness of the system to participate in the study. School systems in Southwest Virginia were attractive because that area of the state is my primary focus. I was interested in rural, lower socio-economic divisions because my division is similar and I have chosen to make this area of the state my home.

Gaining Access and Entry

This is a descriptive case study focusing on how one school system built and sustained the capacity to improve student achievement on Virginia's standards-based assessments. Documents that provide evidence on the views and actions of instructional leaders were collected. These documents were obtained from the Virginia Department of Education (VDOE), central office staff, principals, and teachers. Scores and school demographics were accessed via the Internet from the VDOE and individual school and county web sites.

Permission was gained from the district superintendent to access the central office staff and the schools. The director of instruction in the central office was interviewed. Finally, I contacted the principals of the schools in which the interviews were conducted. A brief overview of the process of how access was gained follows:

1. A letter was submitted to the division superintendent requesting permission to conduct the study. The letter described the purpose of my study and explained how I would collect the data. I asked the superintendent to contact me with questions regarding the design of my study or any concerns or questions he may have. No questions were noted.
2. After receiving approval from the division superintendent and contacting the director of instruction by telephone, a meeting was arranged to discuss the study, obtain written consent, and set up a time to conduct the interview with the director of instruction.
3. I interviewed the director of instruction and was given the names of the principals and the schools that he had chosen to participate in the study.
4. The prospective principals were contacted by telephone, and a short visit was arranged to explain the purpose and procedures of the study. Written consent was gained from each principal to participate in the study, and the individual interviews with each principal were conducted on two separate days.
5. The teachers were contacted, and meeting times that were conducive to their schedules were set up. At each meeting the study was explained, and the participants signed a consent form. I proceeded with the interviews which took approximately four days to complete.

Completion of the steps above provided access and entry into the schools to conduct the study and provided the individuals involved a clear sense of the purpose of the study and allowed adequate time to conduct research.

I interviewed the director of instruction in the school system. One example of purposeful sampling, referred to as snowballing, involved asking each participant to refer other participants (Merriam, 1998). The director of instruction recommended other leaders in the school system who might offer valuable information about how they developed and sustained capacity within the system. Those principals and teachers in various schools were interviewed to gain information about the building and classroom level. The director of instruction for the school system suggested these individuals. Table 2 illustrates the data sources from which information was drawn.

Table 2
Data Sources Across Levels of Educational System

Levels	Documents	Interviews	Observations
Macro	No Child Left Behind, Standards of Learning Standards of Accreditation	None	None
	Director of Instruction (1) hiring, curriculum guides, description of division	Staff meetings (1), others	Exo Practices: evaluation,
Meso	Memo's, handbooks, minutes of faculty meetings	Principal (3)	Faculty meetings (3), Parents, Teachers, Aides (1)
	Pacing guides, assessments, Individual Education Plans, 504's	Teachers (9) viewed by Principal as quality teachers	Micro Focus: Classroom Learning Environment 1. Interactions 2. Instructional strategies 3. Classroom management

Assurance of Confidentiality and Consent

A consent form was submitted to the Virginia Tech Institutional Review Board that explained the purpose of the study, procedures, and future use of the data for approval. Approval was received and the division superintendent was provided with the consent form, and gaining access to the division's personnel was discussed. The necessary signatures were obtained before collection of data began.

The name of the school division, schools used, and all participants' names were kept confidential. The school district was assigned a fictitious name, Success County. Ensuring confidentiality was essential in gaining meaningful data from the participants. I identified participants with a coding system that corresponded to their schools.

Data Collection Procedures

The qualitative research paradigm defined the methods and techniques most suitable for collecting and analyzing data. Qualitative inquiry, which focuses on meaning in context, requires a data collection instrument that is sensitive to underlying meaning when gathering and interpreting data. Merriam (1998) explained that good listeners and communicators are best suited for this task, especially because "interviewing, observing and analyzing are activities central to qualitative research" (p. 23). Data were primarily collected through interviews and informal observations. I interviewed central office personnel, principals, and teacher-leaders.

Each school was informally observed and I was able to obtain a sense of the culture and climate of each school. I utilized a checklist created by the Virginia Department of Education to aid in this task. The checklist provided insight into the culture and climate in the schools. The checklist is used by the department to identify areas that need to be addressed in culture and climate as well as offering prompts of what one should see when visiting a school. I used the checklist during my initial visits to the central office and to the schools. Relevant documents, including improvement plans, newsletters, memos, and minutes were reviewed to gain additional perspective. All three techniques provided valuable information on the school improvement process and how the process is viewed by instructional leaders.

In the following sections of this chapter, I describe how the data were collected and how I arrived at the instruments used to collect the data. The procedures used to conduct the interviews will be explained along with the procedures for data collection and recording.

Means of Collecting Data

Interviews were the primary means of data collection and were conducted at each level of inquiry including the exo, meso, and micro level. Interviews were not included on the macro level, only documents were reviewed. My review of the literature and experiential knowledge of school divisions as a teacher, department chairman, athletic director, and school administrator guided the development of the interview protocol, the selection of documents, and the identification of where and when to observe. The interview questions stemmed from the framework of Florian et al. (2000).

The review began with policy and regulations on the macro-system level and proceeded to the exo-system by examining the central office processes. I then examined the meso-system, the practices at the school and proceeded to the micro-system where the classroom level was investigated. Seidman (1998) described gaining information through interviewing most simply put “as stories are a way of knowing” (p. 1). The process is essentially a meaning-making process. He further described interviewing as “a basic mode of inquiry” (p. 17). This type of data collection method allowed me to use my interest in understanding the experience of other people and the meaning they make of that experience.

Interview Procedures and Protocols

Taped, formal interviews of 45 to 60 minutes in length were conducted with (a) the director of instruction (b) three selected principals and (c) nine selected teachers. Based on this design, 13 interviews were completed. The interview protocols are presented for review in appendix E. The interviews were scheduled at a convenient time for the individuals involved. At the beginning of each interview, written consent for participation was obtained. Merriam (1998) stated that highly structured interviews “get reactions to the investigator’s preconceived notion of the world” (p. 74). However, my purpose will best be suited for semi-structured interviews and protocols were developed as such. Merriam noted that a semi-structured format “allows researchers to respond to situations at hand, to the emerging worldview of the respondent, and to new ideas on the topic” (p. 74).

Content Validity

The interview questions were constructed around the Florian et al. (2000) framework for the types of capacity, which was the domain, found in school systems. Questions were then

formulated using Bronfenbrenner's (1979) Ecological System Framework, which examines the levels across an educational system. This researcher insured content validity by asking questions based on the extent to which the answers related to the four types of capacity on each level of the educational system.

Document Data Collection or Recording

It is difficult to separate the processes of gathering and analyzing data. Once the interviews commence, the researcher cannot help but work with material as it comes in (Seidman, 1998). The interviews were audio taped and then transcribed. Upon completion of each interview the data were examined, concepts and themes were selected and a decision was made about areas, which should be examined in more detail. Themes were established when particular ideas or explanations kept reoccurring in the data forming a pattern. Those patterns were collapsed into themes. All materials from the interviews and a review of documents were analyzed by (a) sorting and collapsing the data under topics that represented themes, (b) categorizing and organizing the data to form themes, (c) reviewing and categorizing again to find data related to the themes, (d) reviewing the data once more to determine any overlap or ambiguity, and (e) organizing the data in the form of propositions that summarize prevalent themes and patterns.

Pilot Study

A pilot study using the methods for this research was conducted at a school in another division. However, the pilot school did fit the characteristics of the schools in which this study was based. I interviewed a director of instruction at the central office level, a principal, and two teacher-leaders to whom I was directed by the principal. I examined relevant documents, including minutes from school board and staff meetings. Informal observations using the checklist provided by the department of education were conducted in the school. The pilot study was a valuable tool and it provided information that allowed me to refine my interview protocol. In the pilot study, all interviews were audio taped and reviewed. After reviewing the documents, completing the interviews and observations, I invited the participants to comment on the effectiveness of the interview protocol. Each participant was given the opportunity to suggest additions or deletions to the interview questions and several of participants offered suggestions. Suggested changes included asking more open-ended questions and adding one question

regarding how teachers and divisions utilize the information provided by the state, such as crosswalks and enhanced scope and sequence. Changes were made in response to their comments.

Assessing the Cultural Context

I included school and district demographics in the field notes section such as enrollment, percentage of free or reduced-price lunches, SOL test score information, and relevant teacher demographic information. Relevant characteristics of the schools and participants that may affect the findings of this study were included. Participants' age, gender, years of experience, educational credentials, preparation, and endorsements is presented in table form for clarity.

Data Analysis Procedures

The purpose of analyzing the data was to transform the information into findings. With the very first document reading, interview, or observation, insights emerge that lead to refinement of the questions being asked. Seidman (1998) emphasized that interpreting is not a process researchers do only near the end of the study. Even as interviewers question their participants, tentative interpretations may begin to influence the path of the questioning. Identifying passages that are of interest, choosing how to label the passages, and grouping them is analytic work that has within it the seeds of interpretation. Seidman also emphasized that there is no substitute for total immersion in the data and once all of the data are collected, the analysis then becomes most intensive.

After completing each interview, the data were examined, concepts and themes were pulled out, and a decision was made about areas which should be examined in more detail. Once the interviewing was completed, I constructed a matrix to display the categories as they were established from organizing the data. The context of the matrix evolved as the categories were defined. I used the suggestions on how to build matrix displays provided by Miles and Huberman (1994) as a guide.

The matrix display helped to organize the data into categories; it also helped in analyzing the data to determine findings and conclusions. Miles and Huberman (1994) suggested several ways that matrix displays could be used to illustrate and test conclusions. These authors pointed out that noting patterns or themes could be especially useful for analysis when there is an overload of data. They advised, however, that it is important for the researcher to make sure that

what is observed is “real added evidence of the same pattern” (p. 216). Furthermore, one way to confirm the presence of patterns is to subject the patterns to “skepticism, one’s own or that of others, and to conceptual and empirical tests” (p. 216). This researcher first organized data matrix by type, for example, interviews and documents. Secondly, the data were sorted and analyzed by schools. Finally, the data were sorted and analyzed by level of the ecological framework, the micro-system level (classroom), the meso-system level (building), and the exo-system level (district) of micro-system. Within those levels the data were further broken into the categories and finally, themes emerged in the analysis. The themes were evident across each level of the educational system.

In this study I used the strategy of noting patterns (Miles & Huberman, 1994) to analyze the data. To confirm the presence of patterns, memos were written explaining the conclusions derived from the display matrices. According to Miles and Huberman, writing memos is “a form of analysis” (p. 213) that leads to “reformulation, added clarity, and ideas for further analysis” (p. 213). The memos helped to document the comparison process and trail that lead to the final conclusions. To further confirm the presence of patterns, I “documented the analysis procedures” (p. 213) by putting phrases on index cards and grouping them according to themes. A colleague, one who successfully completed a qualitative study, reviewed my work. I asked the colleague to specifically review the final matrices, the decision rules for constructing the matrices, and the written matrices.

Addressing Quality

Most researchers are concerned with producing credible and trustworthy knowledge in an ethical manner (Merriam, 1998). In addressing quality I examined the aspects of each component, the validity and reliability of the instruments, the appropriateness of the techniques used to analyze the data, and made sure there were data to support conclusions.

Triangulation of information, member checks, peer examination, and the repeated examination of interview tapes were utilized in this study to establish credibility. Credibility was further reinforced through follow up telephone conversations and e-mails with participants to clarify interview responses and to obtain other related information. Merriam (1998) noted that validity and reliability are concerns that can be approached through careful attention to a study’s conceptualization and the way in which the data were collected, analyzed, and interpreted, and the way in which the findings are presented.

Vockell and Asher (in Merriam, 1998) recommended unobtrusive measures of data gathering when collecting qualitative data. This method involves the review and analysis of formal and standardized instruments, such as standardized tests, and documents, which are either current or archival. School publications and other relevant documents are unobtrusive measures from which data were collected for comparison. Document and interview data were analyzed for congruency of information. The use of this strategy ensured triangulation. The triangulation strategy when coupled with member checks and repeated examination of the interview tapes gave credence to the findings (Miles & Huberman, 1994).

Limitations and Delimitations

There are limitations that occurred in this study. For example, the director of instruction was asked to choose three outstanding principals and the principals were asked to choose three outstanding teachers. The director of instruction chose the principals that were to be interviewed, and the principals chose the teachers with whom I spoke. However, based on the analysis, it does not appear that the outcomes were affected because not all of the principals and teachers were favorable of the strategies and concepts the county employed.

It is also noted that the author developed the instruments, conducted the interviews, and analyzed the results. To improve interrater reliability, the researcher could have added additional raters to review the data and thus insure no personal bias.

Chronology

The idea for this study was conceived in 2002. It became evident that after two years of failing SOL scores and then a significant turnaround in SOL scores, something significant was occurring in Success County. As a school leader in a similar division in Southwest Virginia, this turnaround was of interest to me.

The data collection for this study began after IRB approval was received, July of 2004, see Appendix F on page 167. Interviews, observations, and document reviews were conducted during the fall and winter of 2004 and into the spring of 2005. Transcripts were transcribed and data analysis occurred in the summer and fall of 2005. Several items are important to note regarding this division and this study. The school system was not successful on the SOL's until 2000. Initially, the greatest area of weakness was social studies and writing. The director of instruction began the process of aligning the curriculum in 1999. The other actions, providing

professional development, building on strengths, fostering relationships, promoting the use of technology, and sharing leadership occurred simultaneously but to varying degrees over the years.

In the spring of 2005, the director of instruction retired from Success County. He currently acts as a consultant to the division. The school division has sustained full accreditation as specified by the Virginia Board of Education since 2000 and the division has made adequate yearly progress every year as measured by the No Child Left Behind Act of 2001.

Presenting the Results

One of the most important parts of conducting a study is reporting the results (Merriam, 1998). Merriam noted that the “general lies in the particular” (p. 29); that is, what we learn in a particular situation can be transferred to similar situations subsequently encountered. “The idea that the general resides in the particular, that we can extract a universal from a particular, is also what renders great literature and other art forms enduring” (p. 30). Yin (1994) maintained that an exemplary case study goes beyond methodology and into the production of “insights into human or social processes” (p. 147).

