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Online Learning and Effective Leadership: The Importance of Relationship Building and Culture

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ONLINE LEARNING AND EFFECTIVE LEADERSHIP:
THE IMPORTANCE OF RELATIONSHIP BUILDING AND CULTURE

by

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ABSTRACT

ONLINE LEARNING AND EFFECTIVE LEADERSHIP: THE IMPORTANCE OF RELATIONSHIP BUILDING AND CULTURE

Nadine K. Rupp
Old Dominion University, 2016
Chair: Dr. Jay P. Scribner

Online and blended learning are becoming more important in k-12 public schools because of their flexibility and increased opportunity for students in urban as well as rural environments. Implementing and sustaining technology-based learning is a complex process that requires educational leaders to have a broad spectrum of knowledge and skills which are critical to the success of online programs. This case study research used in-depth interviews to gather data on how one district was able to provide a successful program using effective leadership skills. Three areas critical to success were identified in the data: clear vision and achievable goals, appropriate resources, and relationship building. The emphasis leadership put on orchestrating a culture of support, trust, open communication, and collaboration was an important aspect of the success and expanded capacity of the district's program. The study suggests that the changing roles of educational leaders in a technological world involve shared responsibility, flexible rather than rigid hierarchy, and teamwork in order to anticipate the needs of students facing a technology driven future.

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This dissertation is dedicated to the memory of my parents, Frederick C. and Nadine W. Rupp, whose lifelong encouragement of education instilled a love of learning in me. Both avid readers themselves, they were never allowed the opportunity of attending college in the traditional sense because of the demands of the Great Depression. I'm sure that they both would have excelled. I thank them for passing their interests and abilities on to me.

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Thank you to all who helped me to get to this defining moment in my life. I think back on the journey that started with the classes I took here at ODU and the faculty who work so hard to improve education through their research and their contact with their students. I have such a different perspective on what it means to be a leader in education, and how rapidly that is changing. Thank you for sharing your knowledge and helping me to expand mine. I hope I am able to pay that forward in whatever direction my next career takes me.

I am especially grateful to my committee members, Dr. Steve Myran and Dr. Cherng-Jyh Yen for their careful attention in reviewing my work and helping provide perspective as well as their expertise. My adviser, Dr. Jay Scribner, provided me with the broadest and most transforming education regarding leadership. As his research assistant I was introduced to texts and topics that went beyond the scope of politics and policy. I learned lessons on going beneath the surface and searching for deeper understanding of the issues that will stay with me, always.

My closest friends and family have been immeasurable support to me, keeping me motivated and on track when I got discouraged. Special thanks to my intrepid copy editor, Ms. Lentin for going the distance. I am especially grateful to my children, Cindy and Darrin, who have made me so proud of both their character and their achievements. I now am happy share to this milestone of mine with them. My road to achieving the doctoral level of academia has been an unconventional and circuitous one to travel, and I realize what a special path it has been.

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CHAPTER 1 - INTRODUCTION

The Need for Study

Public education in the United States has attempted waves of reform throughout the past century. The reality is that in the 21st century we still teach the same way we did during colonial times. (Elstad, 2008) The teacher-centric classroom of students listening to lectures and perhaps taking notes is the image firmly planted in us all. This outdated methodology has produced widening achievements gaps, disenfranchised and bored students, 30% dropout rates, and unequal curriculum choices based on zip codes. The Internet and technology is turning traditional education upside down. It is opening the door to student-centered, individualized instruction, with increasing opportunities for all students (iNACOL, 2015). The advent of online and blended classrooms is changing the way children are being taught. Using the Internet to create online classrooms is bringing about reforms that have long eluded traditional settings (Tucker, 2007). We are at the doorstep of true reform.

It is self-evident that not all students were created equal. Although our constitution values equal rights for its citizens, equal educational opportunity does not exist. Natural ability, circumstances of birth, and factors affecting motivation and self-knowledge vary for every learner. An educational system that can individualize instruction to accommodate the great diversity that exists in public schools can produce positive effects on achievement (Tomlinson, 2015). In a world of economic strain, increasing workloads for teachers and administrators, and greater demands for accountability, how can modern society come closer to providing individualized instruction? The answer may be through the use of technology and access to the Internet which has become a universal source of information. Conversations, concepts, and

learning opportunities that may never have happened under traditional delivery formats are possible using new technologies (McLeod, Bathon, & Richardson, 2011). Online and blended learning may hold the key to equal educational opportunity.

Virtual school programs are not without their issues, however, and their success is determined by a complex system of educational, political, fiscal, technological and cultural influences (Cavanaugh, 2009). The rapid technological transitions occurring within our society, and specifically within our schools, can often create upheaval and fear (McLeod, Bathon, & Richardson, 2011) for teachers, administrators, students, and their parents. The barriers to change can be daunting. A study exploring reform efforts in Minnesota found that 80% of superintendents agreed that their district had ingrained patterns of behavior resistant to school reform (Stewart, Raskin, & Zielaski, 2012). Online and blended learning can provide significant pedagogical benefits, but their implementation demands clear organizational planning, strong leadership, and sustained commitment. Some studies have shown that the key to success is sustained collaborative leadership (Garrison & Vaughan, 2013).

The need for educational reform, the embedded resistance to change, and the transformational opportunities brought about by global technologies and the Internet have converged to create a demand for more effective leadership skills and knowledge. Proper planning and initiation of online classes is not prominent in the literature directed toward administrators. Rather, it is discussed in terms of learning strategies and instructional design, not decision makers (Cavanaugh, Barbour, & Clark, 2009). A special issue of the *Journal of Research on Leadership Education*, Volume 6, Issue 5, was focused on these dilemmas facing modern education. “One of the most critical educational issues of our time is the need to create and facilitate learning environments for p-12 students that will prepare them for the digital,

global world in which we now live” (McLeod, Bathon, & Richardson, 2011). Robinson (2010) pointed out that “to date, the distinction between instructional leadership and effective instructional leadership has not been the subject of much conceptual and methodological discussion” (pg. 10). The authors further stated that we simply do not have enough research about what effective school technology leaders look like nor what preparation programs should do to prepare such leaders.

Purpose Statement

The purpose of the study is to identify and analyze the components of successful online/blended learning programs. The rapid change in attitude toward accepting virtual education is confronting educational leaders with a complex set of problems that they may not have the knowledge or experience to deal with confidently. It is the intent of this study to discover how administrators of schools that currently have online programs identified and managed the issues involved with implementation in their own districts, and to gain insight from their experiences. The study intends further to identify what factors led to a satisfactory transition to online education in their district. These insights can be shared with administrators in other districts who are not yet online and are considering the issues associated with a transition to virtual instruction, in order to make more informed decisions.

Research Questions

The primary research question to be investigated is to explore what factors led to the successful implementation of online learning in their school system. The critical questions of ‘why’ the decision was made and ‘how’ it was implemented will be the basis of an explanatory as well as exploratory case study research methodology (Yin, 2009). Yin describes case study

methods as having a distinct advantage when asking ‘how’ and ‘why’ questions about a contemporary set of events over which the investigator has little or no control.

Further, the study will seek to discover the goals, values, and expectations that preceded the final decision to begin implementation of what can be considered a system reform. Did school leadership have a clear vision of what benefits to student learning could realistically be achieved? How would the curriculum be improved, and who would participate in the design and framework of the online instruction?

Every school district has its own unique set of needs and available resources that must be managed to achieve the highest educational outcomes for its students. Therefore, no single procedure or protocol will work for every school. Even so, educational leaders who have been through the experience of starting online classes have had to address issues that are common to all school systems, although the specifics vary between districts. This study will attempt to illuminate the decisions that were made by attempting to answer the following research questions.

- A. What values and factors do effective educational leaders consider when making the transition from traditional classroom instruction to online learning?
- B. How do those values and factors influence the implementation of successful online programs used in their schools?

Conceptual Framework

There are complex issues to consider in selecting and providing online educational environments. Some studies have emphasized how to use technology in the classroom, and how to train teachers once the decision has been made to include online learning. However, research has been directed toward teaching methods, instructional designs, and learning theory, not

toward decision makers who must look at many disciplines and types of resources. Styron, J., Wang, S., & Styron, R., (2009) looked at the decision making process at the college level, but the context focused on how higher education can provide online services to college students. The literature does not examine the preparation or training that K-12 administrators have available to them when deciding how to initiate technological change such as online learning in their districts, or how to maintain its success.

Factors that are involved in the implementation process depend on characteristics such as a school district's access to technology, highly qualified teachers, priority for college or career preparation, student achievement levels, socio-economic demographics, culture, school climate, and other criteria unique to a district. The values that are of major concern in one community are not necessarily going to be important in another school district.

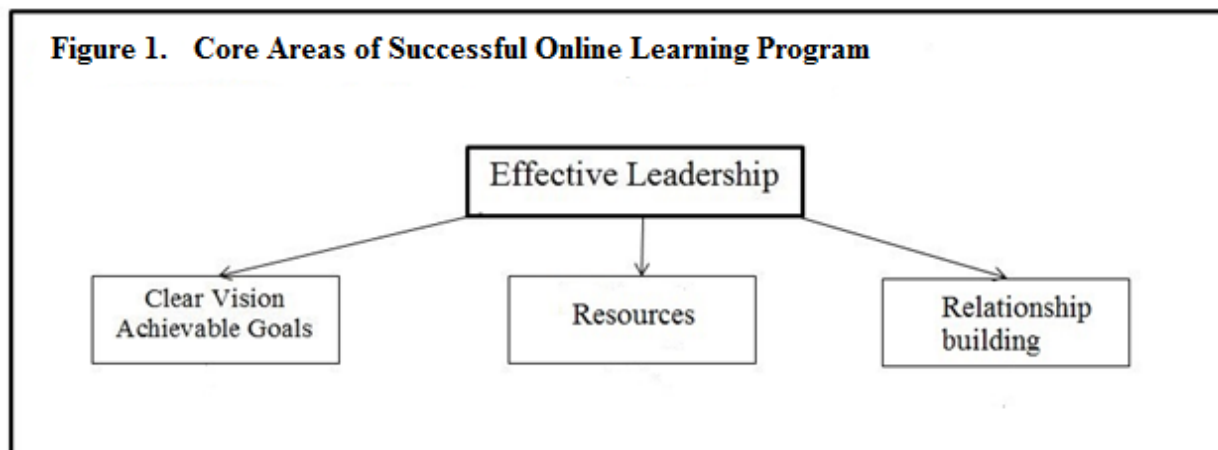
Proposed Relational Framework

Michael Fullan, Scott McLeod, and Robert Marzano are leaders in the current topics of educational leadership, technology, and reform. In reviewing the literature, their recent publications and those of their colleagues, have recurrent themes and terms that describe educational values and issues. Approximately 100 of these recurring terms were selected and associated with three core areas that are instrumental in successful implementation of online and blended learning programs. The tie that binds and moves the implementation forward in a cohesive and positive direction is effective leadership. Fullan (2010) emphasizes the importance of communication and the building of relationships in accomplishing whole system reform. Change-savvy educational leaders put the building of relationships first, before building projects. Robinson (2010) includes building relational trust with staff, parents, and students as a

requirement for instructional leadership. Fullan (2010) further states that communication *during* implementation is far more important than communication *prior* to implementation.