Chapter Four contains the findings from “the data collected and analyzed” (Yin, 1994, p. 138). Specifically, Chapter Four includes results of the case study. To describe the findings, direct quotes and commentary are used to illustrate the patterns that were observed in the data. Chapter Five contains “the conclusions and implications from the findings” (Yin, 1994, p. 138). Specifically, Chapter Five includes a discussion of the findings, conclusions about the organizational and instructional patterns that developed and sustained capacity within the school system, implications for practice and recommendations for future research.

CHAPTER FOUR

FINDINGS

This chapter begins with a review of the purpose of the study and the guiding question and concludes with the findings. A prologue follows which provides the reader with a profile of the county, the school division, and the three schools chosen to participate in the study. In addition, demographic information collected from the individual participants is shared. The county is pseudo-named Success County for the purposes of this study. Data from the participants were organized into common themes and patterns that emerged from an analysis of observations, interviews, and documents. The findings are reported throughout the chapter. The descriptions of the participants are designed to supply adequate information to allow the reader to determine the transferability of the findings.

Review of the Study

The purpose of this study was to review the efforts of one school system in developing and sustaining its capacity in response to increased accountability for student achievement. The question guiding this study was: How did a school division successful in achieving state accreditation develop and sustain capacity to improve student achievement in its schools? Elements of instruction were reviewed across the entire educational system using Bronfenbrenner's (1979) Ecological System Framework. The ecosystemic framework depicts multiple levels within an environment, in this case, the multiple levels that exist within a school system. Bronfenbrenner's model was used for the analysis of data from the macro level, the outer most level, to the micro level, the inner most level. The policies and mandates that exist in the outer level of this model are related to and acted upon by the school division, the building level, and finally, on the micro level, the classroom. In this chapter I provide the findings from within this school division as I seek to explain its success.

Prologue: Profile of Success County and its Schools

Nestled in far Southwest Virginia sits a rural and picturesque community that has a population of 23,136 but has steadily lost population since 1992. According to The Virginia Electronic Labor Market Access (VELMA) website (<http://www.careerconnect.state.va.us/lmi/lmivelma.htm>) the average yearly unemployment rate

for 2005 was 5.2%. The average weekly wage was \$452, equivalent to \$11.30 per hour or \$23,504 per year.

There is some agriculture in the county and some coal mining to the north, but the county is primarily a bedroom community for the Tri-cities region of Northeast Tennessee. Although there are economic development activities within the county, the majority of the county workforce is employed in one of the tri-cities. The county has the largest population of health and social assistance per capita, and it is the second poorest county in the Commonwealth (<http://www.careerconnect.state.va.us/lmi/lmivelma.htm>).

This rural school district has 3,700 students and covers an area of 549 square miles. There are approximately 300 teachers in 13 schools; student transportation is provided with 75 buses. Schools enrollment numbers are small: The largest school has 404 students, and there are many grade-level structures. There are schools that house kindergarten through sixth grade, some with kindergarten through fourth grade, one with fifth through seventh grade, and several additional configurations for the secondary grades. The configurations are based on geography and accessibility of the student population to the schools. School officials gauge the attendance zones by the number of minutes the students spend on the bus, not the number of miles, in this rugged county.

The administrative structure includes the district superintendent, a director of instruction, a director of operations, a supervisor of secondary education, and a supervisor of special education. Each school has a principal, and all of the secondary schools and most of the other schools have a designated assistant principal although they may perform in that capacity on a part-time basis.

The central office administration building is located in a small town that serves as the county seat. As I approached the building, I could see that a large banner hung above the entrance. It was titled Our Mission, and it read:

Our mission is to involve families, the community, business, and educators in providing a safe/healthy environment where life-long learning is successfully realized by all students through an individualized/relevant curriculum and instructional program focused on preparing responsible, productive citizens for the future.

As I wrote down the mission, a man was exiting the building; he turned out to be the superintendent of schools. He was very friendly and seemed to be especially pleased that I was inspecting the mission statement. He explained that he was on his way to a meeting but his staff was expecting me and would help me with any information I needed. He seemed friendly and genuine, and I felt welcomed. That feeling continued as I entered the building and was immediately greeted by a receptionist. The building was decorated with children's art, and although it was an old building that apparently was not built for the intent of housing school board employees, it served the purpose well.

Success School District comprises 13 schools. The three schools that were a part of this study were chosen for various reasons by the director of instruction. Although each selection represented different levels of schooling, the selections were based more on the activities of the schools' principals than on the ages or grade levels of the students. The director explained that School 1, an elementary school, was chosen because the principal was raising student achievement in a community with primarily disadvantaged children. School 2, an intermediate school, was chosen because the principal initiated a remediation program that had spurred test scores, and the program had received much positive attention. School 3 was the standout high school in the county and was considered to be an outstanding high school in Southwestern Virginia. The principal had provided stable leadership for 11 years, and the school had been consistently strong academically and athletically. Each school featured in this study had a constellation of characteristics that contributed toward its success. The following section provides an overview of each of the three schools.

School 1

Resting at the foot of a national forest and on the banks of a slow moving river is School 1, pseudo-named Dogwood Integrated Elementary. With a total enrollment of 94 students in grades K through four, the school has eight teachers, a principal, and support staff. It is designated as a Title 1 school and, according to the principal, has a disadvantaged clientele. Out of the 94 students who attend, only 26 (27.7%) pay full price for lunch, with the remaining (68.3%) receiving free or reduced-price lunch.

The building was built in 1912 and over the years has undergone some renovations and reconfigurations. As I entered the building, the serene atmosphere immediately struck me. It was a very peaceful and calm building. A waterfall trickled quietly in the corner of the main office,

and I had to remind myself that I was in a school and not a library because of the hushed voices usually associated with an elementary school. A tour of the building allowed me to see a well-maintained, orderly, and spacious facility. The classrooms were large and well decorated with students' work, bright colors, and interesting bulletin boards. The teachers seemed somewhat cautious during our introductions. They gave the impression that they were not used to receiving the attention of an outsider but were proud of their accomplishments as a school community. The students were friendly and quite reserved as they walked quickly and quietly down the halls, and I was struck by how well-behaved they were.

School 2

Nestled on the northwestern edge of the county is School 2; pseudo-named Riverview Cove Intermediate, it is close to a state park and utilizes the park as an outdoor classroom. The school has a principal, a part-time assistant principal, 11 teachers, and a variety of support staff, including, custodians, paraprofessionals, and cafeteria employees to support the work with the students. The intermediate school houses 187 students in grades 5 through grade 7, and 37% of the students receive free or reduced-price lunch.

As I waited in the tidy front office for the principal, the secretary was very friendly and shared with me the story of what she referred to as "the '29 tornado." Apparently, the school was struck by a tornado in 1929 during the afternoon classes, and 12 students and one teacher were killed and several others injured. She pointed out an old bell encased in a glass trophy case that was the original bell of the school, which at the time of the tornado housed kindergarten through twelfth grade. She explained that the history of the area was very important to the community and that the school held a special place in their hearts because of the tragedy.

School 3

Situated in the county seat, this secondary school, pseudo-named George Calhoun, houses students in grades 10 through grade 12; it employs 36 teachers and has an enrollment of 404 students. The building was constructed in 1956, encompasses 24 acres, and is adjoined by a middle school. Thirty-four percent of the students receive free or reduced-price lunch. There is a principal and a full-time assistant principal. The assistant principal serves as the athletic director and the head football coach. The school has the reputation of being an athletic power house. My initial visit was during homecoming week so the school's lobby, hallways, and classrooms were

adorned with blue and gold, literally from floor to ceiling. The theme of the day was “camo,” and everyone was decked in camouflage clothing. I do mean everyone. From the administration to the cafeteria workers, everyone was joining in the fun and the celebration of the pending Friday night football game. The school has won several state championships in football and was undefeated thus far in the season. This was one of the most spirited student bodies and school staffs that I have encountered; it was exciting to be a part of it if only for a few hours.

Profile of the Participants

Formal interviews were conducted with 13 professionals: 9 teachers, 3 principals, and 1 director of instruction. Informally, I spoke with several additional teachers, instructional aides, and students. Demographic information was collected from participants at the beginning of each formal interview. Table 3 contains demographic data on the participants.

Table 3

Participants’ Demographic Information

	Director of Instruction n=1	Principals n=3	Teachers n=9
Gender			
Male	1	2	4
Female	0	1	5
Race			
White	1	3	9
Black	0	0	0
Years of experience as an educator			
0-3	0	0	2
4-12	0	0	3
13-19	0	1	2
20-29	0	2	1
30+	1	0	1
Degree Status			
Bachelors	0	0	5
Masters	1	3	4
Doctorate	0	0	0

The participants in this study were the director of instruction for the school division, the principal from each school, and 3 teachers from each school. The principals were chosen by the director of instruction, and the teachers were chosen by the principals. The different categories were well represented by both genders, years of experience and endorsements; however, none of the participants were African-American. The total percentage of African American teachers in the county is under 4%, and there are no African American administrators. These characteristics reflect the demographics of the county. Success County did not meet the required number of African American students in any sub-category for NCLB reporting. This indicates that there are less than 50 students in any given reporting category.

The director of instruction is described in the following section. The section is important because it contains the experiences of the positional leader charged with improving the instruction in the county and raising student achievement.

Profile of the Director of Instruction

The director of instruction has 33 years of experience in education. He spent 17 years teaching in an elementary classroom and providing special education in a resource setting. He was the specialist in the county for educating students with emotional and behavior disorders. He served as the county elementary supervisor and director of special education, before serving in the capacity of director of instruction. He is a Success County native, as is his wife. In addition to his work in the public schools, he has taught a variety of courses in two local community colleges for 12 years. He retired from the school system in June of 2005. He intends to continue teaching at the community colleges and to focus more energy on his passion, which is researching the history of his beloved county and the surrounding region. He is widely credited for providing the foundation for improving achievement and his actions were central to developing instructional capacity in Success County.

Overview of the Findings

In addressing the research questions, six major themes were derived from the interview data to describe how this system built and sustained the capacity to achieve state accreditation. The data were analyzed and then placed by comparing one piece of information to the next and looking for recurring concepts or ideas in the data. Categories of similar ideas or concepts were then formed into themes. These themes are (a) aligning curriculum to the state standards, (b)

providing professional development, (c) fostering relationships, (d) promoting the use of technology, (e) building on strengths, and (f) sharing leadership. The six themes were evident across every subsystem: classroom, schoolhouse, and central office in this school district. The six themes were analyzed according to the dimensions of capacity building identified by Florian et al. (2000). According to Florian et al., a school district has four types of capacity: (a) human capacity, (b) organizational capacity, (c) structural capacity, and (d) material capacity. Human capacity is the knowledge, skills, dispositions, and self-perceptions of people within the school system. Organizational capacity is the relationships among individuals within the district and outside the district; for example, partnerships with organizations, universities, or state departments. Structural capacity is the elements of the system that are independent of people and includes procedures and policies, professional development programs, and curriculum frameworks. Material capacity is the fiscal and material resources available to the system. In reviewing the data for this study, the findings reflect every type of capacity presented in this framework. See Table 4 for a visual description of the types of capacity and corresponding themes. The following section provides a detailed discussion of the themes that surfaced and how the framework for analyzing capacity can be seen across the educational system.

Presentation of the Major Themes

This section contains the themes and evidence of their importance to Success County. Interviews were conducted with personnel on each level of the subsystems in Bronfenbrenner's (1979) model and the comments are organized as such. For example, the comments of the director of instruction represent the school district perspective at the exo-system level, the comments of the principals represent the school building perspective at the meso-system level, and the comments of the teachers represent the classroom perspective at the micro-system level. Finally, the data are classified according to Florian's framework describing the four types of capacity and how the different types of capacity were at work across each level in Success County.

Table 4

Types of Capacity, Corresponding Themes, and Examples of Interactions

Themes	Human capacity	Structural capacity	Material capacity	Organizational Capacity
Aligning curriculum to state standards	Expertise Approach Knowledge Relationships	Curriculum framework Procedures Policies		
Professional development	Based on staffing Delivery methods Meaningful Connectivity	Professional development program based on needs Standards of Quality		
Fostering relationships	Within division Positive approach Collaboration Distributed leadership	Policies and Procedures regarding establishing partnerships		Partnerships within division Partnerships with organizations, colleges, departments of education
Building on strengths	Recognizing teacher leaders Utilizing personnel relationships	Revisit existing policies and procedures as needed Strengthen procedures	Improve available soft/hardware Make funding available Grants	Strengthen existing partnerships Employee appreciation Recognition
Promoting the use of technology	Expertise Approach Collaboration		Adequate funding Hardware Software Computers Support	
Sharing leadership	Autonomy of schools Distributed leadership Expertise within division			

Note. The capacities are from Florian, J., Hange, J., & Copeland, G. (2000).

Data sources are referenced in the report using codes that identify the type of source (T- transcript of interview; O- observation; D- document; FN- field notes) followed by letters that identify the school (RC, GC, DI), and then letters that identify the interview participant . Finally, the page number of the transcript is listed. For example, T/GC/T2-2 is a quote from the transcript (T) from George Calhoun (GC) School from teacher number 2 (T2). The quote appears on page 2 of the transcript (-2). The principals are labeled in the order they were interviewed; for example, T/RC/P1-3 is a quote from the transcript (T) from Ridgewood Cove School (RC), the first principal that was interviewed (P1), and the third page of the transcript (-3). Finally, the director of instruction is labeled as DI when referring to the interview transcript.

Aligning Curriculum to the State Standards

Every state department of education is focused on implementing standards-based education systems and supporting districts and schools in this endeavor (Florian et al., 2000). Virginia has developed and adopted standards in the major academic disciplines, and Success County worked to align its curriculum to the state standards by which it was being assessed. In 2001, school leaders and teachers realized the content they were teaching did not match the content that the Commonwealth was assessing, so they took measures to fix the problem.