Most scholars agree that effective leadership is among the most important characteristics of effective schools, which correlates to leading reform and innovation. Leithwood, Harris, and Hopkins (2008) claim school leadership as being second only to classroom teaching as an influence on pupil learning. Pasi Sahlberg, a leading Finnish expert on school reform identifies effective leadership, teacher quality and school culture, as being the most important factors under the control of the school system (Sahlberg, 2013). These relationships are part of the change implementation core components being proposed for this study and diagrammed in Figure 1. The theory proposed is that the relationships created between three core areas, (1) clear vision and achievable goals, (2) relationship building, and (3) up-to-date resources/capital, are each critical to successful implementation of the whole system reform that is online/blended learning.

It is the intention of this study to show that the three core areas alone, will not maintain a successful online program. Effective leadership requires the ongoing support of relationship building, and providing a culture of trust and open communication to build and sustain school capacity (Cosner, 2009). “Administrators are responsible for actively building a school culture that values and nurtures collaboration (Ketterlin-Geller, Baumer, & Lichon, 2015, pg. 51).



Overview of Study

In the Commonwealth of Virginia, the Department of Education has recently directed that all high school students will be required to take at least one online class before graduation. The new directive is forcing administrators to make important decisions in order to implement this new technology in their schools. Many principals do not feel qualified to lead technology integration in their schools (McLeod, Bathon & Richardson, 2011). This study included interviewing administrators and teachers who are elearning facilitators in 4 high schools in a district in Virginia and have already implemented online learning programs, and to gain insight from their experiences.

The intent of the case study will be to understand the issues in depth within the contextual conditions that exist in each school. The intended outcome will be to share the experiences of established online educational leaders with those who may have had very little history with virtual classes or references to rely on, since online learning, itself, is new and still evolving.

Limitations

Every district will have its own unique set of circumstances, resources, goals, and objectives to meet, so that any analysis will be limited to the context in which it exists. The data collected indicating that the online program is successful will most likely be attributable to multiple reasons and not necessarily isolated to a single source. It will be important to follow a replication design with underlying logic that will provide support for propositions (Yin, 2009) regarding effective leadership and implementation.

As the researcher in this study, my personal opinions and bias may be reflected in the data collection process and analysis. I am very positive about the inclusion of technology and online learning in public schools. It is exciting to me to hear about the wide range of

opportunities and equal access becoming available to students regardless of their geographical location, socio-economic status, or zip code. I anticipate that the roles of teachers and principals will be changing dramatically as online instruction becomes more engaging and creates more diverse learning environments for all students. The emergence of collegial leadership and relationship building will be of particular interest. Since my opinions affect my approach to this study, it is important for me to avoid influencing the participants' responses and not to be seen as anything but neutral.

My intention was to interview administrators to identify their leadership techniques, goals, and values, and the emphasis they place on relationship building, and the impact they have on school culture. I also interviewed the teaching staff in the schools to determine whether their perceptions of the relationships between teachers-teachers, and teachers-administrators match the perceptions of the administrators. Obtaining multiple sources of data will provide different perspectives to counterbalance the biases of individuals.

Summary

There are many aspects and factors to consider as will be described by the literature review discussed in Chapter 2. The administrators' decision making is based on the resources that they already have, their goals for their district, and how the online environment should be managed to produce the best results for the students. Chapter 3 will describe the qualitative methodology and the analytical framework used to answer the research questions. Chapter 4 will describe the history and demographics of the district chosen. It will summarize the findings of the study with emphasis on the planning and decision making processes being used to manage the elearning program, and the impact leadership has on school culture. In particular, it will focus on the relationships between the administrators and teachers, as well as the relationships

between teachers and their co-workers. Chapter 5 will discuss the most significant findings and how leadership influences the culture of support, collaboration and trust that results in increased capacity for the schools, and higher academic achievement.

In summary, there is little debate that twenty first century skills are putting demands on educators, and most administrators are starting to acknowledge that the benefits of virtual learning may outweigh the costs. Online learning is a complex scenario with multiple variables to be considered by educational leaders in deciding what is appropriate for their school system. Expanded opportunities in course curriculum, advanced level classes for college readiness, customized instruction, credit recovery and remediation are all factors that heavily influence the decision making. These benefits are both exciting and challenging to administrators and can lead to providing the best educational opportunities for the students in their district. How leadership style influences the culture and performance of the district and can be the determining factor of success. It is the goal of this study to provide insight and a framework for school leaders to use in making their own decisions on why and how to implement online learning.

CHAPTER 2 – LITERATURE REVIEW

This chapter will look at three aspects of leadership's role in implementing online learning as found in the literature. The first section will define what I identify as online learning and its many dimensions, and will answer the question of why this technological shift is occurring. It will examine the use of technology and the Internet, its evolution in educational methodology, and how it has impacted students, teachers, and administrators. The benefits, political implications, and the concerns associated with online learning are widely described in the literature.

The second section of this literature review will concentrate on the leadership perspective of implementing technological change in the schools. It will address the question of how educational leaders are making the transition to online learning in their schools. There are barriers to change implementation that leaders need to address. It is important that leaders set priorities and provide effective preparation as well as ongoing management and support.

The third section of this chapter will review the literature on the importance of leadership in building relationships and establishing trust to facilitate change. Modern trends in effective management are encouraging teamwork and collaboration in decision making. There are multiple components to building a culture of trust which allow members of an educational community to work together and support each other. These components will be examined in the context of how leadership can facilitate change and support an educational community in transition.

Section 1: Defining Online Learning

Online/Blended Learning Defined

There are a variety of terms used to describe modern computer based learning environments such as: distance learning, virtual or online learning, cyber schools, and web-based instruction. The concept of ‘online learning’ overlaps with the broader category of alternative education delivery systems including earlier technologies such as correspondence courses, educational television, and video conferencing (Means, Toyama, Murphy, Bakia, & Jones, 2010). The Sloan-C study conducted by Allen and Seaman (2006) defined three types of online learning: (a) online courses that have most or all of the content delivered online, and are defined as at least 80% of seat time being replaced by online activity; (b) blended/hybrid courses blend online activity with face-to-face delivery where a substantial proportion (30% to 79%) of the content is delivered online; and (c) web-facilitated courses use web-based technology for 1% to 29% of the content to be delivered online. This structure is to facilitate what is essentially a face-to-face course.

For this study, the terms online, blended, and virtual will be used interchangeably to describe learning that takes place partially or entirely over the Internet (Means, Toyama, Murphy, Bakia & Jones, 2010). Other forms of distance education such as printed correspondence courses, television broadcasts, video-conferencing, or stand-alone educational software programs that do not involve the Internet will *not* be included. In modern use, the transition to online education is requiring new skills for leadership to learn and understand, to orchestrate revised course content and pedagogy, and to prepare the school community for the reform efforts. Change is difficult, and technological change especially can produce upheaval and fear (McLeod, Bathon, & Richardson, 2011). The challenges for educational leaders are

many and convoluted. This review of the research will explore the multiple dimensions and complex issues that leadership must address.

Dimensions of Online Learning

Whether delivered by independent, asynchronous, or synchronous means, online learning is demonstrating that it is an innovative reform that can be readily integrated into the public school system (Tucker, 2007). However, choosing an online program is, in itself, complex. There are various online formats to consider that have emerged from a variety of sources including state, local, private, and nonprofit agencies. “Supplemental” virtual programs use a variety of online instruction models such as the nonprofit Virtual High School (VHS), a provider of online courses for 600+ traditional high schools in 40 states and 33 countries (Virtual High School Website, 2015).

Online learning is a natural evolution from previous paper and pencil versions of distance education. The decision to implement virtual classes requires consideration of many complex issues that go far beyond merely providing computers in the schools. With the rapid growth of technology and the introduction of the Internet, online learning has been used extensively in higher education and adult training programs. However, elementary through high school aged children are just beginning to participate in the revolution. The dilemma is that children are not taught in the same manner or environment that adults are (Barbour & Reeves, 2009). Public school administrators face issues in many aspects of online learning in deciding whether virtual classrooms are appropriate for their district, and need to learn how to initiate the process.

There are multiple dimensions to consider in structuring online programs. Choices include decisions about comprehensiveness that determine whether the program is supplemental or full-time and factors that describe the reach, type, location, and operational control of the

program. Figure 2 summarizes the defining dimensions of online programs adapted from Gregg Vanourek (as shown in Watson, Murin, Vashaw, Gemin, & Rapp, 2012).

Figure 2. The Defining Dimensions of Online Programs

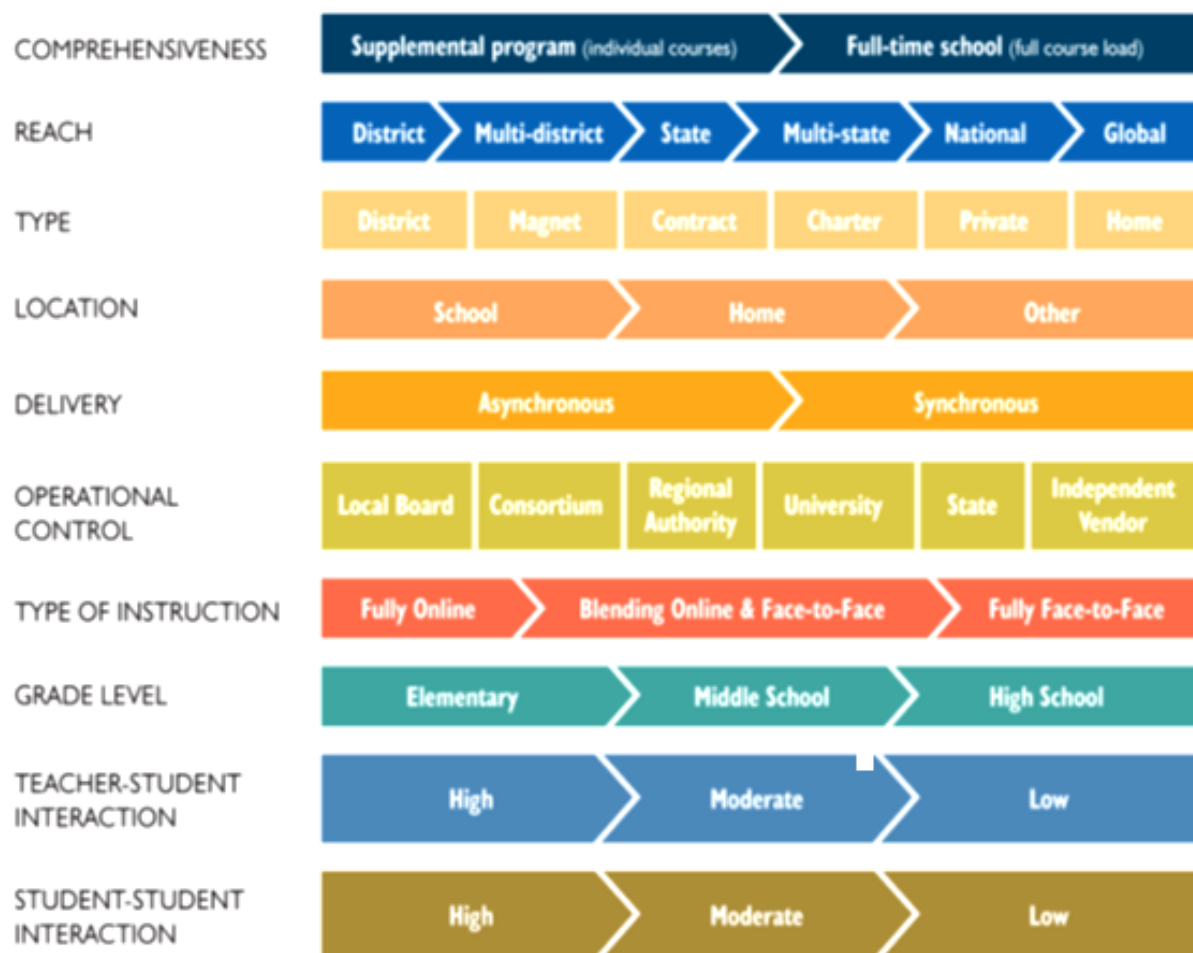


Figure adapted from Gregg Vanourek, A Primer on Virtual Charter Schools: Mapping the Electronic Frontier, Issue Brief for National Association of Charter School Authorizers, August 2006.

© Keeping Pace with K-12 Online Learning, 2011, kpk12.com

Some school districts are partnering with a number of providers such as virtual and charter schools and especially with colleges and universities that are in close proximity to the district (Picciano & Seaman, 2007). Collaborative efforts between higher education centers and

public schools have emerged, such as Texas Tech's Outreach and Distance Education program offered online to K-12 students to supplement their traditional school curriculum (Archambault & Crippen, 2009). Also important is the fact that many school districts are using multiple providers and are not relying exclusively on one provider (Picciano & Seaman, 2007).

Quality in Online Learning

In order to make decisions regarding the dimensions of online learning as described in Figure 2, educational leaders need to first identify their goals and define quality in an online course or curriculum. Project Tomorrow® surveyed school and district leaders who support and promote online education in advancing student achievement. Their definition of quality emphasized the following characteristics (Evans, 2010):

- Course is aligned to curriculum standards
- Ease of use by students and teachers
- Student achievement results with the course or curriculum
- Course was developed by a classroom teacher with content expertise
- Course has embedded assessments built into program

By identifying key characteristics of high quality curricula, educational leaders can better evaluate whether to obtain third party programs, develop their own within-district courses, or adapt existing 'in-house' programs to meet their particular needs.

Policy Considerations in Online Learning

Before administrators can initiate online learning in their districts, they should review the state and district policies that may present barriers to initiating new programs. Susan Patrick, iNACOL's (International Association for K-12 Online Learning) president, has discussed several issues that have been obstacles in transitioning to online learning. For example, some states and

communities have established seat time requirements for passing an individual course (Patrick & Sturgis, 2011). Students must log a minimum number of face-to-face hours, or physical attendance in order to obtain credit for a course. If a student is spending part or all of their class time online, the criteria should be successful completion of work rather than time spent sitting at a desk (Beem, 2010).

Another concern is Teacher-of-Record policies. When graduation requirements stipulate that a course be taught from within the diploma-granting district, a qualified teacher may not be available. The student would be barred from the option to take the course online with a qualified teacher who is not physically within the geographic area (Patrick & Sturgis, 2011).

Other policy issues identified by Patrick & Sturgis (2011) include the following: credit recovery, quality control over the rigor and alignment with standards, and teacher qualifications. When districts do not have the resources to offer their students the same advanced level or remedial opportunities available in other larger or more affluent districts, online classes can provide equal access to all students regardless of their zip code. If state agencies take over the operation of running virtual school programs, they remove the political barriers and concerns about alignment (Beem, 2010). For example, the state of Virginia has instituted Virtual Virginia that offers online Advanced Placement, world language, core academic and elective courses (Virtual Virginia website, 2016).

Redefining Instructional Roles

The introduction of online learning to a school system brings with it instructional roles that add to those of traditional teaching. Presentation of activities, pacing, interacting with students, assessment, interacting with parents, and instructional design are different in virtual classrooms than in tradition settings. There is a greater need for carefully planned interactivity,

multimedia specialists, web development specialists, and adaptation of content (Barbour & Ferdig, 2012) based in instructional design research. Other instructional roles may include facilitators who take on supervisory and mentoring responsibilities and become learning coaches as part of team support. Online students need support and scaffolding, and losing face-to-face contact creates a gap that the average student needs to fill (McLoughlin, 2002).

The role of today's principal is much more complex than that of past generations. Legislation since the beginning of the new millennium such as No Child Left Behind in 2002 and Individuals with Disabilities Act 2004 has brought to the forefront the principal's role as instructional leader (Lynch, 2012). In addition to the classroom teacher, the principal's role as educational leader can have a powerful effect on academic performance (Leithwood, 2008). It follows, then, that strong leadership is crucial to the implementation of school-wide reform (Olson, 1999). Futrell (2011) addresses the need to develop new models of school leadership to handle the cultural, economic, and political challenges that are redefining education in the twenty first century. She cites the growing diversity of student populations and the demand for higher academic achievement as too great a challenge for a single individual, and stresses the need for more collaborative shared leadership models within schools.

Embracing Online Learning

Barbour & Ferdig (2012) describe how school leaders can "embrace virtual schooling" (p. 61-63) by addressing key outcomes and concerns. These key factors include the following: 1) training teachers to understand K-12 online learning and how it differs from face-to-face; 2) knowing how to provide administrative as well as technological support; 3) leading by example and encouraging teachers to take an online class themselves; 4) collect, analyze and use data available from online activity; and 5) connect to other leaders who have participated in online

learning. Transformational leadership is especially relevant in developing online learning (Futrell, 2011).

Bleakley and Mangin (2013) describe what they consider to be one of the greatest challenges for contemporary school leaders: “In addition to the obvious challenge of securing adequate resources, leaders must also assess technology needs, identify appropriate products and services, adapt existing infrastructure, develop support for adoption, and provide adequate opportunities for educators to learn about and integrate unfamiliar technologies into their practice.” pg. 20.

As in traditional brick and mortar schools, some virtual schools have greater success than others (Barbour & Reeves, 2009). For school leaders, the decision making in transitioning to online instruction must include carefully preparing the entire educational community in advance, including teachers, principals, students, administrators and support functions. Ketterlin-Geller, Baumer, & Lichon (2015) emphasized that administrators are responsible for creating and modelling a culture of collaboration in their schools, and that ultimately collaboration affects students’ academic achievement.

Benefits of Online Learning

If studies have failed to show a strong correlation between effectiveness and improved learning online, then the question arises as to why there is such rapid growth and development of virtual school program in nearly every state especially Alabama, Idaho, and Florida. Is the huge commitment of time, money, and resources worth it? That question must be addressed by educational leaders in terms of their own district’s needs and resources.

Often, the virtual programs fill a spectrum of curriculum gaps, providing Advanced Placement or higher level math and sciences courses that are not available locally, or remediation

courses that help at-risk students make up credits for missed or failed classes (Tucker, 2007). Virtual schools provide expanding educational access that allows rural and small schools to offer courses that they would otherwise be unable to teach. They are a way to provide equity and access to students from geographically, ethnically, or economically isolated school districts (Barbour and Reeves 2009).

The most often cited advantage of online learning is the expanded access to courses that would not otherwise be available to students in their home school. Rural and small schools are especially limited by the lack of highly qualified teachers in advanced subjects and those with limited enrollment electives (Barbour and Reeves, 2009). Online learning not only provides many more options for these districts in terms of being able to offer courses where teacher shortages might exist but also does so in a way they see as affordable (Picciano & Seaman, 2007). Online technology provides more student-centered and individualized instruction, allowing students to take on responsibility for their own learning and self-pacing (Christensen, Horn, and Johnson, 2008; Tucker, 2007).

Surveys of school districts and high school administrators indicated that educational leaders perceive online courses to be important in reducing scheduling conflicts, and alleviating limited classroom space (Picciano, Seaman, Shea, & Swan, 2012). They also saw online and blended learning as important in meeting the needs of specific groups of students. For example, virtual programs offer Advanced Placement or college-level courses to students wanting to get a start on their higher education goals. Such increased access to otherwise unavailable classes and qualified teachers contributes to reform efforts by providing equal opportunity to all students. Online learning is available to the public regardless of academic achievement or economic level

and can provide rigorous, individualized instruction to any student with the desire to learn (Watson & Gemin, 2009).

Concerns about closing achievement gaps and graduation rates have been addressed in virtual high schools. Many schools have begun with online credit recovery and remediation classes for students who had failed a traditional course required for graduation, or incompletes due to illness or absence. Online programs can be an effective tool for reaching at-risk students, and can improve outcomes for those with special needs (Repetto, J., Cavanaugh, C., Wayer, N., and Liu, F., 2010).

Online programs can address several aspects of the factors that contribute to students' decisions to leave school. The "5 Cs" that influence a student's risk of dropping out are described by Repetto, et al., (2010) in terms of how virtual programs can help. 'Connect' between school and a student's future by integrating work experience and community involvement; 'Climate' in a safe learning environment can be a haven from an unstable home life; 'Control' is provided in self-regulated and self-paced learning; an engaging "Curriculum" with effective teaching strategies and academic supports; and 'Care' is expressed when virtual schools individualize and provide facilitators and mentors.