Aligning the curriculum to the state standards was described by all administrators and six of the nine teachers as an area of emphasis. At first, central office personnel attempted to address curriculum changes by establishing curriculum writing teams; however, this was overwhelming because the teams could not keep pace with the changes in the state standards. As a result, district leaders chose to do what so many of their colleagues in small systems have done: They adopted Virginia's Standards of Learning (SOLs) as their curriculum. One teacher commented, "We feel the SOLs embody everything we are looking for in a curriculum anyway" (T/GC/T2-2). Alignment did not mean re-writing curriculum to encompass the standards, it meant simply changing what was being taught to reflect the standards already in place. Principals and teachers commented that they have continued to focus on revising instructional content to match the SOLs as the standards have evolved over the years. This practice has been instrumental in sustaining the success on Virginia's standards based tests. Every school in Success County has attained full accreditation from the state and has sustained that status for over five years, from 2000 through 2005.

Perspective of the director of instruction.

According to every person interviewed, the director of instruction was instrumental in the process of re-aligning what was being taught across the system to directly reflect Virginia's SOLs. He explained that he believed this was the most vital thing professionals did in the county and that they did it early on when the state standards were first put into place. He commented, "I knew the first year that we got horrible results that these tests were not going away and that we had better embrace them and do it quickly" (T/DI-2). The director believed that he needed to be the leader who would guide the principals who would then guide the teachers through the process of changing what they had been teaching for years. He called the process of curriculum alignment, "very powerful, a key point to the success" (T/DI-3). He described how he began the process of change by studying the blueprints of the standards of learning tests, the crosswalks, which are additional resources to supplement the standards, and the actual standards in the individual subject areas. He emphasized the importance of *teaching* others how to change practices, not just expecting them to do so.

I learned it first, then I passed it on to the principals, but a very important thing I focused on was not just giving the information to the principals, I taught them how to use the information with their teachers. Anybody can copy something and hand it out, but the key is teaching someone how to utilize the information. (T/DI-3)

Improvement starts with one person willing to take the reins and start the process. The director of instruction in Success County was that person. He explained that it is vital that the teachers understand how the process works and that they are included in the process: "The teachers needed to be skilled in aligning all of the elements of the curriculum so that the assessment provides an accurate reflection of the student's accomplishments and an effective indicator of the teacher's success" (T/DI-5). Without the teachers teaching the aligned curriculum, their success may never have occurred. The director of instruction explained the problem of not teaching what was being tested as being pervasive in the Commonwealth. This may have been the case in the early years, but school people have adjusted:

At the state level, content standards are the targets. A mismatch between what is designed and delivered by the classroom teacher and state content standards and assessments can

result in standardized test achievement that is not truly representative of a student's achievement. (T/DI-4)

The director indicated that Success County had struggled with the fact that the teachers were not teaching what was being tested and that was a big problem. Using Bronfenbrenner's (1979) ecosystemic model, it is imperative that on the micro-system level, the inner circle, the curriculum that is being tested is taught in the classroom. On this level there were problems in Success County in 2001, as the director of instruction explained:

The SOL writing test scores were very poor, and it was determined those students were not being instructed and assessed in the classroom in the same manner as on the state assessment. On the SOL, students were allowed unlimited time to write, and in the classroom they were being timed. Another disparity was that we found that few teachers accurately addressed the criteria on the scoring rubric. Although the criteria had been provided to schools statewide, most teachers had not bothered to obtain and read the documents, and few principals had taken leadership in getting the criteria to teachers. (T/DI-4)

The director of instruction enlisted the aid of the principals in the task of aligning the curriculum. He recognized that he could not do the job alone. Success County took the approach of focusing on the problem working from the exo to the meso and finally to the micro-level to achieve the goal of aligning the curriculum to Virginia's standards. The following section provides information regarding the insights of the principals.

Perspectives of the principals.

The principals in Success County were instrumental in aligning the delivery of the curriculum with the tested curriculum. Only one of the principals interviewed was in administration when the process was initiated; however, the other two were teaching in the county schools. A principal who had been an elementary teacher at that time explained, "Our principal worked with us, and we had several meetings on pacing and curriculum mapping. At that time we were using our curriculum, and a group of us were chosen to compare our curriculum with the SOLs" (T/DI/P2-3). Another principal described the process over time that led to the alignment of the curriculum with the state standards. He commented:

Everybody in Success County, when the state first came out with the SOLs maybe not the first year but the second year they realized these are real and they are going to stay and let's do the best we can with them. I really think everyone has really gotten on board and tried really hard. The director of instruction really pushed us as administrators. We did not have a choice; we had to align our curriculum with the state's. There was no question. (T/RC/P1-5)

This principal of the county's intermediate school explained that although the staff aligned the curriculum to the tests, he wished they could focus on the needs of individual students. He stated:

I believe that the special education child that is working on a second grade level ought to be tested on the second grade level and the SOLs don't allow for that. So the curriculum is flawed in that regard. It is a system that is set up for the masses and not everyone fits into that category. (T/RC/P1-5)

The principals in Success County explained in interviews that they felt they had turned the corner in late 1999. The teachers were on board, and the teachers were focusing their teaching on the standards. A secondary principal commented, "The hard part was the first couple of years, and since then the new teachers learned from the experienced teachers and the newer teachers are well versed in the SOLs thus the learning curve is much smaller" (T/GC/P3-3). Teachers entering college preparation programs now are aware that the instructional focus should be on the standards because of increased knowledge of the accountability system and the standards. When determining instruction it is more important to plan instructional outcomes than instructional activities. Overall, the county principals now describe playing a supporting role in supervising the curriculum; whereas, six years ago they were the ones guiding the teachers through the process of change within the schools.

Perspectives of the teachers.

Alignment of curriculum, instruction, and assessment is crucial to success in improving instruction. Aligning the curriculum to match the assessments forces teachers to focus on high-order, integrated skills, to communicate goals and standards, and to design avenues to help students achieve mastery of the standards.

The teachers involved in this study were knowledgeable and eager to discuss their efforts in aligning the curriculum to the state standards. The teachers spoke openly regarding their efforts. One of the secondary teachers with 28 years of experience stated,

It's all right there; they tell you exactly what they are going to test you on. I love it. I had a lot of work to do in the beginning, but once I did that work, I should say we did that work, it has been a piece of cake. (T/GC/T2-1)

The majority of the teachers made statements similar to hers. One teacher stated, "You cannot continue to teach the chapters in the book; you have to use your book as one of many resources. I thought I could keep on doing what I was doing, and I found out the hard way that that was not going to work. I had to re-think how I was planning" (T/GC/T3-1). Firth and Pajak (1998) explained "Curriculum based on standards-referenced instruction focus on desired, observable learner behavior produced as the result of instruction" (p. 25). Teachers taking the time to plan for instruction is paramount. It should be asked, what do I want students to know and work backward as to what the best methods are to accomplish the goal. The only teachers that did not make comments regarding a change in paradigm were the teachers that had recently graduated from college, and the only thing they had ever known were the SOLs and aligning what they were to teach with the standards.

A social studies teacher with 14 years of experience said that he welcomed the challenge. He explained:

It's always something new. Kids have no trouble adapting to the changes. The adults are a different story. I had a much harder time than the students. It's easy to get into a rut. I had to change my way of thinking and what I was teaching. I had to make sure I was teaching what they were testing. (T/GC/T3-1)

Although the teachers made the shift in 2000 from teaching what they liked to what was being tested, there was opposition to that change. This opposition was heard over and over. Some teachers resisted the change for several years, then they saw that the standards were not going away. Key individuals enacted change and aligned the curriculum to the standards, and as one of the teachers put it, "Once we changed what we were teaching, from then on, it was all gravy" (T/DI/T1-1).

It is evident that one of the reasons for the success of this county was the willingness of school people to do what was necessary to achieve the established goals. To ensure that the curriculum and instruction supported assessments, decisions regarding curriculum development and instructional planning are important. The division leaders realized that what they were doing was not working and were proactive in enacting change on the most basic level, the curriculum. They recognized that success would not come despite hard work and, in the case of this district; the curriculum became the standards, and the instruction supported the standards. The director of instruction stated several times, “I hate that we are not at a stage that we can expand on the standards. Maybe at some point we will have that luxury, but for now, we will focus on the standards and follow them as the curriculum” (T/DI-6).

Analysis of capacity.

Aligning the curriculum to state standards results in building structural capacity and also human capacity in that the individuals that aligned the curriculum developed the expertise, knowledge, and skills to perform the tasks. The approach that was taken was vital to the implementation of a new curriculum framework. The interview data revealed school leaders had established positive relationships with all stakeholders, and the change was accepted with leadership from the division-level. The division leaders established policies and procedures that supported aligning the existing curriculum with the assessments. Finally, teachers were trained on how to implement the curriculum into their daily teaching. Building this type of structural capacity helped the individuals within the system be more successful on Virginia’s standards of learning tests. This is evidenced by the fact that all schools in the division have been fully accredited since 2000. Table 4 provides a depiction of the aspects of human and structural capacity as they relate to aligning the curriculum. The table is organized by the themes that were found in the data on the left hand side and the four types of capacity as defined by Florian et al (2000) across the top of the table. Listed across from each theme is a synopsis of how that theme relates to that specific type of capacity. Some themes are apparent in each type of capacity, such as building on strengths. Building on strengths encompasses every type of capacity. However, not all of the themes are evident in each type of capacity, such as fostering relationships and material capacity. Material capacity is not a primary factor of fostering relationships so there are no summary cues in the column. Table 4 is an overview of the text and an explanation of how each theme and type of capacity correspond.

Providing Professional Development

As discussed, Success County tackled the problem of aligning its curriculum through extensive professional development for both administrators and for teachers.

Professional development, another component of structural capacity, is the second major theme that emerged from this analysis.

Designing and providing professional development is one example of building structural capacity. Structuring a system by which principals and teachers can learn and improve their practice is vital in improving and sustaining positive change. The Constitution of Virginia requires the Board of Education to determine and prescribe standards of quality for the public schools of Virginia; these standards are subject to revision only by the General Assembly. These standards are known as the Standards of Quality (SOQ) and form part of the Code of Virginia (Retrieved October 31, 2007 from <http://www.doe.virginia.gov/VDOE/suptsmemos/2007/inf136b.pdf>). Success County used the SOQ as a framework for conducting staff development. The director of instruction explained the importance placed on providing meaningful professional development and developing programs that go beyond the basic requirements set forth in the SOQ and meet the needs of their particular division and the needs of the teachers.

Perspective of the director of instruction.

Although there are many good teacher preparation programs in the area, the director of instruction in Success County stated he does not view the preparation programs as complete nor does he consider years of teaching as a guarantee of teacher quality. There is an ongoing commitment to quality staff development in Success County. This commitment is exemplified in the following statement made by the director of instruction,

Staff development is a big deal in our county and has been for the past 15 years or so. All our teachers are on 200 day contracts. Considering they work with students for 180 days and get in an additional six or so with pre and post school year activities. This leaves about 14 days for which they are paid and that they must fulfill. I give five to principals for in-school staff development that take place after our work hours. Teachers typically still have eight or so days that they must fulfill by completing professional development activities (DI, personal communication, January 19, 2005).

The director of instruction explained that while they use the SOQs as a framework they go beyond that source and conduct a needs assessment. During the pre-school work week, one day is designated for a countywide meeting. School employees discuss the successes of the previous year and their strengths and weaknesses and then break into smaller sessions. For example, all of the grade-level teachers meet; the secondary departments meet and elect a chairperson for their group. The groups are given an agenda to conduct meetings. The agenda consists of areas of instruction that need to be emphasized, vertical alignment of the curriculum, and goals for the groups. The director of instruction further explained that Success County emphasizes a team concept, a group effort, not one school over another, and they tackle instructional issues in the same manner. A compact faculty size can support close interpersonal relationships. In such settings professional development is often enhanced by teaming and by small, task-oriented groups (Cawelti, 1997).

The director of instruction had 17 workshops scheduled for the 2003-2004 school year and 5 additional staff development sessions that he was waiting for date confirmations from presenters. He stated, "Principals and teachers do things within the schools, but as a division, it is our responsibility to bring in staff development that will help teachers be successful" (T/DI-3). He noted that the central office staff met, looked at the test data and the teacher evaluations, discovered the strengths and weaknesses of the division and built the staff development around the weaknesses. From those data, they also established six goals for the district and worked on accomplishing those goals throughout the year. They have been doing this for over 10 years, and he felt it had worked well for them. He explained, "Last year we were successful on five out of the six goals. We continue to focus on math and English in the eighth grade, and a great deal of our staff development focuses on those areas, while not losing sight of our areas of strength" (T/DI-4).

For contract purposes, a workday equals five hours of staff development in Success County. Teachers must complete an additional eight work days beyond what is provided the week before school and during the school year. Teachers keep a log of their staff development hours, and that document is turned into personnel and placed in their file. The director of instruction stressed the importance of a good staff development program and stated that the program must be well rounded to meet the needs of all of the teachers. He further commented that staff development should focus on a clear set of priorities; provide ongoing, school-based

support to teachers; deal with academic content as well as teaching methods; and create ample opportunities for teachers to view new teaching methods. Cawelti (1997) added, “There is evidence to show the effectiveness of professional development models that are peer-led, open-ended, and active (p. 55).

Perspectives of the principals.

The principals with whom I spoke all believed the staff development that was offered was worthwhile and necessary. One principal offered this,

We do a lot here, I feel like I have the freedom to do the types of workshops that my school may need. For example we do a lot of cross development with the elementary school that feeds into us. We also meet with the high school, we feel like the eighth and ninth grade teachers can evaluate what we’ve done better than we can and if our kids are lacking in multiplication skills we want to know about it. (T/RC/P1-6)

When questioned about their affiliations with organizations such as the National Association of Secondary School Principals (NASSP) or the Association for Supervision and Curriculum Development (ASCD) each principal claimed that they did not belong and did not attend many of their workshops. One principal offered this explanation,

I don’t feel like I have the time. I feel like I need to be at this school every minute of the every day. I hate to leave even to go to the bank to make a deposit. I don’t do anything when I’m here but I feel like my staff sees me here and they see that I believe in things and I don’t skip out on them, I don’t mean this to sound negative but going to things like that they may think I am not with them. I want them to know that I am in the trenches with them and whatever they need I’m here to help them and get it for them. (T/RC/P1-6)

Lack of time and a desire to be in their buildings was the sentiment among the principals; they seemed to think it was more important that they be in their schools than attend conferences. Staff development provided by the central office is open to principals as well as teachers and is well attended by the administrators. Principals also attend two and sometimes three-day retreats during the summer. The retreats offer a variety of mini-workshops ranging from instructional issues to presentations from local Rotary clubs. One principal had this to say about a retreat,

It’s going over everything from policy manuals, rule changes, a little bit of everything, but sometimes it makes me feel like I’m drinking out of a fire hose. It’s overwhelming,

the volume of stuff, and I know this past meeting I took an entire legal pad full of notes, not counting all the handouts we received. (T/DI/P2-4)

After a review of the agenda for the retreat mentioned above it should be noted that the agenda seemed to focus primarily on issues such as policy and regulation changes, and updates for ongoing initiatives (document CO-GI/A-1). This is important because I expected to see issues pertaining to improving instruction. The agenda focused little on instructional issues or improving teaching and learning.