In reviewing the literature, Barbour and Reeves (2008) found that virtual schools have the potential for high-quality learning by allowing their students to have access to experts in the subject matter. When students, especially minorities, can access specialized curricula, their overall achievement will rise. The fact that tens of thousands of students are choosing a fully online school in the states that allow unfettered access to such schools suggests that states without such programs are not fully meeting the needs of their students (Watson, et al., 2011). The opportunities abound, although success is certainly not guaranteed. There are good and poor

virtual school learning experiences, just as in brick and mortar classrooms (Barbour and Reeves, 2009). Studies that identify why some succeed and some do not are lacking, and more research needs to be done.

Concerns about Online Learning

Student preparation.

Most of the studies that have found positive results comparing online classes to face-to-face instruction have been conducted with college students and adults. In the meta-analysis done by Means, et al., (2010), they were only able to identify five rigorous published studies contrasting learning conditions for K-12, indicating a need for more research. Studies do indicate, however, the importance of student readiness for success in virtual classes. A student's interest in taking an online course, or previous achievement in traditional classroom settings, do not always translate to success in virtual courses.

Characteristics that have been identified with successful behavior in online courses include the following: locus of control; high internal versus external motivation; self-confidence/self-esteem; self-directed, independent learners; degree of experimentation (risk-taking); willingness to ask a lot of questions; good time management skills, ability to set goals, strong support from family, and self-reported computer/technology skills (Roblyer & Marshal, 2002; Reid, Aqui, & Putney, 2009).

Students and their parents can be better prepared for online classes in high school by taking orientation classes or attending preliminary "boot camps". Course materials, software needed for their courses, and some preliminary face-to-face time with teachers and facilitators can improve chances of success. Reasons why students leave online programs have been suggested by virtual high school staff as the following: student's false expectations and feelings

of isolation; the course not being as easy as students anticipated; requirement of staying on task; too easy to procrastinate; poor attendance; and falling behind (Reid, Aqui, & Putney, 2009).

These concerns will be looked at more closely in the following paragraphs.

Self-regulation.

The ability to effectively employ self-regulation skills may be even more critical in distance education environments than in traditional classrooms. Some students have difficulty managing their learning which may be compounded by instructors who do not design or deliver instruction that supports and promotes self-regulation skills. Students must use self-regulated learning (SRL) strategies that include planning, goal setting, self-monitoring processes, and calibration judgments in order to be successful because of the largely autonomous nature of online learning (Bol & Garner, 2011). However, some students have difficulty managing their learning, and their ability to self-regulate can vary as to quantity and quality. Credit recovery students are less motivated than accelerated students in taking online courses, and less likely to repeat the experience after taking their first. (Oliver, Osborne, Patel, and Kleiman, (2009). The decision to initiate online learning for all students weighs obstacles like these against potential benefits.

Economic concerns.

Today's economy has forced many states and local governments to cut back on spending which has included education budgets. Educational leaders are forced to make difficult decisions in allocating resources to maintain existing programs in the schools. There is scarce funding for new initiatives. In their review of the challenges of instituting virtual learning in public schools, Barbour and Reeves (2009) warn against the high start-up costs associated with developing or purchasing content, delivering that content, and staffing a system that would handle both the

administration and course delivery. Reliable internet access is a concern for students who plan to take classes at home.

Teacher concerns.

As in brick and mortar schools, the most important factor in student achievement and learning is the teacher. Face-to-face experience is important for virtual teachers because there are similarities in both media, but “good teaching” is expressed differently, and effectiveness does not necessarily transfer from the classroom to the Internet. An online teacher takes on the diverse roles of content facilitator, technologist, designer, administrator, facilitator, adviser, assessor, and researcher (Goodyear, Salmon, Spector, Stepples & Tickner (2001). The rapid growth of virtual classes has created a demand for highly qualified and certified virtual teachers (Futrell, 2011). The ACCESS program in Alabama has waiting lists for qualified teachers in most subjects (Natale & Cook, 2012).

The ways in which good teaching is expressed may be very different in the two settings of face-to-face teaching and online teaching (Goodyear, et.al, 2001). Aspects of online pedagogy, how classroom management changes in an online setting, and how best to use modern technological tools to convey content and assess student understanding are important considerations in transitioning teachers and students into an online environment (Archambault & Crippen, 2009). If the transition from traditional learning to virtual learning is not successful, student achievement suffers. Students who have had high academic success in traditional settings may lack the self-regulation and motivation skills necessary when introduced to online learning.

The difficulty for many teachers is that they must perform their roles and duties in isolation. A conceptual framework developed by Garrison & Arbaugh (2007) emphasizes the

interplay of three levels of presence essential to create deep, meaningful learning experiences online. Balance between teacher presence, cognitive presence, and social presence creates a Community of Inquiry (COI) that encourages student-teacher and student-student interaction. Lack of any of these levels of presence can lead to teacher and student feelings of disconnection and disengagement (Hawkins, Graham, & Barbour, 2012). As a result, teachers feel “fragmented” and lose commitment to the course and to the students as individuals. When students feel disconnected it is easier for them to disengage from the course.

Unfortunately, most virtual teachers are not formally trained or prepared for the absence of physical cues and lack of responsiveness that can lead to feelings of isolation, and must learn on-the-job how to compensate. They are further challenged by not having access to other virtual teachers with whom they may interact and discuss solutions and alternative practice. To lessen feelings of isolation administrators of virtual programs could create a non-academic space with a closed social network where students and teachers can interact outside of the class environment (Hawkins, et al., 2012). Teachers could increase the quantity and frequency of content-based interactions as well.

School district leaders face choosing appropriate online programs that provide instruction that is equal or superior to traditional environments. The complexity of considering all the dimensions shown in Figure 2, can be too much for a principal or single administrator to decide without input from multiple sources. Harris (2004) suggests that those heads who distribute leadership responsibilities amongst their staff are more likely to build capacity for change and realize school improvement. Silins and Mulford (2002) found that student outcomes are more likely to improve when leadership sources are distributed throughout the school community and when teachers are empowered in areas of importance to them. Administrators can turn to

teachers' for collaborative instructional design and delivery efforts by focusing on collective expertise development and dissemination, implementation strategies, and the development of assessment methods (Ketterlin-Geller, Baumer & Lichon, 2015). Leadership effects vary greatly depending on the particular type of leadership practice under consideration. The evidence suggests that it is important to integrate relationship values, such as respect and openness, into the complex tasks involved in school leadership (Robinson, 2010).

Section 2: Importance of Educational Leadership in Online Learning

The previous section of this chapter defined online learning and examined its multiple dimensions, benefits, concerns, political issues, and social considerations. The remainder of the chapter will look at the literature from the perspective of the educational leaders who must implement online instruction in their schools. Successful integration rests on the skill of leadership to make the change process as acceptable and seamless as possible to the stakeholders and implementers who are impacted by the change.

Recent studies have sought to provide policy-makers, administrators, and educators with research-based guidance in deciding how to analyze the needs of their districts and how to prepare for the implementation of online learning that is appropriate for their schools. It is important to recognize how effective practices, such as community building among stakeholders, use of facilitators, preparation, and training, will improve implementation (Means, et al., 2010).

In some educational communities the introduction of online classes is a controversial topic (Styron, Wang, Styron, 2009). It is a time consuming process, and the rapid changes occurring in technology make the choices confusing and expensive. Whether in a higher education or high school setting, addressing the concerns of the faculty is a top priority in

achieving positive results. Some faculty will be supportive, some will be unsure, and some will have negative attitudes. They will be concerned about maintaining rigor and quality in the course materials and delivery, and will be apprehensive about the technological challenges and availability of tech support.

Faculty buy-in may depend on incentives offered to encourage enthusiasm and support for participating in online teaching (Styron, Wang & Styron, 2009). Providing ongoing training on integrating the use of technology and technical support may help alleviate apprehension about using the new media. Defining promotion policies in terms of online and face-to-face instruction as well monetary compensation may help remove barriers to acceptance.

Leading Technology Integration

How to achieve the benefits of technology in schools when stakeholders are not in support constitutes one of the most prominent challenges facing contemporary school leaders (Bleakly & Mangin, 2013). It requires identifying the key problems, and developing a pragmatic strategy for resolving those problems in a way that minimizes existing tensions. Dexter (2011) studied the leadership practices used by principals, technology coordinators, and other team members in implementing technology integration in middle schools with laptop programs. They found that implementing a complex improvement reform using technology was facilitated by establishing distributive leadership practices. Better outcomes occurred when carried out by a team of people addressing the technical, operational, and instructional components required. Spillane (2005) used the phrase *distributed leadership* to describe the “interactions between leaders, followers, and their situation” (p. 144).

McLeod and Richardson (2011) have studied how the fields of school leadership and educational technology have combined to create a new field of study identified as *school*

technology leadership. They found that the research is limited in focusing on the leadership perspective as opposed to a technology perspective. What literature does exist focuses mostly on areas such as staff development, local and national policy, use of technology tools such as email and software, and social justice issues. In essence, they maintain that “we cannot say that we know what effective technology leadership practices look like in elementary and secondary schools” (p. 236). They identify online learning as one of the under-represented themes in technology leadership coverage, and emphasize that technology makes dramatic demands on school leaders that cannot continue to be marginalized.

It has become common for teacher education programs to include instruction in using Internet resources and communication tools, but few school administrator programs provide training in how to promote appropriate instructional use of technology (Schrum, Galizio, & Ledesma, 2011). Most state departments of education do not require any formal preparation in understanding or implementing technology in preparing for licensure or degrees. Teachers need the leadership of their administrator in incorporating instructional technology (Anderson & Dexter, 2005). Administrators must understand what is involved in the process of leading their schools’ or district’s technology integration to be successful (Dawson & Rakes, 2003).

A potential explanation given for the failure of innovation is lack of professional development provided for principals. McLeod, Bathon & Richardson (2011) identified that 43% of principals in their study reported not being familiar with various technologies, and 44% did not feel qualified to lead technology integration in their schools. School-based administrators report learning about technology on their own (Schrum, Galizio, Ledesma, 2011). It is too common for school leaders to rely exclusively on conjecture, past experience, or institutional norms instead of a variety of sources of evidence in their decision making (Dexter, 2011).

Opportunities to develop greater knowledge of any innovation, and, in particular, online learning, increases principals' capacity to lead a reform effort (Brenninkmeyer & Spillane, 2004, as cited by Gerard, Bower, & Linn, 2008).

Examples of Administrators' Implementation Experiences

It has been said that "although it is useful to learn from one's own mistakes and experiences, it is even wiser to learn from those of others" (as quoted by Darling-Hammond, 2010, p. 164). School leaders and policy makers should investigate the experiences of other K-12 administrators before transitioning to their own online learning environments. As already discussed, it is a complex process with many factors to consider. Gerard, Bowyer, & Linn (2008) studied the implementation of Technology Enhanced Learning in Science (TELS). They found that the topics identified by principals when grappling with reform fit into six broad categories: principal leadership, curriculum, educational policy, teacher learning, student outcomes, and resources. No two districts are alike or share the same needs and resources, but the planning process and leadership issues are fairly universal.