The principals do offer staff development in the areas of improving teaching and other instructional issues within the schools. An elementary principal explained that she had conducted staff development within her school on how to incorporate higher level thought and questioning techniques. She focused on Bloom's Taxonomy and stated,

If the SOLs are wanting them to do something else, for example at a particular level but they are only working on a much lower level, then there is a gap and this makes the teachers think and it is a little different mind set. We go by the Blooms' chart and try to push the kids where they need to be. (T/DI/P2-5)

The secondary principal seemed to structure the staff development primarily by departments or other means of grouping such as beginning teachers versus experienced teachers. He stated, "I feel it is imperative to get teachers together and that they have a specific agenda. Too often I go to meetings and it seems they flounder without direction" (T/GC/P3-3). He provides a great deal of the professional development and often calls upon what he termed the master teachers in his building to provide help. He pointed out that he has several teachers with expertise in areas that he does not have, and he uses their talents to help others. He mentioned the county does an excellent job at providing staff development, and he is aware that some teachers resent it and see it as a waste of time. "Some people are rude during the sessions and grade papers. You want to say something to them, but you have to understand that some people are rude by nature and will never be happy with anything. I try to remember that" (T/GC/P3-3).

In summary, the principals believed that staff development was bountiful and helpful. They felt all areas were covered adequately and no additional professional development was needed. One interesting note that should be mentioned is that of the three principals, none had attended a conference out of the county for their individual professional development in over two

years. This is important because most school systems encourage principals to get involved in academic organizations and attend workshops. Additionally, one of the principals had not attended any workshops in over five years. This seems to be in conflict with the literature in recommending membership in professional organizations as a best practice for successful administrators (Houlihan, 1988).

Perspectives of the teachers.

The teachers of Success County seemed to appreciate the staff development offered to them and at the same time I heard some comments that could be interpreted as negative. A young woman in her second year of teaching had this to say:

So far it is really good. The ones I have gone to they actually have given me extra materials I've asked for, and they are always willing to help me with what I need and everything. I've not found it to be too much; some people do but for me, maybe because I'm new. I actually enjoy it. It is balanced and helpful. (T/DI/T2-3)

A teacher at the same school commented that she enjoyed the workshops given by other classroom teachers: "To me that's better than a workshop you go to where maybe someone who's never been in a classroom is telling you how to teach reading" (T/RC/T1-3). This was echoed by several of the teachers. They felt that the presenter must have direct knowledge of the topic or they were not believable and the teachers tuned them out.

The term "Danny Days" was heard often. The teachers seemed to have named the district's staff development days after the director of instruction. One man offered, "We usually have around 8 to 10 Danny Days per year" (T/RC/T2-3). In general everyone agreed that for the most part Danny Days were worthwhile workshops, especially if they focused on a teachers' specific content. Others felt less enthusiastic and commented:

It is not helpful. If they would offer something that you can actually apply to the classroom, offer us more materials, suggestions for how to discipline the kids, more effective ways to manage the classroom. They offer all these off the wall workshops you never really get anything out of. (T/DI/T1-3)

One comment heard over and over was the lack of time for staff development. Most of the teachers stated that after teaching all day they were exhausted and dreaded the thought of

sitting for two hours and trying to concentrate after school was out when all they wanted to do was go home. Teachers did appreciate food being offered at the workshops and frequent breaks.

In summary, the success of the workshops depended on the usefulness of the information. It was stated over and over that as long as they could use the information and the children would benefit from it the teachers would implement the ideas. Success County offered a great deal of staff development, and it was varied to try to meet the needs of as many teachers as possible.

Analysis of capacity.

The elements of a system that are designed by people, such as policies and procedures, must provide a strong foundation for the program to function successfully. Providing professional development that is based on the needs of the employees and reflects the Standards of Quality is important in building the structural capacity of a school district. The professional development in Success County focused on clear priorities that stemmed from the goals for the current school year. The programs were mostly school-based to support classroom teachers, and they dealt with academic content as well as teaching methods. Human capacity is pertinent because the staff development was based on staffing needs and according to the interviews was meaningful to six out of nine teachers in this study. The content and presentations were flexible from one year to the next and from one school to the next because different schools serve a different clientele and that clientele changes annually.

When staff development presenters convey content that connects with the teachers and in the implementation phase the methods or content connects with the children, the staff development is more meaningful. To be effective, professional development must be skillfully delivered by knowledgeable individuals and with research based methods. Establishing policies and procedures to govern the professional development program and insure that the Standards of Quality are not only being met but expanded upon is an important aspect of building structural capacity. While not every teacher agreed that the staff development was worthwhile to every teacher, the comments in the interviews showed that Success County accomplished building structural capacity and human capacity by providing sound and effective professional development as presented in Table 4. To accomplish the task of providing meaningful and pertinent professional development, Success County school leaders often depended upon previously and newly forged relationships to aid in their endeavor. Fostering these relationships is the next theme that emerged from this analysis.

Fostering Relationships

Fostering relationships is a large part of the achievements in Success County and is the third theme analyzed from the data. Relationships among individuals within the system and partnerships with business, industry, and colleges outside of the school system play a major role in shaping the educational system. One example is the county's partnership with Eastman Kodak back in 1993 when school-business partnerships were just beginning to come into existence. At that time Eastman won a prestigious quality control award and the company passed on the methods to the leaders in the school division. The central office staff met often with the divisional leaders of Eastman and incorporated some of the practices that the director of instruction explained were instrumental in making changes early.

The county is involved in three consortia and does work in conjunction with the local community college and The University of Virginia at Wise. The director of instruction and several teachers are adjunct instructors at the colleges and they act as ambassadors to bridge the gap between the school system and higher education. In addition to connections with the higher education leaders, each school has the freedom to utilize partnerships within its local community and is encouraged to do so. According to Florian et al. (2000), organizational capacity refers to relationships among individuals both within the district and with individuals outside of the district, which includes partnerships. In the case of Success County, fostering relationships was vital to its improvement and sustained success. These associations were the foundation for formulating and nurturing the human capacity for the benefit of all stakeholders.

Perspective of the director of instruction.

The director of instruction claimed he and the county benefits greatly from the partnerships that exist. As one of the original constructors of the partnership with Eastman he had this to say:

Working with the executives from Eastman helped us to see that we are not all that different and that we could benefit from incorporating some of their practices. I think they also have a lot more respect for what we do than they may have had before. It benefited both of us, really. We got some financial help with projects and some help with our leadership practices and they shared with us what type of employee they are looking

for and how we can help them in the long run. It was a win-win and still is today (T/DI-2).

In addition to his duties as director of instruction in Success County, the director of instruction teaches at the local community college and claimed it fulfills his need to teach: “I love it, I love discussing with the students and learning from them. It is a great joy for me. Teaching is what I love” (T/DI-2). He claimed that the community college is an added benefit to the community. Most graduates enroll to pick up some basic courses and then transfer to four-year institutions. “We celebrate our access to higher education. Here we are in far Southwestern Virginia and we can get a quality education right here in our back yard” (T/DI-3). He spoke very highly of the colleges and businesses in the area and felt they had given anything that was asked of them to the school system.

Success County is a member of three consortiums; the most prevalent is the Southwest Virginia Public Education Consortium. These consortiums allow the school system to take part in projects and to be exposed to opportunities that one small county might otherwise not be afforded. The director of instruction stated that the consortiums offered much in the way of technology and training to enhance instruction for local students. “We can send eight teachers to Technology Splash (an event for staff development) and they can then go back to their schools and train everyone else. We get a lot of bang for our bucks that way” (T/DI-4).

The director of instruction has been instrumental in building these networks and fostering these partnerships. He writes the grants for the county and is responsible for almost every aspect of the partnership process. The principals and teachers commented on the importance of the director of instruction and the relationships he has nurtured with individuals and organizations supporting the school system.

Perspectives of the principals.

All principals felt that fostering relationships was an important part of the success of their individual school; in addition, they noted the relationship between the central office personnel and their schools as being vital. “I look to the director of instruction, director of special education, the superintendent, teachers, anybody and everybody for help, and I always get the help or support that I need” (T/RC/P1-3), commented one principal. He spoke further regarding the director of instruction:

He has been so wonderful to this county; you couldn't ask for more than he has given. It wouldn't have done what it's done without him. But everybody at the central office, they are so willing to help. I can pick up the phone right now and call and they'll do anything they can to help. If I need one of them to come out here to help or do an in-service, they would be right here and do it. I mean, they are great. (T/RC/P1-5)

The county's partnerships benefited some schools more than others and this effect depended largely on the location of the school. For example, the intermediate school did not utilize any partnerships. The principal cited the rural location and the inability to work out the logistics as the reason. The high school seemed to enjoy the most benefits from the relationships the school system had built with businesses, industries, the university, and community colleges. The principal explained that the math and science departments especially took advantage of the Eastman Kodak partnership. Their teachers worked closely with Eastman engineers and several of their students did internships there. Occasionally, the engineers would visit the high school and do special presentations in math and science classes.

The elementary school principal explained that a local business had donated land for a garden adjacent to the playground beside a pond on the school's property. Teachers utilized the area for projects in science. The business owner was instrumental in not only maintaining the area but updating it. She explained,

His grandparents and parents went to school here and he went away to college and came back here to raise his family. That is the story of a lot of our local businesses, family owned and operated, and more than willing to give back to the community. (T/DI/P2-1)

Perspectives of the teachers.

Several teachers benefited from relationships with businesses and noted they felt the obligation to be a patron of those businesses to express their appreciation. A secondary math teacher commented:

It's vital that we show these people we appreciate what they are doing for our students. For example, I do a project on bridge building in one of my classes with an engineer from Eastman. The first year he did it I wrote a letter to his supervisor and expressed my gratitude and sent pictures, also. Well, since then Eastman gives each employee three

days a year to volunteer in the schools. A little bit of appreciation goes a long way.
(T/GC/T2-2)

A teacher at the intermediate school explained that she works a lot with the University of Virginia at Wise. She helps with the teacher preparation program and in turn gets to use the facility and attend workshops. She felt the professors were really a help to her as a beginning teacher by providing her with resources and ideas to use in the classroom. A teacher in the same school explained that she worked with the University of Kentucky:

I took part in a program this past summer through the Appalachian math and science project. I learned some new techniques and have implemented some new ideas. The professor will be coming this spring to observe me. It was a wonderful program and there is follow through, not just here is the information and have a nice day. (T/RC/T2-3)

A sixth grade math and science teacher was excited to share that he has a partnership with Virginia Tech through the Cooperative Extension Office. “It really works out well with my life science skills and my sixth grade science. We do leaf and tree identification which covers the SOLs plus they get rewards for it” (T/DI/T1-2). He went on to explain the reward system. He also takes part in a program with a middle school in Richmond that deals with road kill. “The kids identify a section of road, they monitor it on the bus ride to and from school, and the data we collect are put into a frequency table on the Virginia Tech website. They compare the data with the school in Richmond. It’s great and it covers a lot of SOLs” (T/DI/T1-2).

The only teacher who did not work directly with some type of partnership mentioned the value of these connections for his school.

Eastman does a tremendous job with the sciences, math and chemistry. There’s a wonderful relationship there. But unfortunately, there’s not much in terms of social science. We have a great relationship with the other high schools, and our departments work closely to make sure everyone is on the same page with what’s good, what’s bad. We bounce things around and see what we need to do (T/GC/T3-2).

One thing that was evident throughout the interviews was the importance of fostering relationships and the appreciation of them. The teachers valued the resources afforded them by

businesses and others in the community. There was a high level of involvement from the community and it showed in the relationships.

Analysis of capacity.

Fostering relationships within the district and with individuals outside of the district such as leaders of universities and colleges, state department of education, and other organizations is a critical part of building organizational capacity. Success County built fruitful relationships with Tennessee Eastman, local community colleges, and various businesses and has sustained those relationships since 1996. A collaborative approach promoted community development by highlighting the interconnections between education and economic development. The district is also a member of various regional consortiums which exist to improve the performance of their teachers and resources available to the students in rural Success County. The director of instruction explained that while some of the partnerships were informal in nature, his goal was to establish those partnerships formally by implementing policies and procedures regarding the partnerships. In 2004, the director of instruction accomplished his goal, four of the most notable partnerships established clearly defined outcomes which enhanced the contributions from the organizations and the schools as recipients.

Building organizational capacity often starts at the top of the organization. Initiative and support from central office leaders provided the impetus needed to begin and sustain collaborations. These relationships ultimately placed a spotlight on school and student development and made the benefits of these efforts tangible which further enhanced the organizational capacity in Success County. In successful relationships such as those in the county, the benefits radiate from one partner to another, resulting in rewards for all constituencies including business, education, higher education, parents, and communities.

In an interview, the director of instruction explained that fostering relationships within the division was a focus of his. School district leaders made it a priority to recognize employee contributions and leadership skills on every level of the educational system and leaders utilized distributed leadership by the employing the strengths of their employees as a tool to collaborate with others within the district. For example, if a teacher exhibited strong technology skills, that teacher trained others, accomplishing two goals; first, it built the strength of that teacher as a leader, second, it encouraged collaboration and third, it promoted the use of technology. Table 4 is an overall view of the types of capacity and aspects of the corresponding themes.

Promoting the Use of Technology

Success County placed a high priority on establishing a solid foundation for the use of technology within the district. Promoting the use of technology is the next theme analyzed from the data.

Success County educational leaders realized in the mid 1990s that up to date technology, not necessarily state of the art, but adequate technology was vital to accomplishing their goals. School leaders focused more on accessing than acquiring the latest technology available. Technology played an integral role in the changes in the school system.

Perspective of the director of instruction.

There were several important components in the technology implementation. According to the director of instruction, promoting the use of technology began in 1998 with a comprehensive integrated learning management system, the A+dvanced Learning System (A+LS). This managed instructional software was used as a framework around which other software could be added to supplement instruction in the classroom. In addition, the following five technological initiatives were implemented in late 1998, early 1999: (a) The Microsoft Office Productivity Package was selected and installed on all divisional computers and all teachers completed a three credit course on using MS-Office in the classroom; (b) multimedia technologies were used at both the elementary and secondary levels. These included programs such as Front Page, Hyper-Studio, Adobe Photo Shop, and Kid-Pix. By December of 1999, forty-four percent of the teachers had completed at least one advanced multi-media class. The instructional support programs and web pages they developed added extensively to their classroom presentations; (c) all teachers completed a three credit class in using the internet in the classroom and make extensive use of the vast resources of the internet in their classrooms; and (d) there was emphasis on selecting programs that were needed and provided adequate access to technology. Within the Success County School System, as of 2004, the computer ratio is less than two to one for students; teachers have their own computers. This low ratio was accomplished through classroom and lab-based computers; (e) technology integration into the curriculum was stressed and considerable time and energy was put into staff development in this area.

The director of instruction summarized the thrust of promoting technology with these words, “We want to teach our children where to go and how to find information, not so much give them the information” (CO/DI-7).

Computers are used for two purposes in schools. The first is learning from computers. Here the computer acts as tutor by presenting review information to the student and the student responds. The second purpose of computers in schools is learning new subject matter and skills with computers. Students use computers and their programs to write, analyze data, develop presentations, and conduct research. The primary focus of computers in Success County is learning from computers. This outlook was described by principals and teachers that participated in this study.

Perspectives of the principals.

The principals in this study discussed the importance of technology for their schools. Also, each noted the importance of qualified people to support the technology as being more important than the actual technology. The high school principal expanded on the A+LS system previously explained by the director of instruction and added:

The American Education Corporation is a key component of the technology plan. It is an integrated learning system that provides instructional content across the four core subjects. The lessons are carefully aligned with the SOL’s and each lesson provides a structured learning experience where the student first studies or learns the content, participates in practice exercises where they receive immediate feedback, and finally are tested for mastery. (T/GC/P3-3)

The principal of the intermediate school explained that the teachers were provided with training on using A+LS as an integral part of the total curriculum of Success County Schools. They have made it part of the daily routine as students use the program to support and augment the instruction they receive in the classroom. “It is used mainly to reinforce and evaluate mastery of concepts and skills taught in the classroom” (T/RC/P1-3). In addition to this program, the high school has purchased a site license for Flannagan-Mott practice tests which are also aligned with the SOL’s. He stated the teachers liked having the flexibility of using both. They felt the Flannagan-Mott format was more user friendly and the questions were written more clearly than in the A+LS program.

The principal at the elementary school did not comment much on the available technology. She did not seem comfortable discussing technology and was not convinced of its importance, “Well, we have computers, and I know the teachers use them. I feel they are helpful but cannot take the place of teachers and it seems that’s where it’s going. Distance education, I’m not sure it’s all that its cracked up to be” (T/DI/P2-3).

Computer availability was of top importance to the high school principal. They have five computer labs in the school. Each core department has a lab, and there is one lab beside the library. Those are in addition to computers in the classrooms. He commented on the flexibility to set up labs as the school staff wanted. It was not dictated by the central office and he and his teachers appreciated that. He also indicated his appreciation for the training the teachers were offered, especially the veteran teachers that may not have any previous experience with computers. “The training opportunities level the playing field for the older teachers; they feel so threatened by computers. The teachers fought the mandatory training at first, but now they embrace technology and I’m proud of our people for recognizing the importance of it” (T/GC/P3-3).

Perspectives of the teachers.

The largest champions of technology were the teachers. They felt it was more than adequate and that it is supported with competent people. “We have three computer experts in the county; they keep our system running top notch” (T/GC/T1-1). The same man mentioned the director of instruction and claimed, “He breaks new ground in technology. He is not afraid of it” (T/GC/T1-1). The teachers seem to echo the same sentiment in regards to the available technology. They realize they did not have the best but, “We are tickled with what we have. For example, the lab upstairs, those computers were refurbished last year and are not completely new, but they are all online and work just fine” (T/GC/T1-2).

One of the teachers in the high school explained that the wave of the future is distance education, and he saw technology as a means for students in smaller schools in Southwestern Virginia to have the same opportunities as children in larger school districts. “My daughter is in community college; she takes all her tests online. It’s the wave of the future and we cannot change that. If we allow it to be, technology can be an equalizer” (T/GC/T3-3).

The teachers recognized the importance of educating their students through distance education and, in 2002, the school system offered several courses via distance education and the

county became a member of a consortium that supported Southwest Virginia Education and Training Network (SVETN). One of the high school teachers taught a science course via SVETN and sent it out to six other schools in the area. He said it is a challenge and you have to be patient and creative but it does work, “If we did not have this opportunity, over 50 students would not have the opportunity to take this higher level course. Of course, I wish I was there or that they could take the course in their home schools but that’s not the way it is, so we do our best” (T/GC/T1-3). That seemed to be the sentiment of all the teachers. They were appreciative of what they had and used all of the resources available to them.

Analysis of capacity.

Promoting the use of technology helped build material and human capacity within Success County schools. This type of material capacity helped build and sustain the improvement on the SOL assessments in the school district. As Florian et al. (2000) explained material capacity refers to the fiscal and material resources available to the system. In this case the material resources were technology based. Success County decided early to focus fiscal resources on access and promoting the use of technology. Insuring easy access to computers was a priority for district leaders thus money was spent placing computer labs in schools and in individual classrooms and providing staff development on how to best utilize technology. The director of instruction sought teachers that were using technology and employed them to teach others. In turn, human capacity was built by the distribution of leadership among several individuals. The teacher leaders used collaborative approaches to introduce and promote the use of technology to impact student learning.

Insuring initial funding and allocating adequate funding to support the technology was vital to promoting the use of technology. Employing existing personnel to carry out the task of implementing the technology further impacted human capacity. Collaboration among teacher leaders, expertise from the technology staff, and an implementation plan was employed to assemble the technological skills of the teaching staff. The expertise and the tact with which the information was presented by the teacher leaders and technology staff was critical to the success or failure of the implementation phase. It was essential that the teachers felt comfortable with the technology; that they collaborated with other teachers which fostered those relationships within the district and built human capacity in promoting the use of technology. Building the material and human capacity was critical to promoting the use of technology in Success County.

Having the funds and material resources available to promote and sustain technology is an important foundation for any school district. Although Success County did not have state of the art technology, they established a stable foundation and focused on supporting existing technology within the county. Table 4 illustrates the types of capacity and the corresponding themes.

District leaders worked hard to promote the use of technology and build on the strengths that currently existed within the county. The next theme that developed from an analysis of the data was building existing strengths within the division.

Building on Strengths

The fifth theme that came from an analysis of the data was how the system had built on existing strengths. Fifteen years ago, things began to change in Success County. The change began with a new superintendent and central office staff. This staff brought a new outlook with renewed hope and vision. That superintendent was there from 1989 to 1994. He was succeeded by the assistant superintendent for administration who not only continued to promote the changes that were beginning to emerge, he built on those existing strengths. Considering that the system used what it had and expanded on those strengths, all four types of district capacity were evidenced in this theme. Florian et al. (2000) described the four types of capacity for understanding district capacity, and all of those fall into this category because it is about building on those strengths, those types of capacity that already exist. Building on the human capacity, organizational capacity, structural capacity, and material capacity that already existed helped Success County develop and sustain improvement; the following illustrates the thoughts of some district employees.

Perspective of the director of instruction.

The director of personnel explained the impetus for building on existing strengths within the school district. He explained:

The present superintendent was one of the new central office staff brought in during the initial period of change. His steady and skillful work with each of the school board members and administrative groups has done much to take what was begun to its fruition. During this time, the confidence of the school board continued to build in the superintendent and the central office staff. This confidence resulted in a sense of

collaboration between the school board and administration. Consequently, the school board, central office staff, and school administrations have been able to speak with one voice, to create clear and agreed to mission and vision statements, and to create the kind of consistent, dependable environment needed for excellence to emerge and be maintained. We have enjoyed the kind of consistent school board operational style that is an often overlooked but essential ingredient in any successful school division. We used what we had and decided to make the best of the situation. (T/CO/DI-2)

Building on the strengths in their community has been the biggest reason for the success in Success County. The director of instruction stated that although he did not have any firm numbers, he guessed that 80% of their teaching force and administrative staffs graduated from Success County Schools and chose to come back there and work. He explained:

We could complain every single day that we are poor, that our kids shouldn't be expected to do as well as the kids in Fairfax, that we get left out of the decision making process in Richmond, that we don't have the resources, the technology, the money and on and on and on. But at some point you have to say to yourself, we have to and we will. We have said that and I will do what it takes to keep this county moving forward. With our old schools and old buses and mediocre budgets, we'll do it because of our people. We may not have much control over state policies and big budgets but we'll make due and beat the pants off of most other school systems because we believe that we can. (T/CO/DI-3)

This philosophy was prevalent with the personnel that participated in this study. They portray the sense that despite all the things that may be against them, they will overcome and be successful. The principals shared their feelings regarding the practice of building on strengths.

Perspectives of the principals.

The principals were quick to note key individuals and practices that they felt had contributed to the success of their schools. They did not look to other people or organizations to help them; they looked within the school system and decided to make the best of what they had and make sure they hired only the best and expected the most from the students. "We don't get to choose what children come to our school. If you don't embrace them and make the best of what you have, you will sink fast" (T/RC/P1-1).

Each principal commented that the children seemed to be very motivated. When asked where that motivation comes from, each one had interesting ideas. The principal from the high school stated:

This school has a history of winning, in sports, academics, winning in general. It is a tradition and I feel that the students don't want to let their parents down, their teachers down, and ultimately this community. So they just do what it takes (T/GC/P3-4).

The principal from the intermediate school commented further:

These kids don't all come to us at grade level but they work their tails off to get where we want them, the parents really push them and stand behind us. Now you always have those that drive you crazy, but for the most part they are right there with us pushing the kids to be better, it definitely comes from the parents (T/RC/P1-3).

The principal from the elementary school added:

Our kids are motivated by doing well and succeeding. When they accomplish something we celebrate it, now not with things like candy or toys, but we stress how they feel inside, that is the true reward and I think that stays with them forever (T/DI/P2-2).

Each principal seemed especially proud of his school and the staff. They were quick to point out that their school was the best school in the county and that they had the best teachers in the county.

Building on the strengths that exist in their schools consisted of using the strong teachers to collaborate, establishing opportunities for leadership among the students, and empowering the support staff and giving them a sense of belonging. "Calling on those teachers who had specific talents and recognizing the value of those strengths so that others may learn from them is key" (T/DI/P2-2). "Maybe I don't have anyone on my staff that is an expert with United Streaming, but I know the school down the road does have that person. I call them and we use them, we're not too proud to ask for help" (T/RC/P2-3). The interview data clearly illustrated the importance principals placed on building the strengths that already existed in their buildings and the impact that those strengths had on their success.

Perspectives of the teachers.

The teachers who were interviewed offered much information regarding the idea of building on strengths. Each one mentioned the fact that the county leaders did not look for answers outside of their county. The teachers seemed to know the leaders looked to the teachers for those answers. This was illustrated in various ways, for example: “We know the principals are depending on us and we welcome that challenge, I personally love the challenge everyday” (T/GC/T2-1). “My principal moved me from kindergarten to fifth grade; he has confidence in me, and I won’t let him or the kids down” (T/RC/T1-1). A teacher commented further:

I know that if I want my SOL scores to be high, I have to do whatever I have to do to prepare the kids. Maybe that’s being a disciplinarian, maybe that’s being a mom, maybe that’s recognizing when the kids need a break and giving them that, it’s up to me. The parents are counting on that and I try my best to do that. (T/DI/T2-2)

One teacher regarded the confidence his principal placed in him, “My principal knows that I will make sure everybody in this department has the information they need to teach the standards. I am the technology guru and he looks to me for that, and I love knowing that he trusts me with that” (T/GC/T3-3). Most teachers commented in various ways that they felt valued and appreciated and that that was important to them.

Teachers did not feel slighted because they were not able to go to the regional or state conferences and said they felt a lot of that was a waste of time and money, “We can go to the next county and meet with other teachers and get good ideas. You don’t have to go eight or nine hours across the state. I think we have the answers; sometimes teachers just don’t want to do the work that is necessary” (T/GC/T3-3). However, one teacher did comment that he wished some of the teachers could visit larger schools to appreciate the work ethic in Success County. He explained,

Some of the teachers here don’t know how good we have it; I taught in Southside Virginia [another rural region in the Commonwealth] for one year and that did me in. The teachers didn’t talk to each other, and it was very disjointed and the kids were lazy. We don’t have that here. I wish they could see that (T/DI/T1-3).

One teacher did say that she wishes she could go to more conferences and have a chance to share our experiences in Southwestern Virginia:

I get information from the Department of Education website, but I wish I could talk to someone and tell them my frustrations. For example, on the SOL test they ask a question about an auditorium and I know several of my kids did not get it right because we don't have an auditorium; they've never been in an auditorium. Things like that frustrate me. I wish some of the big wigs would come spend a day in our world. (T/RC/T3-3)

When asked if there were any resources the teachers wish they had but did not, every teacher answered in the same way, they believed they had everything they needed but felt comfortable asking for something and they knew their principals would find a way to purchase what they needed. The teachers came across as very confident, knowledgeable, and self sufficient in educating the youth in Success County.

Analysis of capacity.

Building on existing strengths is vital for any organization leaders who strive to improve. The best way to effectively address the challenges that face communities and school systems is to have in-depth knowledge of the resources available and build on existing capacity. Most school systems have finite resources, human, physical, or financial, and as such, system leaders must take a hard look at what already exists and build upon those assets. For example, Success County leaders took advantage of existing staff who were already viewed as exemplary in their fields and utilized them to amplify the strengths of other staff members, thus improving human capacity. They chose to focus on effectiveness not deficiencies. The central office leaders sanctioned principals and directed principals to empower staff members. Teachers were asked to give their time and talents and be a part of the solution. Building on existing human capacity gave these individuals and groups a sense of empowerment because they were a part of the improvement process and a part of the successes of the students.