Effective Preparation and Management

There is no substitute for good management and careful planning. "Successful creation of a virtual school is dependent upon more than developing or acquiring quality online courses, preparing competent online teachers, and securing adequate funding". (Reid, et al., 2009, p. 293) Their study of a virtual high school's first year experiences revealed existing internal management problems and poor planning that led to poor results for the students. One of the school's biggest challenges was trying to redefine the rules and to properly assess the program's needs and design. The first year was unorganized, without written plans or procedures, resulting in constant change and modifications. Attendance dropped from 240 to 160 full-time students, a

67% retention rate. Also, 67% of the seniors failed to pass the state's high school proficiency exam (Reid, et al., 2009).

Lessons learned from the first year experience were incorporated into changes for the second year. "Students were screened to identify which ones would be most likely to succeed based on prior academic achievement, school absences, disciplinary record, and face-to-face interviews" (Reid, et al., 2009, p. 293). Potential students for the upcoming year were provided with questionnaires before deciding whether or not to enroll. Counselors, parents, and teachers were provided with information that would better evaluate the virtual learning environment. Measurable goals and clear objectives were identified and established before classes began (Reid, et al., 2009).

Barriers to Change Implementation

To be effective, leadership has to have an explicit sense of purpose and use strategies that mobilize many people to tackle tough problems (Fullan, 2001). Leadership acts as a catalyst without which the positive outcomes and full potential capacities that exist in an organization are unlikely to happen (Leithwood, Harris, & Hopkins, 2008).

Fowler's (2013) review of the research identifies five barriers to effective policy implementation:

1. Teachers never really understood the change
2. Teachers did not know how to use the new methodology
3. Materials needed were not available
4. The culture and institutional organization of the school were not consistent with the requirements of the new policy
5. Teachers became discouraged and lost their motivation (Fowler, 2013, p 244).

Further, in her studies, Fowler (2013) found that failure is frequently the result of teachers' feelings of discouragement and burnout, turnover in leadership, loss of administrative support, budget concerns, and poorly conceived planning. Successful implementation depends on developing and maintaining both the will and the capacity of those formally delegated the responsibility of implementing the change (Fowler, 2013).

Indicators of Successful Leadership

Leadership style and change strategies may be the difference between success and failure in implementing educational reform such as online/blended learning. Transformational leadership targets variables in the change process using such strategies as continuous learning among staff, sharing learning throughout the organization, and working with the community toward achieving organizational goals (Onorato, 2013). Futrell (2011) warns that the increasing demands of being an educational leader make it nearly impossible for one individual to address all the complex roles and responsibilities of such positions. School leadership is being redefined as a more distributive model (Futrell, 2011). Leadership provided by many possible sources – individual teachers, staff teams, parents, central office staff, students, and vice-principals as well as the principal has a greater influence on schools and students performance, than when enacted by a traditional single leader (Leithwood, Harris, & Hopkins, 2008).

A small handful of personal traits explains a high proportion of the variation in leadership effectiveness (Leithwood, Harris, & Hopkins, 2008). Under challenging circumstances the most successful school leaders are open-minded, ready to learn from others, flexible rather than dogmatic in their thinking within a system of core values, persistent in pursuit of high expectations, resilient, and optimistic. Sahlberg (2013) identifies effective leadership qualities including being firm and purposeful, having shared vision and goals, promoting teamwork and

collegiality, and frequent monitoring and feedback. He goes further to describe the link of leadership to the culture of the school including maintaining focus on learning, and producing a positive school climate (Sahlberg, 2013). In other words, school leadership matters as much as teacher quality. Fullan (2010) emphasizes that purposeful collaboration helps to achieve focus and coherence in otherwise fragmented systems. The top-down approach to change without peer interaction does not work (Fullan, 2010).

Goleman (2000) examined the relationship between leadership style, organizational climate, and performance. His definition of climate combines six factors in the working environment as follows: flexibility, responsibility, standards, rewards, clarity and commitment. He determined that there were four leadership styles that had the most positive impact on climate and performance. (1) Affiliative – the leader creates harmony and builds emotional bonds; (2) authoritative – the leader mobilizes people toward a vision; (3) democratic – the leader forges consensus through participation; and (4) coaching – the leader develops people for the future.

Priorities in K-12 Online Education

While online learning opportunities become more common in K-12 districts, decision makers may not be aware of what constitutes quality. Effective preparation requires thorough self-study to realistically identify a school's strengths, weaknesses, and what outcomes are expected. Change must be managed, communicated, and coordinated among multiple stakeholders, issues, and resources in order to provide quality educational opportunities for students (Little & Houston, 2003). Irvin, et al., (2012) have suggested that future research study whether administrators who are aware of what constitutes quality online instruction make the same decisions as those administrators who have little or no knowledge of the process.

K-12 educational leaders who have participated in online programs have identified the most important factors to be considered in running a virtual school. These areas create a framework for planning, initiating, and managing a virtual high school and can be summarized by the results of a Delphi study by Rice (2009) in the following list (in order of ranking):

1. Evaluation of course design and delivery — research on effective online course design and delivery, and development of a comprehensive and effective method for evaluating that effectiveness.

2. Best practice — define and identify characteristics of effective pedagogical practices and technological applications that lead to achievement gains.

3. Accountability — hold virtual schools to the same accountability requirements as brick-and-mortar schools.

4. Access — increase access to distance education programs for all students by removing state-level barriers to the establishment and operation of virtual public schools, developing programs to better assist special needs students, and implementing statewide open enrollment policies.

5. Online learning/learners — educate the public about the function and purpose of distance education while increasing awareness of the potential advantages and disadvantages distance learning opportunities may present to learners.

6. Professional development — ensure that online instructors have the proper training to be effective teachers in the online environment, perhaps in the form of a credential or certificate.

7. Accreditation/standards — align online courses and curriculum to states' academic standards and offer an accredited program.

8. Funding — ensure that effective teaching and learning is taking place by providing financial resources for the extensive training of teachers and administrators of online K–12 schools or programs.

9. Technology — improve high-speed access to allow more engaging online learning

The findings from Rice’s study are useful in providing a framework to identify policy and implementation recommendations from the perspectives of three stakeholder groups: researchers, policymakers, and practitioners. The nine areas identified “offer a structured lens through which to view those areas of primary importance to the individuals intimately involved in facing the challenges associated with this new and innovative approach to learning” (Rice, 2009, p. 174). It can be noted that other than technology, the same areas are critical to success in face-to-face instruction.

Leadership effects vary greatly depending on the particular type of leadership practice under consideration (Robinson, 2010). She believes that it is important to integrate relationship values such as respect and openness in school culture. D. Frost (2008) argues that more distributed forms of leadership, where teachers are encouraged to take a greater role in the leadership of change and innovation, are the key to better outcomes and build school capacity. In some educational systems leadership maintains a hierarchical approach with a centralized command, while others promote greater collegiality and collaboration (MacBeath & Dempster, 2009). Leithwood, Harris & Hopkins (2008) claim that successful leaders build collaborative cultures, and are open-minded and flexible rather than dogmatic in their thinking. Collaboration may be defined as individuals purposely coming together to share the responsibility and authority for decision making (Hord, 1986). It is important to note that collaboration is not the

intended outcome but instead is a means of positively affecting student achievement (Ketterlin-Geller, Baumer & Lichon, 2015).

Implementing a new policy or program such as online learning requires educational leadership to have an understanding and healthy respect for the complexities of the change process (Fullan, 2001). Many official policies are implemented only partially or incorrectly, indicating that school leaders must be prepared to guide their schools through a difficult process of mutual adaptation (Fowler, 2013) and to continue to provide sustained, ongoing support. Garrison and Vaughan's (2013) studies have found that the adoption of transformational blended learning approaches demands clear organizational plans, strong leadership, and sustained commitment. The key is sustained collaborative and distributed institutional leadership (Garrison & Vaughan, 2013).

Relationship building emerges from the literature as crucial to the success of effective leadership in schools, especially when a major change or reform is needed. Relationships built on a culture of trust and communication lead to more expedient implementation and achieve better results. This study focused on how educational leadership was successful in creating a climate of support and trust in implementing online learning. The following section defines and discusses relationship building in detail, and identifies the traits that go into trust and open communication that are essential to positive interpersonal relationships.

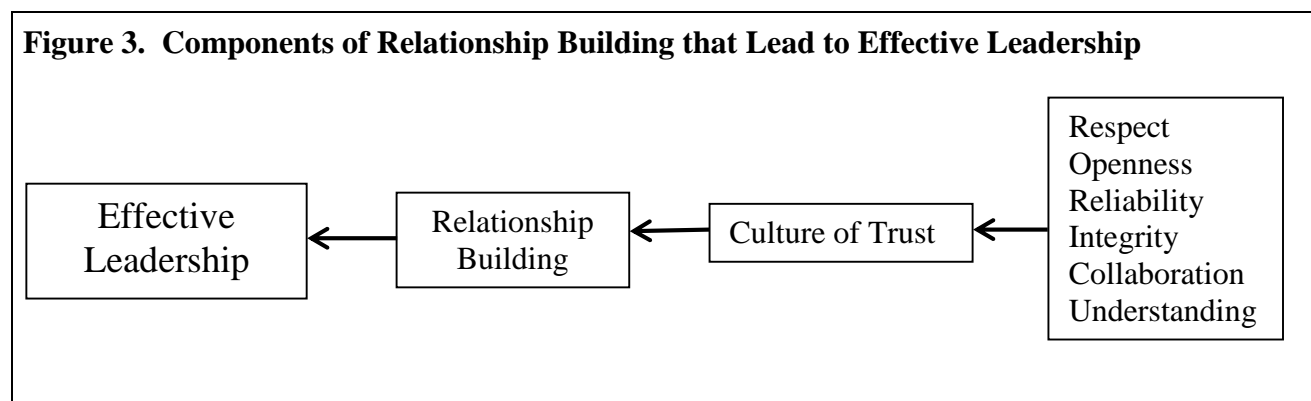
Section 3: Relationship Building and Leadership

Building a Culture of Trust

According to Handford & Leithwood (2012) trust is an enabler of change. Trust has been defined as a willingness to be vulnerable in a relationship (Rogers & Ashforth, 2014), and also the extent to which a person is confident in, and willing to act on the basis of, the words, actions, and decisions of another (McAllister, D., 1995). Change, by definition, leads to unknowns, uncertainty, fear and risk. Many experienced, successful teachers are exhausted by the constant shifts in educational policy, statutes, and reforms that are introduced by a revolving door of new superintendents, principals, and leadership in general. Because teacher assessment is frequently based on performance of the children in their classrooms, educators are forced to make changes in the classroom which may or may not be effective. There is risk to accepting change when outcomes are still unknown, particularly when it involves technology that teachers are unfamiliar with, such as technology and online learning. In order to accept changing approaches to educational methodology, teachers must trust leadership (Handford & Leithwood, 2012; Fullan, 2010). For them to earn that trust, leadership must build positive, supportive relationships (Cosner, 2009).