Building organizational capacity was a push for the county; participants realized the value of encouraging relationships within and outside of the district. Developing these relationships was critical. People have different views of what a partnership is and what it is not. It may be referred to as development of relationships *within* the school community; it might also be viewed as the development *of* the school community. Development in the school community suggests something new is developing. Development of the school community seeks to uncover and expand the knowledge and skills of people and businesses already existing in the school

community (Gelberg, 1997). School leaders were relationship driven and empowered community members, business owners, parents, teachers, support staff, and students to increase organizational capacity and student achievement in their district.

Structural capacity, those elements of the system that are independent of people, was built by people evaluating policies and procedures, aligning the curriculum with the standards, and providing a strong professional development program that was based on the needs of the school division. Central office leaders formed committees that evaluated existing policies and procedures and insured that the policies and procedures supported the desired outcomes. If the policies did not support the goals, they were re-worked or strengthened. Meaningful staff development became a thrust for the system. Small faculty sizes may have made a difference in the quality of development that was provided on the school level. It was easier to achieve consensus over professional development priorities and agendas as well to share successful teaching strategies with a small group. Relationships tend to be more personal and informal in smaller schools where there is a greater tendency for cooperation among the staff. Teachers working together to improve their craft is the goal of professional development and Success County made that the basis of their professional development program and the formulation of policies and procedures which helped them build on existing structural capacity.

Building on material capacity did not mean the school division received an influx of money; it meant administrators analyzed where the money was going and asked themselves hard questions to determine if they were getting the best value and funding programs properly. Education is one of the most important legal functions of state government (Hoff, 2001). However, a major portion of the responsibility for school funding remains at the local level. The ability of a school district to obtain funding is directly related to the local fiscal resources available to that district. In the case of Success County, those funds are limited at best because of the socio-economic status in the area. Realizing that there would be no windfall of funds available to the school system, school officials decided to focus on doing what they could with what they had. There is nothing extravagant about their buildings or classrooms, and county officials do not pay their teachers a great deal of money in relation to other systems. For example, in 2004-05 Success County ranked 106 out of 132 school systems in beginning teacher pay (Virginia Education Association, 2004). School officials had to make due with what they had, and they were resolved to make sure adequate facilities and resources existed to accomplish

the goals of the division. Building on existing strengths was a factor that contributed greatly to the accomplishments in Success County. See Table 4 for a description of the types of capacity, the corresponding themes and examples of how those themes are related to the different types of capacity.

Sharing Leadership

The last theme analyzed from the data was sharing leadership within the division. Although it was evident that there were several strong leaders in the school system, it was evident that no one wanted to take the credit for the successes the division has experienced. Everyone gave credit to someone else and it became clear that no one person was responsible for the successes. The success was due to the teamwork of key individuals and the shared leadership that occurred across the educational system on each level. From within the classroom walls, the building perimeters, and the county corridors leadership was evident in each situation.

Perspective of the director of instruction.

The director of instruction explained the importance of building leadership in the county. “Building leadership was a major thrust early on because we are few in numbers and we need strong leadership on all levels not limited to the superintendent and principals” (T/CO/DI-4). The director of instruction discussed leadership on every level, student leaders, parent leaders, support staff leadership, teachers, and finally administrators. He claimed that he had studied leadership a great deal and he felt the most important aspect of leading a group is to establish a group to lead with you and empower them. “I don’t have all of the answers, but together we have most of them” (T/CO/DI-4).

He explained that although subtle, an important component to educational change in Success County was the attitude with which it viewed its administrators. “The principle component that guided change in the district was building educational leaders instead of managers” (T/CO/DI-4). He believed management was the role of the principal years ago and that had changed. “In prior days, schools were often viewed as a mirror of an industrial society with the factory as a model. As a result, administrators were managers of a work force. This attitude has changed in Success County. A deliberate effort was made to transform the role of the school administrators to that of instructional leaders” (T/CO/DI-5). He further remarked that he believes that is part of his job to accomplish that and help administrators grow into leaders. “I

feel if we take the time to develop a principal then in the long run we save time. Too often they are put into schools with little direction and ask to do a job that is nearly impossible. I want to give them the tools, limit the bureaucracy they deal with, and then get out of the way” (T/CO/DI-5). All of the administrators with whom I spoke appreciated this philosophy and attempted to use that same philosophy in their schools.

Perspectives of the principals.

The principals were insightful in their discussions of leadership. The principal at the intermediate school explained that he has completely changed his philosophy over his many years of experience, “I was a coach before I became an administrator and I felt like my teams were successful because of my leadership and knowledge. I was young and dumb. Only now do I realize that we only won because I had the best assistants around” (T/RC/P1-2). The other principals echoed that sentiment and felt they could not accomplish the goals of their schools alone. Each principal named specific people that they looked to for leadership. Some of those individuals were on the state level, some at the central office and most were within their schools. For example, the high school principal commented, “I know that if I am not at school that my assistant principal and my teachers will carry on with the vision and the plan. I don’t even have to be here; they are the tie that binds us, not me” (T/GC/P3-4). Each principal mentioned key teachers in their buildings that provided leadership and the importance of promoting that leadership.

The principal from the elementary school explained that she feels they have strong central office leadership, “It does not get any better than our central office staff. They are top notch people. If I have an issue I know who to call and I know it will be resolved or maybe I just need someone to hear me out and I feel comfortable doing that” (T/DI/P2-3). Each principal named the director of instruction as an extremely strong leader and claimed he did not want any of the glory but deserved most of it. “He is the reason we are where we are, people like him and he is smart. He doesn’t just tell us what needs to be done. He does it with us and teaches us how to use the data to help our teachers” (T/RC/P1-4). “He does a tremendous job at looking at the data, helping us to figure out what it really means and how to react to that with our staffs” (T/GC/P3-3). “I don’t know what we’ll do when he retires, it scares me” (T/DI/P2-3). The division has replaced the director of instruction and he is as dedicated to working with the principals as his predecessor.

The principals also work to promote leadership within their schools. For example, one principal explained that he picks two people from his staff and gently pushes them into leadership roles around the school and he claimed in most situations they did not even realize what he is doing. “There is an aide that works in our guidance department and she is such a creative, organized person. I can give her any task and she can do it. No college degree but I have given her things to do beyond the scope of her job and she runs with it. She has since started back into school and is going to become a teacher and I think that is very worthwhile” (T/GC/P3-3). Another principal offered this, “I have a parent that will help me in our community in ways that are invaluable, I’m not talking about chaperoning a dance, I mean she has a way of talking to other parents and getting them to buy into things we may want to do and her leadership has made so many great things happen here. She is a great communicator” (T/RC/P1-4).

It was evident that the administrators are strong leaders and encourage others around them to take on leadership roles. The principals promote shared leadership and realize it is one of the reasons for their personal success as well as their schools.

Perspectives of the teachers.

Most of the teachers who were interviewed were teacher leaders. That was one of the underlying reasons the principals chose them. They were knowledgeable and confident in their teaching skills. All were very successful in the classroom in terms of test scores. Every teacher who was interviewed taught a grade level with an SOL test or an end of course SOL test, which indicates that they are the leaders and are seen at least by their principals as master teachers. All the teachers were able to articulate their plans for monitoring the SOL and tracking their students’ progress. Each teacher also discussed helping other teachers and seeking the help of other teachers. One of the teachers was only a second year teacher and yet the other two teachers from her school regarded her as a strong teacher leader in the school. “She knows her stuff and is so creative in her teaching strategies. I have learned a lot from her and I’ve been teaching for a million years” (T/RC/T2-2).

The teachers also mentioned the strong leadership their principals exhibited. One teacher explained, “His door is always open and he will listen to us, but in the end he will make the tough decisions and stand by them. His demeanor is such that our faculty respects him and likes him” (T/GC/T1-3). Each teacher had positive comments for their leaders but at the same time did

not seem to depend on them for their wellbeing. They came across as self sufficient and capable of performing their job duties independently.

Several of the teachers discussed the importance of student leaders in their classrooms as far as peer tutoring and setting an example for others:

I have students who are natural leaders in and out of the classroom and I use them in any way that I can. There are actually several former students that are teachers in our county now and they will tell you that someone saw leadership in them and developed it and it led them into teaching. That is powerful. (T/GC/T2-3)

The teachers seemed to feel empowered and valued. Several of them mentioned that their principals often ask them to perform various tasks within their buildings and that were happy to do so. “Every year that we have a new teacher, I am a mentor. I don’t mind doing it because it only makes our school strong to develop young teachers into quality teachers” (T/DI/T2-2). It seemed that they realized they had a bigger responsibility than some of the other teachers and that was alright with them. They were a varied group in subject area, grade level, and years of experience, however, one common denominator was their leadership qualities that had been recognized and developed whether consciously or unconsciously.

Analysis of capacity.

Human capacity is present in each of the themes presented; however, it is the primary type of capacity illustrated by the theme of sharing leadership. Without the distribution of leadership throughout the county, the autonomy given to building level administrators to make decisions, and the empowerment of individual teachers, the division leaders would have relied on few people to guide them through the accountability maze of Virginia’s state assessments. Initially, administrators and teachers qualified as instructional leaders simply by paying attention to instruction, performing such tasks as setting curricular goals, monitoring lesson plans, and evaluating teachers. Today, instructional leaders immerse themselves in the core of teaching and learning. Instructional leaders use data to make decisions, align staff development with student learning needs, have a sophisticated understanding of assessments, and must be master teachers. Distributing leadership is a change in culture. It was slow to occur in Success County. The superintendent and director of instruction stressed leadership on every level and sanctioned all employees to be a part of the solution and through their efforts built and are sustaining the

capacity to improve student achievement on Virginia's standards based assessments. See Table 4 for a description of the types of capacity and how the corresponding themes relate to the types of capacity.

Chapter Summary

The themes that emerged from the data were varied and related to the diverse types of capacity presented in the literature review. Table 4 depicts the themes and, according to Florian et al. (2000), the corresponding types of capacity built and sustained in this school system. The table illustrates the aspects of building human capacity within a school system. All capacities are dependent on the amount of human capacity that exists within a division. For example, without a strong basis of human capacity, it is difficult to accomplish instructional tasks. Human capacity affects (a) how the curriculum is aligned, (b) how relationships are fostered, (c) how professional development is delivered, (d) how the use of technology is promoted, (e) how leadership is shared, and finally (f) how to build on existing strengths. Without knowledgeable, competent, and effective people many of the tasks could not be accomplished and the school system employees and students would struggle. Secondly, building structural capacity is vital because knowing how to organize and structure the priorities of the system to accomplish the goals of the division is essential. Finally, building material and organizational capacity is a necessity for the success of any school system. Funding issues drive the level of activity in any system. The manner in which school districts are organized and how funds are allocated within the district can affect programs at every level. The process of building and sustaining these four types of capacity and how they work together can mean success or failure for any school division. Success County educators seem to have found the correct balance that works for them as evidenced in Figures 3 and 4 below. The following figures illustrate Success County's achievement scores on Virginia's Standard of Learnings tests from 2000 through 2006 in the core subject areas that are tested, English, mathematics, social science, and science.



Figure 3. Success County's Standards of Learning scores for grades 3-8 tests for years 2000-2006.

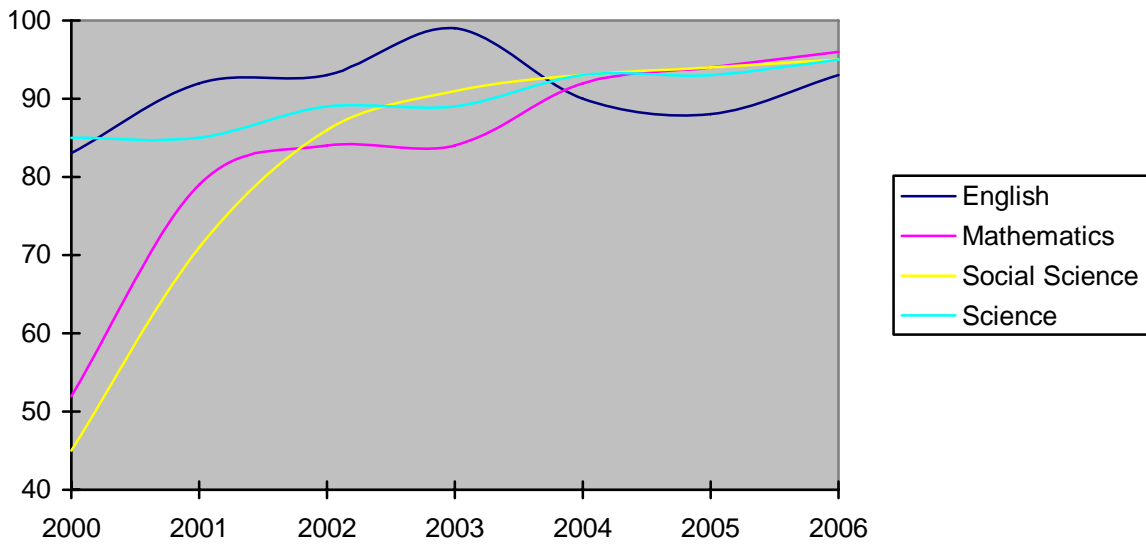


Figure 4. Success County's Standards of Learning scores for end of course tests for years 2000-2006.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to review the efforts of one school system in developing and sustaining its capacity in response to increased accountability. The question guiding this study was this: How did a school division successful in achieving state accreditation develop and sustain capacity to improve student achievement in its schools? In answering this question the ability to generalize is limited in selecting a successful district; it is an over simplification to assume that successes could be easily replicated.

This study involved collection of data through the analysis of documents, observations, and interviews with various personnel in the Success County School System. The data collection and analysis were guided by a review of related literature and the conceptual frameworks of Bronfenbrenner (1970) and of Florian et al. (2000). This chapter begins with a discussion of the conclusions drawn from these data. Following this discussion, implications and recommendations for practitioners are described, and recommendations for future research are shared.

Discussion of the Findings

The intent of this researcher was to provide readers with an illustration of one school system that academically transformed itself and improved the achievement of its students on Virginia's Standards of Learning assessments. The system has also sustained the improvement as evidenced by the full accreditation rating each school has received and kept over the last 6 years.

It is an over simplification to assume that the successes of one school system could be easily replicated. To facilitate the transferability of the conclusions and implications, an attempt was made to be consistent with case study methodology in describing the findings in Chapter Four. As Merriam (1998) suggested, rich descriptions were provided to assist readers in determining the extent to which Success County leaders match their own situations. It is up to readers to decide whether the study's findings and conclusions are transferable to their own circumstances.

Bronfenbrenner's ecosystemic framework (1979) provided a lens through which to view the different levels in an educational system. The model effectively portrayed the various levels as separate entities, while at the same time exhibiting the importance that no level stands alone

within a school system. The levels are dependent upon one another and one level can have a large impact on another level. The second framework provided by Florian et al. (2000) afforded a context that allowed for the interpretation of the themes and an explanation of how the themes that emerged from an analysis of the data helped build and sustain capacity within this school system. Both models were useful in portraying the findings.

In this study six major themes emerged from the data to describe how this system built and sustained the capacity to achieve state accreditation. These themes consisted of (a) aligning curriculum to the state standards, (b) providing professional development, (c) fostering relationships, (d) promoting the use of technology, (e) building on strengths, and (f) sharing leadership. The themes analyzed from the data collected in Success County reflect the review of the literature in that several of the themes were found by other researchers to be vital in improving student achievement in a school district. A brief discussion of each theme and related literature follows.

Promoting the Use of Technology

In this study building material capacity through promoting the use of technology was important to the achievements of the Success County School System. Darling–Hammond (1994) emphasized that ensuring adequate funding and materials to extend programs such as technology was vital to the success of school districts. Success County had to work within its budgetary constraints and other researchers argue that the utilization of resources is far more important than the level of resources available (Creemers, Peters, & Reynolds, 1989). Corcoran and Goertz (1995) explained that the most common use of the term capacity refers to “the ability to do something” (p.28), but capacity can also mean “the maximum or optimum amount of production” (p.29). The reform community generally has used capacity in the former way; however, it may be fruitful to think about system capacity or school capacity as the maximum level of *production*. Thinking in terms of production, Success County has gotten the optimum amount of production out of the resources, both fiscal and human, allocated to promoting the use of technology.

Aligning the Curriculum to State Standards

Aligning the curriculum to state standards and teaching the content that is based on those standards was essential to the achievements in Success County, echoing the findings of

Newmann and Wehlage (1995) that specifying clear learning standards is possibly the most important action in improving achievement. Students must receive instruction based on the standards from which the assessments are derived. It is vital that teachers understand the importance of aligning their lessons with what will be assessed and update the scope and sequence of the instruction accordingly.

Providing Professional Development

Research affirms that teaching quality is the single most important factor influencing student achievement, and moving students well beyond family backgrounds' limitations (Kaplan & Owings, 2002). Success County leaders focused on enhancing and organizing its staff development to reflect the standards by which staff members were being measured. Massell also (1998) detailed the importance of aligning materials and professional development to standards.

Sharing Leadership

Sharing leadership and building on strengths that already exist within a system by giving schools authority over decisions regarding classroom instruction was one of the themes derived from this study. It directly reflects the findings of Massell who suggested that school leaders must not only have the desire, but the capacity to influence student achievement, and can do that by building the capacity for reform (1998). Newmann and Wehlage (1995) and Byrk and his colleagues in Chicago (1998) similarly found that shared decision-making, collaboration among teachers, and clear goals for student learning were critical to the success of restructuring public schools. The quality of human capital and the level of the resources available can be viewed as defining the potential of a system; but this potential is unlikely to be realized unless there is an instructional culture and leaders who build consensus, provide support, and motivate staff to make a collective effort on behalf of all students. Distributing leadership among many individuals on the micro, meso, and exo-system levels, Success County leaders changed the culture within those system levels and increased student achievement on the SOLs. The achievements of the school system have been sustained based on the fact that the schools have reached and maintained full accreditation for over 5 years.

Fostering Relationships

In the Florian et. al (2000) study, building human capacity was often accomplished through developing relationships with external agencies or organizations. This was the case in Success County. The partnerships provided the administration and staff with different perspectives of how to best prepare students and build consensus within the community. The businesses, industries, and community colleges had a vested interest in the accomplishments of the students. A well prepared and a well educated product of the school system meant better students and employees for the community, a win-win situation for all.

Corcoran & Gertz (1995) added that it is important for local business and industries to pass on the knowledge, values, beliefs, and behavioral norms to the students in the school system because they are the futures of those businesses. Fostering relationships promoted communication, which helped to align the goals, objectives, and actions of various stakeholders.

Building on Strengths

Teacher capacity is dependent on training and development opportunities provided by states, districts, and schools. School capacity is similarly dependent on states and districts for resources and authority over decision-making. Only at the system level is capacity created rather than received from elsewhere (Herbert & Hatch, 2001). Building on existing strengths was a conscious decision by the superintendent and the director of instruction in Success County. The director of instruction influenced existing capacity through teacher training, allocating resources, and focused collaboration between teachers. Further, Herbert and Hatch argued that building capacity is not specific to one particular approach to teaching and learning. Schools exist within an institutionalized system of bureaucracies, yet they are highly individual organizations, each with its own unique set of needs, values, goals, and concerns, as was the case in Success County. They are attended by constantly changing student bodies and operated by teachers and administrators who form their own norms and cultures. It is not realistic to think that there could be one set of guidelines that would encompass all of this diversity. Rather than simply implementing a model for whole school reform, schools might be more successful in sustaining reforms by developing their own approaches from individual goals and the knowledge that improvement programs can provide (Darling-Hammond, 1994). Success County did not seek out

a particular reform model, and there are several models in existence. They decided to look at their data, set goals, and decide on the best method of achieving those goals.

Commentary

Each theme was embedded repetitively in the data collected and in the literature reviewed for this study and clearly reflected the data found in other studies of building and sustaining capacity for improving student achievement. The data also illustrated the effect of the distribution of leadership in Success County. The superintendent delegated the duties of building the instructional program to the director of instruction. The superintendent's role was not obvious from the direct interviews that were conducted. The director of instruction was described as the catalyst for building on existing leadership within the county. He was persistent and provided clear goals for the principals in the division, giving them ownership of the process and eventually the outcomes. Often the principal is portrayed as the single most important person in the school; the principal is called upon whenever a new reform is advocated. In response to this, policymakers and practitioners are beginning to recognize that leadership should be distributed throughout the school rather than vested in one position.

In some cases, this may be a matter of delineating the job description of a principal and giving other staff members some of the responsibilities. A principal may choose to hand off some tasks to assistant principals or lead teachers. Whatever the choice, it is not realistic to expect one person to provide direct oversight for all school dimensions and activities. Success County Public School leaders realized this and helped principals delegate some tasks to teacher leaders and in turn further enhanced the human capacity within the schools.

Harris (2003) explained that distributing leadership means enlisting the capabilities of others in a common cause. When it is done effectively acts of leadership at all levels will bubble to the surface, enhancing the school's effectiveness and relieving some of the demands on the principal. Success County staff has created instructional leaders across the micro-system level (classroom), the meso-system level (building), and the exo-system level (district) of Bronfenbrenners eco-systemic framework. This distribution of leadership has positively impacted student success on Virginia's Standards of Learning and has helped sustain the level of full accreditation for the division for over five years.

Conclusions

School leaders in Success County recognized the importance of building capacity within their school system and acted quickly in response to increased accountability. This researcher reached the following conclusions based on the data analyzed in this study. First, the aspect of building human capacity sparked the growth in other areas of capacity. The greatest assets of this division are the people within the system. Secondly, central office administrators were the impetus for change and dedicated themselves to improving the student achievement in the division. They focused efforts on the people already in the system to build capacity and distribute leadership. The efforts of school division leaders were well thought out and initially coordinated from the top down. Successful school systems require and communities should demand strong leadership in their divisions. Success County school leaders provided exemplary leadership by showing initiative and taking responsibility for improving student achievement in every classroom. Third, school leaders established and recognized leaders at each level of the educational system and gave individuals a sense of responsibility and power over the outcome of the student achievement by distributing leadership. By strengthening relationships, developing, and rewarding excellence on a continual basis, Success County has sustained the human capacity and in turn, material, structural, and organizational capacities have been sustained. This is evidenced by the fact that all schools have remained fully accredited by the Virginia State School Board since 2000. The fourth conclusion is that school systems should initially focus efforts on building human capacity by acquiring or developing strong leaders on every level and subsequently focus on building material, organizational, and structural capacities. Effective leaders can influence positive change as evidenced by the success of this school division.

If instructional capacity is a property of interactions among teachers, students, and materials (Cohen & Ball, 1999), then this researcher's fifth conclusion is that interventions are likely to be more effective if they target new interactions among additional elements of instruction, rather than focusing on one element in isolation from others. Capacity is not a fixed attribute of interaction; it is dependent upon the caliber of the people performing the interactions. Finally, this researcher concluded from the results of this study that successful change in similarly situated school systems will require participants on all levels of the learning community, policy makers, agency representatives, researchers, practitioners, and parents, to work together, to initiate and examine new ideas, to share new knowledge, and to test, refine,

and rebuild programs. Each level of the community brings its own unique contribution to the reform effort, by working and learning together the participants can create the conditions and opportunities for building and sustaining school capacity and most importantly, increased student achievement.

Implications and Recommendations for Practice

Several implications and recommendations for practice that may be valuable to similarly situated school systems are described in this section. Harris (2003) noted that school systems have a greater chance for success when they pay attention to certain factors. She commented further that building the capacity for school improvement necessitates paying careful attention to how collaborative processes in schools and school systems are fostered and developed. The following implications and recommendations offer suggestions for what things other school systems should attend to as they address accountability. These items are as follows:

1. *Implication:* The value of building human capacity by fostering relationships, building on strengths, providing professional development, aligning curriculum to state standards, and promoting the use of technology within a school system is vital to the improvement of student achievement as measured by state standards.

Recommendation: When school system leaders emphasize building the capacity of individuals in the division instruction is improved. Building human capacity can be enhanced in many ways including fostering relationships among all stakeholders and distributing leadership. Relationships promote communication, which helps to align the goals, objectives, and actions of various constituencies (Darling-Hammond, 1994). Hiring highly qualified staff who are knowledgeable about the district's vision is the basis for building human capacity (Florian et. al., 2000). School districts are well served by providing support and offering meaningful professional development that meets the guidelines set forth by the SOQs and a needs assessment. Finally, according to Bronfenbrenner's framework, districts should build on those strengths that currently exist in the system and focus on sharing leadership on all levels.

2. *Implication:* Structural capacity should be formulated to meet the specific needs of the school division by paying close attention to alignment of the curriculum to state standards, structuring the professional development based on the needs of the division, and building on the strengths that already exist within the system.

Recommendation: When school division leaders conduct professional development based on the needs of the staff and use the SOQ as a framework for formulating professional development, professional development that is meaningful. Florian et al. (2000) suggested acts of engaging teachers in reflection and dialogue were considered to be important in collaboration efforts. Spending time focusing on integrating new knowledge and skills into practice should be addressed. This can be accomplished through shared planning time, mentoring programs, modeled instructional practices, and staff meetings that focus on student learning. Implementation strategies are important and they help teachers integrate new practices they may have seen in the professional development. Building on the strengths that may already exist within the division is necessary and those strengths should be developed. Focusing existing capacity on specific goals and mobilizing existing capacity so that its full potential is realized is vital to improving a district (Goertz, Floden, & O'Day, 1995).

Districts are encouraged to work on aligning curriculum to state standards and according to Newmann and Wehlage (1995), align instructional materials and professional development to standards as well. Resources should be allocated and time set aside to accomplish this task. Florian et al. (2000) suggested focusing on only one or two subjects a year and using the master teachers in the alignment process.

3. *Implication:* Maximize organizational capacity within the district to enhance student achievement by fostering the internal and external relationships of the division and building on existing strengths within the division.

Recommendation: Relationships are significant dimension of leadership and organizational capacity. Relationships promote communication, which helps to align the goals, objectives, and actions of various constituencies of public school systems (Florian et al. 2000). Fostering those relationships that contribute to reform is important. Examples of those relationships that are essential are: (a) administrative staffs, (b) external organizations or agencies, (c) parents and other community members, (d) teacher organizations or unions, (e) district administrators and school board members, (f) other districts, (g) local business and governmental agencies, and (h) institutes of higher education. Strengthening those relationships will aid in the success of a division.

4. *Implication:* Taking full advantage of the available material capacity and channeling it properly is necessary for the success of a school district. An example of this could be providing a

strong base for supporting and promoting technology and building on strengths that exist within the division.

Recommendation: School districts should allocate the needed resources in the areas where they are best spent. Areas such as staffing for remediation, promoting the use of technology, and providing professional development seem to offer the most benefit to building capacity within a school district. Districts must strive for a solid technology program that is supported by well qualified individuals, provides training to teachers, and maintains the technology. It is simply not enough to have the latest technology available but a solid foundation in technology that is user friendly.

Building on and sustaining the strengths of the individuals within a district is important to the achievements of a system. School districts are encouraged to use the limited funds available to strengthen the existing capacity within the system and look for ways to make the maximum use of the available funds.

5. *Implication:* Leadership provided by the central office staff has a direct effect on individual school's accreditation status and indirectly on student achievement. Central office leaders should take responsibility for and pay close attention to leadership tasks such as data disaggregation that have a direct effect on the work of the meso-system and micro-system levels.

Recommendation: When central office personnel are leaders in all areas of the educational process they have the knowledge base in curriculum development and the expertise to lead others within the school division. Division leaders should take responsibility for each school and not only supply them with data, but guidelines and procedures for implementing change in response to the data. Leaders should offer support as needed to the individual schools and be the catalyst for improving student achievement on the SOL tests and each school's accreditation status.