For the purposes of this study, it is important to define and be able to identify what the term “trust” means. There are hundreds of opinions, articles, and discussions available that have their own interpretation of trust. The literature associates trust with multiple characteristics, personality traits, and work environments. To simplify the identification of trust in this school system, four core elements based on observation, have emerged. Trust can be seen as being founded on 1) respect, 2) openness, 3) reliability, and 4) integrity. (Handford, V., & Leithwood,

K. (2012); Fullan, 2010). See Figure 3. Each requires further identification and discussion in the following paragraphs.



Respect.

The importance of respect in creating trust cannot be overemphasized. One definition seems particularly appropriate: “A set of judgments relating to the perceived worthiness, ethical behaviors and shared values that exist between leader and follower” (Clarke, 2011, pg. 319). It has been suggested “that respecting people is a way of treating them. It is neither a feeling, nor an emotion, nor a belief, though it may be based on a belief and be accompanied (at least occasionally) by certain feelings” (Raz, 2001, p38). It is based on observed actions (Rogers & Ashforth, 2014). It is hard to imagine anyone willing to align with and support someone they do not respect, and do not receive respect in return. One can have organizationally based respect defined by rank such as in the military or a corporate position. However, the kind of personal respect for an individual we want to observe is based on experience, reputation, and performance (Clarke, 2011). In schools, having knowledge of actions that inspire admiration, or recognizing personal values and ethical behaviors, allows co-workers to identify with each other. Whether or not an administrator or teacher respects one another is based on their perception of the other’s skills, abilities, and actions. If a colleague works hard, has appropriately set standards that they

adhere to, demonstrates competence, and is flexible enough to deal intelligently with conflict and/or unfamiliar circumstances, they will most likely earn respect from the rest of their educational community. The observation of successful deeds and activities inspires confidence and respect (Rogers & Ashforth, 2014).

Openness.

A culture of openness and caring between colleagues helps to create an environment of trust. Knowing that co-workers or superiors share common goals, and are willing to exchange information and techniques of achieving those goals is empowering and brings a sense of confidence through collaboration. Hord (1997) suggests that when educators learn together in an open environment that allows dissent and debate, they acquire new skills and increased understanding. Knowing that others are willing to share control and care enough to set high standards in order to achieve desired results builds trust within the community (Teague & Anfara, 2012).

When open exchange is not prevalent, an atmosphere of distrust and defensiveness can result. When members of the community do not demonstrate that they care about each other, as well as have common goals, social distance will develop, and relationships will break down. Shared vision and values lead to collective courage for risk taking (Senge, 2006). In an environment of change, when teachers lack full knowledge of technology and the pedagogy associated with it, they need to feel confident to ask for help and exchange strategies in order for successful implementation. Otherwise, teachers cannot provide proper instruction, students cannot learn optimally, and the change will not be sustained (Fullan, 2006).

Reliability.

An important aspect of trust is consistency and reliability. Employees, teachers, and administrators all need to know that their work outlook is dependable (Tschannen-Moran, 2009). They need to know that the objectives and goals that they have set out, or that have been set out for them are consistent with what is actually happening in their district, and in their classrooms. There needs to be a fair amount of predictability in their work in order for them to stay-on-course, and plan accordingly (Mishra, 1996). If they are expecting a course of action to last for a semester, or a year, or longer, and that action is ended short of its expected duration without completion, they will lose trust in the system and the people controlling it (Handford & Leithwood, 2012).

In the same manner if teachers or administrators are expecting a level of performance from their colleagues, and then discover that an individual or group has not held up their end of the bargain, the whole system will suffer and become undependable. The resulting frustration and disappointment will discourage members of the community from committing to further endeavors, and withdraw their support (Tschannen-Moran, 2009). Once a system has been perceived as unreliable, individuals may isolate themselves, thereby removing the benefits of community interaction (Handford & Leithwood, 2013).

It can be assumed that online learning has an especially high need to establish reliability and dependability. Online courses are conducted over the internet using technology such as computers, internet access, bandwidth, electronic storage, and other aspects of connectivity. Without reliable high speed 24-7 Internet access, students are unable to do their work. Even an interruption of only 10 to 15 minutes can create disruption and loss of commitment by the students. If the instructional technology personnel do not have immediate support from the IT resources in the building, or the resource providers, they will lose confidence in the program as a whole, and have a tendency to give up and return to traditional pedagogy.

Integrity.

There are several characteristics that can be associated with the concept of integrity. Morals, ethics, values, and honesty are components of integrity and frequently mentioned together, in that they are similar but have distinctions. Morals are an individual's beliefs in what is right or wrong, good or bad. It is an internal, personal set of standards based on the individual's own convictions. Ethics are generally an accepted set of moral principles established by society or an institution. They are an externally generated code of conduct. Values describes what is important to an individual or group and the relative worth of those standards (Changing Minds, 2015). Honesty is the concept of being honorable in principles, intentions, and actions. (Dictionary.com, 2015).

All of these characteristics are important in building trust between individuals or groups of people. In order to trust what someone says, you must be able to believe that they are telling the truth. In order to agree conceptually with someone, you must share the same values and ethics. Senge (2006) asserted that you cannot have a learning organization without a shared vision. In order to believe in another's intentions and future actions, you must believe that they are moral. Working together requires agreed upon standards and principles and prescribing actions that match those standards. When actions do not match established ethical guidelines and values, then integrity is lost. Perceptions of integrity are based on a history of past performance. If an individual has been known to be deceptive, unfair, or dishonest, then that person will lose the respect of their co-workers and will not be trusted (Grover, 2013).

Distrust.

Distrust is prevalent in organizations. Surveys have indicated that 45% of individuals report using deception in the workplace (Dunleavy, Chory, & Goodboy, 2010). Deception can occur

when information is deliberately withheld, distorted, or ambiguous (McCornack, 1992). It occurs when people are competitive with each other rather than cooperative (Steinel and De Dreu, 2004). Resentment can result when there are role conflicts, or individuals are hurt by unfair actions such as biased performance reviews, or are promised promotions or incentives that never are realized (Chory & Hubbell, 2008). When higher performing departments are unwilling to share their ‘secrets of success’ with others that are struggling, the district as a whole suffers, and the children are treated unequally and their education is compromised.

Behaviors that Diminish Trust

Tschannen-Moran (2009) describes the importance of trust between leaders and teachers in solving problems and professional growth in an environment of constant change. They both must be willing to engage in honest assessment and review of problems that arise, and revisions that need to be made. The goal is to see mistakes “as opportunities for learning and refinement rather than for blame and castigation” (pg. 229). She identifies the mistakes that can be made by a bureaucratic orientation that can lead to losing the support of the faculty, and diminish attempts at reform. Those mistakes are described by the following terms and their implications:

Constrained Communication.

Schools need open communication to be effective, yet a bureaucratic hierarchy can have a deleterious effect on the flow of communication.

Micromanaging.

One way that distrust plays out in leadership practice lies in the micromanagement of subordinates—that is, by closely supervising workers, by over specifying job requirements (i.e., telling capable people how to do their jobs), and by redoing work that has been done by a

subordinate (i.e., to meet perfectionist standards). All of which shows disrespect and a lack of trust in the individual.

Proliferation of Rules

When trust is broken, a likely organizational response is the creation of new rules to serve as a substitute for trust (Tschannen-Moran, 2009). The proliferation of rules, however, is likely to impair organizational effectiveness.

Rigidity.

In the face of changing environmental forces, schools need to become flexible, innovative, and adaptive.

Adapted from Tschannen-Moran (2009)

Summary of Trust

In order to implement change and maintain the momentum that success provides, educational leaders must gain, and keep, the trust of the participants involved at all levels. Many promising reforms and initiatives have died on the vine, not because of their value, but because of the way leadership failed to gain the respect and support of all team members. We have seen how the literature shows the importance of respect, openness, and reliability in creating trust. Implementers must be receptive to change by being given the necessary skills, by being openly included in the process, and by being supported (Demir, 2015). Trust is the basis on which relationships are built. Without reliability and dedication to established principles, without gaining the trust of the members of the organization, even the best intentions of educational leaders will not succeed.

Bryk and Schneider (2002) summarized the antecedents and consequences of relational trust including many of topics covered in this section. See Figure 4.

Figure 4. Antecedents of Trust

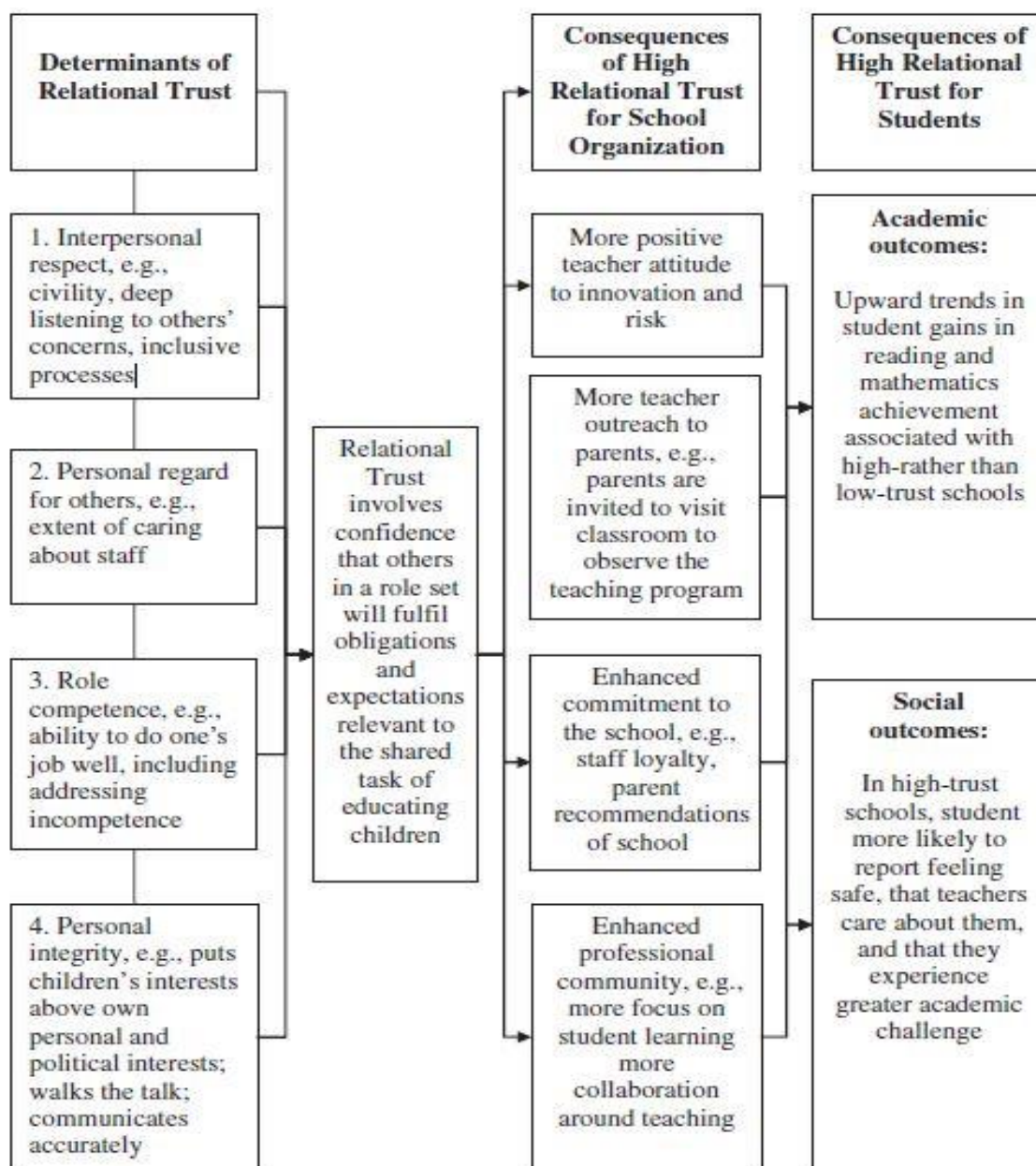


FIGURE 1 The antecedents and consequences of relational trust.

Note: Adapted Figure 7.1 "Relational Trust as a Social Resource for School Improvement," in Bryk and Schneider (2002). © 2002 Russell Sage Foundation. Adapted with permission.

Other Components of Relationship Building and Leadership

Understanding.

It is important that clear expectations are established between leaders and co-workers. All parties involved should understand the goals and share the same vision, values, and beliefs (Beachum & Dentith, 2004). When all parties are clearly focused on the same outcomes, they can then share their ideas and suggestions for how to achieve them. There must be trust that communication is confidential when necessary and any exchange should be consistent with information shared at other times and with other individuals (Demir, 2015). Inconsistencies may lead to misunderstanding and/or mistrust.

Technological change requires a great deal of new information to be exchanged between experienced techies and newcomers. Not only the use of programs and the Internet has to be understood, but how to use the equipment itself can be a challenge for anyone just starting. Teaching ability in a face-to-face classroom does not necessarily correlate to ability in a computerized environment. No one should be faced with feeling inadequate or incompetent from lack of experience (Fullan, 2009). They should be allowed to achieve a thorough understanding of what needs to be done long before they work with students. Proper preparation and support of leaders and cohorts will instill confidence and trust as well as competence.

Collaboration.

Hord (1986) identified *collaboration* as individuals coming together in order to share the responsibility and authority for decision making. Ketterlin-Geller, Baumer, & Lichon (2015) stated that administrators are responsible for actively building a school culture that values and nurtures collaboration. In many school districts Professional Learning Communities (PLCs) are being created to facilitate learning, provide professional renewal and improvement, and improve

receptivity to change and new ideas (Teague & Anfara, 2012). Whether informal or incorporated into the school agenda and schedule, frequent contact with colleagues encourages trust and sharing (Cosner, 2009). When a teacher is part of a group, change is less intimidating and they are more willing to take risks with new approaches and to experiment (Fullan, 2010). When leadership creates a climate of sharing and low-risk innovation, they create respect and trust. The result is improved student learning experiences (Ketterlin-Geller et al., 2015). Communication leads to trust, and trust is the backbone of realizing strong and continuous improvement through collaboration and cooperation (Hargreaves, 2007).

Emerging theories of leadership are urging school administrators to become less controlling and hierarchical and promote team decision making and teacher leadership (Beachum & Dentith, 2004). Elmore (2000) suggested that because of the vast knowledge base that is needed to be effective that principals should distribute the responsibility for leadership. “It appears that teachers who take leadership roles in their schools are successful agents and conduits in promoting cultural change.” (Beachum & Dentith, 2004, pg. 284). They observed a sense of trust and collegiality in the schools they studied and the work of the teachers was held in the highest regard in an open, responsive and thoughtful environment.

The importance of effective communication cannot be overstated. An open, sharing school culture contributes to the success of implementing online learning. Strong relationships between online teachers, designated technology specialists, and technology providers improve the chances for the system to work. Each participant needs to feel confident that they can collaborate, consult, trust and support all members of the online community (Cosner, 2009).

Change Implementation Framework

This chapter's review of the literature reveals the complexity and far-reaching issues faced by leaders addressing the changes instructional technology is bringing into our public schools. The framework that was introduced in Chapter 1's introduction helps to filter down all the issues to be addressed into the following three core areas: clear vision/achievable goals, relationship building, and resources/capital. Each core area is essential to the program. Effective leadership, whether distributive, collaborative, or individual, is the linchpin that is at the center of organization, and will ultimately determine the success of the reform (Leithwood, Mascall, Strauss, Sacks, Memon & Yashkina, 2007). The importance of relationship building, communication and culture at all levels cannot be over-emphasized (Singleton, 2013). As an example, in Fowler's (2013) identification of the reasons for difficulty in implementation of policies, both internal and external, three main areas can be correlated with the proposed framework as seen in Table 1.

Table 1

Identification of Proposed Core Issues in Implementing Policy/Reform as compared to those of Fowler

Three Core Components of Online Learning	Reasons for Difficulty as identified by Fowler (2013)	
	Internal	External
Clear Vision/Achievable Goals/ Strategy	Implementers find it difficult to learn new ways to teach and lead schools	Does not align with state testing programs

	Structural barriers –	Limited resource issues
Resources/Capital	configuration of space, tracking systems	
	Culture of school does not	Public pressure for quick
Relationship Building	support type of collaboration among teachers that is necessary	results

It should be emphasized that introducing online/blended learning technology alone is not effective in improving educational outcomes. It is one component of a whole system, and that each core component is essential to success. It is hoped that this framework helps to reduce the overwhelming nature of the implementation process, and can guide leadership in identifying the important factors on which to focus in preparing for widespread reform.

Chapter Summary

There are many complex factors for educational leaders to consider in implementing online learning in their districts. The research is ambiguous about whether online education is superior to traditional face-to-face instruction in K-12, but its rapid growth is well documented across the United States. Clearly factors other than academic achievement are at work. The focus of reform has been on the transformation of content, not the transformation of delivery (McLeod, Bathon, & Richardson, 2011). Perhaps the reverse is just as important, if not more.

Since state policy can either lag behind or initiate changes in practice, each new virtual program will have to accommodate those policies. The effectiveness of online learning depends on the resources available to a school district, as are the vision, goal setting, planning, analyzing, and preparation done before initiating a program (Bleakley & Mangin, 2013). Community

values, culture, and climate regarding innovation and policy can determine ultimate success or failure of any system-wide reform. Administrators will need to obtain the trust and support of all stakeholders involved, including teachers, parents, students, academic leaders, designers, and tech support (Bryk & Schneider, 2002). Student readiness, teacher preparation and training, financial support, and teamwork have all been found to be essential to the success of the transition.

There is little debate that twenty first century skills are putting demands on educators, and most administrators are starting to acknowledge that the benefits of virtual learning may outweigh the costs (McLeod, Bathon & Richardson, 2011). Educational leaders have increasingly complex issues to address in the multiple reforms being sought for improving student achievement outcomes. Online learning is emerging as both a solution and a further complication in addressing those issues (Bleakley & Mangin, 2013). The experiences and assessments of administrators who have already dealt with the virtual learning process can provide a valuable framework that will direct, simplify, and clarify the transition process for districts just entering the field.

The importance of relationship building and culture cannot be overstated. An open, sharing school climate is central to the success of building school capacity through online learning (Cosner, 2009). There must be strong relationships between online teachers, administrators, designated technology specialists, and technology providers for the system to work. Each participant must feel confident that they can collaborate, consult, trust and support all members of the online community. Although much is yet to be learned, the current research is a starting point that will help lead to greater understanding and innovation.

CHAPTER 3 - METHODOLOGY

Study Procedures & Research Protocol

The focus of this case study research was to examine the process of successfully implementing online learning in public high school settings. The case study method seeks to discover why decisions are made, how they were implemented, and with what results (Schramm, 1971, as cited in Yin, 2009). As we have discussed, the three core areas of interest were: 1) clear vision and achievable goals; 2) human and capital resources; and 3) relationship building. The objective was to analyze the role of educational leaders, the importance of school culture, and the inter-dependence between each of these core areas of concern in achieving success.

A social constructivist approach examined the historical, cultural and political processes of an individual community. Grounded theory was used since the data is grounded in the participants' perspectives and actions. Dialog with participants was needed to understand their perspectives and learn what was important and effective in their particular situation and what influenced their decision making.

Research Questions

The study used Yin's case study method of research in order to answer the questions of what values and factors the educational leaders considered when making the transition from traditional classroom instruction to online learning. Further, how did those values and factors influence the implementation of successful online programs?

Every school district has its own unique set of needs and available resources that must be managed to achieve the highest educational outcomes for its students. Therefore, no single procedure or protocol will necessarily work for every school. Educational leaders who have

been through the experience of starting online classes have had to address issues that are common to all school systems, although the specifics vary between districts. This study illuminated the strategies and procedures that evolved from the interviews and found common elements among the participants.

Case Study Research Design

The research design in this qualitative study was to use case study methodology. The goal was to understand a contemporary phenomenon (online learning) in the important contextual conditions that are unique to school districts. The case study method employed an explanatory strategy examining preparation and planning involved in implementing online learning. This research method meets the three criteria for choosing the case study method identified by Yin (2009). They are as follows: 1) “how” or “why” questions are being asked about 2) a contemporary set of events, i.e. online learning, 3) over which the investigator has little or no control (Yin, 2009, p. 8). This qualitative research was conducted by collecting data in semi-structured, in-depth, face-to-face individual interviews with educational leaders and teachers in a Virginia district that has incorporated online learning into their curriculum. The study investigated an elearning program in depth and within the context of each school. It is intended that the results will help guide future administrators who will be facing the same implementation challenges.