Implications for University Principal Preparation Programs

What does this mean for university principal preparation programs? Universities must revamp their programs. Murphy (2006) argues that it is "self-defeating" to put academic knowledge as the central focus of principal preparation. He discusses the problem of creating a connection between theory and practice, which he terms, the "bridge to nowhere" (p. 3). Creighton (2001) explains the problem in terms of recruiting and selection of participants for programs. He illustrates the point by examining the most commonly used criteria for admitting

students: (a) grade point average, (b) Graduate Record Examination (GRE) scores, and (c) letters of recommendation (p. 3). Although these measures should be factors of admittance, they should not be the only determining factors. Providing a stage for candidates to demonstrate their abilities is also an effective predictor and should be considered. Increasing the human capacity in a school district can be enhanced by preparing school leaders in the most effective way. Effectiveness cannot always be measured in terms of the ability to publish a dissertation, or conducting in-depth studies in educational theory. While those are valid predictors of success, Lashway (2003) suggests principal preparation programs go beyond theory and focus on practice by offering mentoring, portfolio development, and demonstrating skills in schools. Honing skills such as the ability to build on existing strengths, increasing human capacity, sharing leadership, and fostering relationships within a school district is a vital part of any school leader's success or failure.

6. Implication: Principal preparation programs should use research from the field to inform the curriculum taught in university principal preparation programs. Murphy (2006) explained that a primary goal of principal preparation programs should be the ability to think critically and find answers to real problems that school leaders face on a daily basis. Universities have a responsibility to provide the most effective training and preparation to students.

Recommendation: University principal preparation programs should employ practitioners from the field to prepare individuals for positions in school and school division leadership. Programs should focus on real world solutions and proven best practices of leading schools and school divisions.

Recommendations for Future Research

This study provides a description of how school division leaders successful in achieving state accreditation developed and sustained capacity to improve student achievement in their schools. Future researchers are encouraged to replicate this study to test the applicability to other rural school districts and to larger districts as well. Similar studies might be conducted in more suburban or urban districts that have exhibited success as measured by the accreditation status of the district to examine the existence and extent of the themes that arose from these data.

Case studies of individual schools might specifically indicate how particular schools built and sustained capacity. Such studies could provide more in-depth discoveries of how schools operate as a school community and illustrate how the school and its personnel interact with the

central office staff. Future researchers may explore how the leadership from a district's central office affects the teaching practices occurring within the classroom. Future researchers could investigate the practices within the classrooms and the effect of those practices on student achievement. In addition, potential research could investigate the ways that school systems that have been successful in developing and sustaining capacity expand upon that capacity. What qualitative factors exist? For example, on the micro-system level, could alignment of the curriculum account for differences in student achievement despite teacher effectiveness? Are there other factors that contribute or is it strictly teacher quality?

One additional area of recommended research could focus on how principal preparation programs can better prepare future school leaders in the era of accountability. The principalship is not the same today as it was even five years ago, how are universities responding? While the list is extensive, these issues are worthy of further attention in educational research and would directly benefit the educators and inform the practice of educating children.

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APPENDIX A
FREQUENCY OF OCCURRENCE IN CATEGORIES

Categories: Frequency of Occurrence

Data Source	Aligning Curriculum to state standards	Fostering relationships	Building on strengths	Professional Development	Promoting the use of Technology	Sharing Leadership
Interviews						
Teachers	8	5	6	9	7	5
Principals	3	3	2	3	3	2
Director	1	1	1	1	1	1
Informal Observation	0	3	3	0	2	1
Documents	3	2	0	4	2	0

APPENDIX B
PROTOCOL TO ACCOMPANY INSTITUTIONAL REVIEW BOARD
REQUEST FOR EXEMPTION

Virginia Polytechnic Institute and State University

Project Title: Developing and Sustaining Capacity for School Improvement:
A Case Study

Principal Investigators:

LaDonna Meade (Primary Investigator), Doctoral Candidate, Educational Leadership and Policy Studies

Dr. Jean B. Crockett, Associate Professor, Educational Leadership and Policy Studies

Justification of the Project

Nationally, nearly all the states and the District of Columbia have embraced academic standards as a primary means for improving public education. Virginia is no different. Virginia implemented the Standards of Learning assessments in 1994. These assessments are based on a set of standards set forth by the Commonwealth and in 2004 these assessments will determine whether students receive a high school diploma and whether or not a school receives full accreditation. The purpose of this study is to review the efforts of one school system in developing and sustaining its capacity to improve student achievement in response to increased accountability and to describe how this school system became fully accredited.

Procedures

The primary participants in this study include the director of instruction, 3 principals and 9 teachers from a small rural school division. The director of instruction will recommend three outstanding principals and the principals will each recommend 3 outstanding educators from their school (for a total of nine teachers). There are no criteria in the areas of gender, race, or age for the individuals chosen.

The director of instruction will be interviewed at the central office and will be the first interview conducted. Upon his recommendations, the principals will be interviewed at their prospective schools. At a time selected by the principal and the teachers, the teachers will be interviewed in the school setting. Each interview will last approximately one hour. Follow up interviews will be conducted as needed to clarify and gather additional data

First contact with the school division will be made via letter to the superintendent. (See attachment 1). A follow up phone call will be made to the director of instruction to discuss the purpose of the study and to establish a time for an initial meeting.

Interview protocols have been developed around the four dimensions of capacity according to the literature. The questions correspond to the human, structural, material, and organizational areas of capacity within a school division.

Interviews will be audio taped and anonymity will be maintained. A tape recorder will be placed in plain view for the participants to see and they will be told ahead of time the audio taping will occur.

Risks and Benefits

There are no known risks involved to participants in this study. To ensure minimal stress, participants will be selected by the director of instruction and by the principals and will be apprised of the nature of the research project before meeting with the researcher. The school staff will be able to decline the opportunity to participate in the research project at any time they wish. Benefits to participants include the opportunity to provide information that could assist similarly situated school divisions as they seek full accreditation by the State School Board of Virginia. However, no guarantee of benefits will be made to participants as a part of their participation in the research project. In addition, upon request from participants, the researcher will provide a summary of the research results.

Confidentiality/Anonymity

The confidentiality of participants will be given primary consideration throughout this study. All records with names of the participants will be destroyed as soon as a pseudo-name has been established and the tapes have been transcribed. The audiotapes are the primary source for collection of data and at no time will audiotapes be released to other individuals. The researcher and a bonded company will transcribe the audiotapes and the researcher will not make copies or keep copies of the tapes or the written transcriptions. The data and notes will remain in the home of the primary investigator throughout the project. All efforts will be made to ensure anonymity of the participants.

Informed Consent

Please see attached informed consent that will be presented to each interviewee before the interviews are recorded.

APPENDIX C
LETTER 1: FIRST CONTACT

LaDonna Meade
1310 Old Stage Rd.
Wytheville, VA 24382

Dear _____,

I am a doctoral candidate in the Educational Leadership and Policy Studies program at Virginia Polytechnic Institute and State University in Blacksburg, Virginia. This letter is to inform you of the purpose of my study and to request your participation.

Nationally, nearly all the states and the District of Columbia have embraced academic standards as a primary means for improving public education. Virginia is no different. Virginia implemented the Standards of Learning assessments in 1994. These assessments are based on a set of standards set forth by the Commonwealth and in 2004 these assessments will determine whether students receive a high school diploma and whether or not a school receives full accreditation.

The purpose of this study is to review the efforts of one school system in developing and sustaining its capacity to improve student performance in response to increased accountability and to describe how this school system became fully accredited. I am interested in looking at your county due to the success you have experienced. I have attached a copy of the abstract, which provides further information concerning this study.

I would like to have the opportunity to discuss the details of this study with you and to seek your support. I will be contacting you in the near future after you have had the chance to consider my request.

If you have any questions please feel free to contact me at (276) 637-3437 (work) or email me at lmeade@wythe.k12.va.us.

Sincerely,

LaDonna Meade

APPENDIX D
INFORMED CONSENT

Project Title: Developing and Sustaining Capacity for School Improvement: A Case Study

Principal Investigator: LaDonna Meade, doctoral candidate, Educational Leadership and Policy Studies

1. I hereby agree to participate in interviews and observation in connection with the project known as *One School Divisions Experiences in Developing and Sustaining Capacity for School Improvement*. I understand that my participation is voluntary, and I will be asked to discuss my ideas and perceptions regarding the success of our school district.
2. I understand that I will be asked to participate in at least 1 interview, which should take no longer than 60 minutes. Follow up interviews may be scheduled as needed.
3. I understand that I can withdraw from the project and the interview at any time without penalty of any kind. In the event that I withdraw from the interview or project, any tape and transcripts made of the interview will be either given to me or destroyed
4. I understand that I will receive no compensations for my participation in this project, though I will be given a copy of the transcript for my own records.
5. I understand that there are no known risks to participating in this project, though it may be difficult at times to discuss issues I wish to share. I also understand that the benefits of this project are significant, as my experiences may help improve efforts in increasing student achievement in similarly situated school divisions.
6. I understand that the interview will be audio taped. In the interview, I will be identified by a pseudo name as that I may remain anonymous in any transcript, tape, and reference to any information contained in the interview.
7. This project has been approved, as is required, by the Institutional Review Board for Research Involving Human Subjects at Virginia Polytechnic Institute & State University, by the Department of Educational Leadership and Policy Studies.
8. If I feel that I have not been treated according to the descriptions in this form, or that my rights as a participant in the research have been violated during the course of this project, I know I can contact Dr. David Moore, Chair, IRB, Research Division, Virginia Tech, or Dr. Jean Crockett, Associate Professor, Educational Leadership & Policy Studies, Virginia Tech, at the phone number listed below.
9. I voluntarily agree to participate in this study and agree to be interviewed and observed according to the terms outlined above. I have read and understand the Informed Consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for participation in this project.

Signature

Date

Should I have any questions about the research project or procedures, I may contact:

LaDonna Meade
Principal Investigator
276-227-1570
lmeade@wythe.k12.va.us

Dr. Jean B. Crockett
Professor
540-231-4546
crocketj@vt.edu

Dr. David Moore
Chair, IRB
540-231-4991
moored@vt.edu

APPENDIX E
INTERVIEW PROTOCOLS

Director of Instruction

Gender:

Race:

Years of experience in education:

Years served as director of instruction:

Endorsement areas:

Highest degree earned:

Interview protocol developed around Florian, Hange, & Copeland (2000) framework for understanding capacity. Four different types of capacity:

1. **Human capacity:** refers to the knowledge, skills, dispositions, and self-perceptions of people within the school system.
2. **Organizational capacity:** refers to relationships among individuals both within the district and with individuals outside of the district (partnerships with organizations, universities, or state departments).
3. **Structural capacity:** refers to the elements of the system that are independent of people such as procedures and policies, professional development programs and curriculum frameworks.
4. **Material capacity:** refers to the fiscal and material resources available to the system.

Interview questions:

Human Capacity

1. First I'd like to talk to you about the people in your division. Who were some of the people that have influenced the success of this division?
2. Can you describe some of the qualities you look for when choosing principals (teachers)? (prompts: knowledge, skills, dispositions)

Organizational Capacity

1. Were there partnerships in place that contributed to the success of your division? (prompts: universities, Dept. of Education, businesses, schools partnering, linkages)
2. Are you currently seeking any partnerships that you feel will be beneficial?

Structural Capacity

1. Were there any policies or procedures in place that contributed to the success of the division?
2. Can you describe any professional development that contributed to the principals (teachers) in the division?
3. Can you tell me how the division utilizes the information (frameworks, crosswalks, blueprints, scope/sequence, etc.) that is provided by the state?
4. Can you walk me through the process of how the curricula are developed in your division?

Material capacity

1. I want to talk a little about the fiscal resources available to your division; do you feel it is adequate?
2. Do you provide input in the budget or play a role in the development of the budget? (principal's role)

Interview Protocol:
Principal Participants

Gender:
Race:
Years of experience in education:
Level of school:
Years of experience in this school:
Endorsement areas:
Highest degree earned:

Interview protocol developed around Florian, Hange, & Copeland (2000) framework for understanding capacity. Four different types of capacity:

1. **Human capacity:** refers to the knowledge, skills, dispositions, and self-perceptions of people within the school system.
2. **Organizational capacity:** refers to relationships among individuals both within the district and with individuals outside of the district (partnerships with organizations, universities, or state departments).
3. **Structural capacity:** refers to the elements of the system that are independent of people such as procedures and policies, professional development programs and curriculum frameworks.
4. **Material capacity:** refers to the fiscal and material resources available to the system.

Interview questions:

Human Capacity

1. I'd like to talk to you about the people that were key in contributing to the success of your school, who were some of those individuals?
2. How would you describe an effective teacher, what are some of the qualities that come to mind?
3. It is vital to have effective leaders in any school division, who are some of the key leaders that have contributed to the success of the division?

Organizational Capacity

1. Were there any partnerships in place that influenced the schools success?

Structural Capacity

1. Were there opportunities for professional development that you found beneficial? Describe.
2. Can you describe any specific policies or procedures that contributed to your school's success? (attendance, remediation, special ed)

Material Capacity

1. A school division's budget can have a direct effect on its schools. Can you tell me if you felt you had enough financial support?
2. In what areas do you feel you were adequately funded?
3. Are there areas you feel need additional funding or resources?
4. How are you involved in the budget process?

Interview Protocol:
Teacher Participants

Gender:
Race:
Years of experience in education:
Teaching assignment:
Years of experience in this school:
Endorsement areas:
Highest degree earned:

Interview protocol developed around Florian, Hange, & Copeland (2000) framework for understanding capacity. Four different types of capacity:

1. **Human capacity:** refers to the knowledge, skills, dispositions, and self-perceptions of people within the school system.
2. **Organizational capacity:** refers to relationships among individuals both within the district and with individuals outside of the district (partnerships with organizations, universities, or state departments).
3. **Structural capacity:** refers to the elements of the system that are independent of people such as procedures and policies, professional development programs and curriculum frameworks.
4. **Material capacity:** refers to the fiscal and material resources available to the system.

Interview Questions:

Human Capacity

1. Who were some of the people that were vital in your success as a classroom teacher?
2. Can you describe some the qualities of the people that contributed? (knowledge, skills, disposition)

Organizational Capacity

1. Were there any partnerships or were you linked to any organization that contributed to your success as a classroom teacher? (partnered with another teacher, university, etc)

Structural Capacity

1. Were there any professional development opportunities that contributed to your success as a classroom teacher?
2. Do you feel the resources/materials provided to you by the State Department of Education are helpful? (blueprints, crosswalks, resource guides, etc.)
3. What role do teachers play in developing curriculum?

Material Capacity

1. Do you feel you have everything you need to be successful?
2. Does anyone seek your input on purchases made for the school?