Analytical Framework

The analytical framework of the study was to examine the case evidence from the perspective of educational leaders in terms of their planning, implementation, and leadership style. The research by Reid, Aqui, & Putney (2009) emphasized the importance of adequate planning and developing policies directed toward establishing a new educational paradigm.

The goal here was to have meaningful dialog with participants, to understand their perspectives and learn what was important and effective in their particular situation, and what influenced their decisions and ultimately, their success.

The unit of focus was a high school within a district. The study had a multiple-case embedded design, looking at 4 high schools with online learning programs. The rationale for a multiple-case design was to look for patterns across the individual schools. Data collected from each school provided the basis for theory development and identified common patterns as they related to the research questions. The cases were analyzed and the theory development was revised in the next interview using an iterative process. A research design for the study is shown in Appendix 1.

Participants

Educational leaders and teachers were interviewed regarding their involvement in the implementation of online/blended learning classes. Participants were selected through contacts within the district office and guidance department. Each participant was contacted initially by email, with an introduction from the source individual in the central office that served as a point of contact. Candidates were given a copy of the Informed Consent Form (ICF) with background information about the project, the purpose and goals of the study, and the value of their contribution. At the time of the interview the participant was asked to sign the ICF (see appendix). All participants were assured of confidentiality. Steps were taken to ensure privacy during the interview. The interview was recorded with the participant's permission. The interview questions can be found in Appendix 2.

Data Collection Techniques

The case study's primary source of data has been interviews with educational leaders in the district central office, and with elearning teachers in four of the district high schools. Guided open-ended questions covered topics about the planning process, leadership style, degree of support, teacher training and support, and relationships with administrators, other teachers, and the educational community. The participants were asked for key facts as well as opinions and insights to provide their perspectives regarding online education. These interviewees are on the 'front lines' of education and provided details about the school resources, leadership style, and the culture of the working environment. Open ended questions were asked in order to allow the participants to expand their comments and give examples whenever possible. In some cases there was also an opportunity to informally observe an online class in a computer lab.

The classroom/computer lab observation was conducted with the consent of the participating teacher. Participation was completely voluntary. The researcher made every effort to be unobtrusive in the classroom, and act as an observer only. Occasional questions were asked of the instructor for clarification purposes. Notes and journal entries were made by the researcher. Documents were collected regarding teaching materials used in the classroom regarding online/blended learning.

The interviews were transcribed and edited to insure confidentiality of the participant and of the school district. Each transcription was sent to the participant to review and provide member checking. The transcriptions were then coded and analyzed to provide the major source of data for the study.

Strategies for Enhancing Trustworthiness

This study used interviews, corroborating statements, and student outcomes as the main sources of data. Strategies for trustworthiness include the coding of data, emails, and field notes. An audit trail kept track of memos, emails, schedules, and calendars of meetings, interviews, site visits, and class observations. Interviews were transcribed and submitted to participants for member checking.

The multiple-case design adds credibility to the study. Each school case was analyzed individually using evidence from data collected from that school. The analytic technique of pattern matching compares empirically based patterns with a predicted one, strengthening its internal validity (Yin, 2009). The theoretical assumptions derived from the research concerning the three core areas, i.e. goal setting, resources, and school culture anticipated the patterns of outcomes. When the predicted outcomes anticipated coincide with the results of the study, credibility is improved. Further, in cross case analysis, if the separate interviews, when analyzed, have similar patterns, the evidence between the cases strengthens the validity of the overall case study.

Analysis

Stake (1995) describes categorical aggregation where you examine several occurrences for critical incidents, concerns, and issues within the data. This method is similar to pattern matching. “Case study analysis should strive for a balance of presenting the major facts of a case with a complexity of findings and interpretation” (Hays & Singh, 2012, p. 342).

Explanation building is another analytic technique described by Yin (2009) that occurs in narrative form that explains why or how something happened. The iterative nature of explanation building follows a pattern that is similar to the research design framework, and lends

validity to the findings. The recorded observations and interviews were analyzed and compared to the implementation core areas framework presented in Chapter 1. The steps in explanation building included the following (Yin 2009):

- make an initial theoretical proposition
- compare the findings of an initial case against the proposition
- revise the proposition
- compare other details against revision
- compare the revision to a second, third, or more cases
- repeat process as many times as needed

Limitations of Study

Data collected in interviews is subject to the biases of both the investigator and the participant. Individuals will bring their own experiences and interpretations into the discussion that may or may not be completely accurate. Having multiple participants within the same case will help to provide a balanced perspective.

Analysis of the interviews does not necessarily reflect academic achievement that is attributable to the medium of online learning. The abilities and circumstances of students in a specific academic year can be affected by multiple factors other than their learning environment. In aggregate, however, an overall comparison of students in virtual environments versus traditional environments in the same course and school may provide a means of measuring success.

Each interview provided data and events that occur within the context of that school district. Although the analysis attempted to answer how and why questions about online learning in that district, it is bound in time and place, and not generalizable to all school districts. The purpose of the study was to help educational leaders understand a school's strengths and

weakness, their impact on educational goals, values, factors and issues, and how they were addressed in their specific context. The results and interpretation of the data, however, is subject to the abilities and perspectives of the investigator. The intent was that the analysis will provide knowledge and guidance to other instructional leaders who will find aspects of the investigation applicable to their own situation.

This district was selected because of its success with building and improving the online learning program in place. There are, of course, many contributing factors to the success or lack thereof to a major reform effort involving technology and its associated pedagogy. This study was not designed to compare a successful program to one that is failing, but rather to examine the implications for leadership and the importance of relationship building in a collaborative culture.

CHAPTER 4 - FINDINGS

Introduction to Chapter 4

This chapter presents and analyses the findings from the case study research. The introduction presents a brief description of the school district, to help put the dynamics of the community and history of the online program into context. In the first sub-section I look at the three core areas that stood out as the major factors contributing to effective leadership in implementing the district's online learning program. The second sub-section discusses the benefits of the program as perceived by the participants that make the program a success.

Core Area 1, Clear Vision/Achievable Goals, will examine how leadership collaborated with the stakeholders in the educational community to establish the vision for the online program. The first factor that set the stage for leading the reform occurred in the planning stage when the leadership team established a clear vision for the program and set achievable goals. Too often educators assume that just having an online program for students is a magic bullet that will run itself. They have the tendency to expect that the students will sit down to the computer and take the course and it will automatically be a good thing. This is far from reality, and as discussed in the first chapter, there are many complex aspects to consider.

Core Area 2, Resources, will analyze how leadership prepared for the structuring and best use of their district resources. The factor that made the online classes a positive experience for the students as well as the teachers was the technological resources that were planned and funded for the long term and not just as an initial purchase and setup. I have included both a) the learning management system (LMS) vendor, and b) the district's teachers and staff who are responsible for the learning methodology and support, under major resources. It is generally

agreed that teachers have the greatest impact on learning success for students. Human resources are any organization's greatest asset and should be recognized as such.

In terms of human resources, school principals have the second most important influence by setting the standards of operations and establishing a culture of support and academic growth that builds the capacity of the district. It seems clear that without the technological resources that supports reliable high speed connectivity to the Internet, there can be no online learning. Just as clearly there can be no learning without trained professionals using the Internet effectively to provide educational opportunities.

Each of these two core areas, clear vision and resources, are basic requirements for an online learning program. However, the subtleties of creating a learning community that shares the vision and effectively uses the resources to their greatest potential are instrumental in determining success. Core Area 3, Relationship-building, brings together the talents and passions of the teachers and administrators who share common values and goals that are student-centered. In analyzing relationship-building, I look extensively at the components of relationship-building and how they contributed to the district's culture of support and collaboration, and will present the most in-depth analysis of this chapter.

Because of the complexities of so many factors that contribute to a student's education, it is not possible to establish any one of them as being solely responsible for success or failure. Factors such as the socio-economic background of the students, the population size and density, or whether it is located in a rural or urban environment, all contribute to learning culture. In a qualitative study such as this, success can only be defined in terms of the perceptions of those involved in the program, and its stakeholders. Online learning is a major investment of resources, and if it is not judged to be successful, it would be discontinued or phased back. In

this district, after three years, the program is not only being continued, they are foreseeing an expansion of the program. Sub-section 2, Perceived Benefits of the Program, examines what the interviewees saw as the major benefits to come out of the elearning program, and as a result, viewed it as successful.

Educational leadership in the past made decisions that focused on the purchasing of equipment and selecting technology whether it be computers, laptops, or tablets. What they did not devote enough time and effort to is providing a culture of support and collaboration that can make the difference in achieving success. Relationship-building is more difficult and time consuming because it requires commitments to building trust, respect, and effective two-way communication between all levels of the educational community. The following analysis will seek to illuminate how leadership built a culture of support and collaboration that has facilitated the positive outcomes of the online program.

Background of District

The school district selected for this study is an urban/suburban district in the Mid-Atlantic region of the U.S. with four high schools plus an alternative education program. All five of these high schools have established an online learning program that is coordinated through the central office downtown. The district is contained within an independent city with a population size of approximately 140,000. Demographically, the community is 49.6% African American, 42.7% White, and 4.5% Hispanic or Latino. Of the 53,000 households, the median income is \$49,800. The city is part of a larger urban/suburban area with multiple other school districts nearby, some with online programs, some without.

A few years ago, several technological, economic, social, and political movements converged to provide a major opportunity for implementing a new online program in this district.

In an effort to improve on-time graduation rates, grant money was made available to use technology to help special education students complete their course requirements on time. The district decided to take advantage of the movement to improve their online program. They gathered forces to examine more closely what had been successful in the past, and what had not, and revamp their program.

Factors in Effective Leadership in School Reform

An analysis of this effort to improve student achievement with technology follows. It is based on gathering data from seven in-depth, semi-structured interviews with four online teachers/facilitators from different high schools and three administrators from the central office downtown. Three core areas of effective leadership emerged from the data, as previously stated. The leaders of the online program focused on student achievement as their main goal and placed emphasis on the district's 1) clear vision and achievable goals, 2) resources including up-to-date equipment and qualified staffing, and 3) relationship building and culture. See Figure 1. This study found that the art of building relationships that convey a culture of support and collaboration between all levels of the faculty and staff was a major theme throughout the interviews. While leadership had provided the original vision and direction for online learning, the goals, management and maintenance of the program have been a shared effort with teachers and staff. This democratic approach and shared responsibility worked well by building relationships based on common values, reciprocated trust and respect, and mutual support within the district. The collaborative and nurturing culture that was evident from the interviews has led to a much improved online program that is better at serving the needs of the students.

One unique aspect of the online learning program in this district is that the leadership and administration is in the counseling department, and is conducted mainly from the downtown

central office staff. This structure allows for consistency between all the district high schools, but allows flexibility for each school's specific needs and demographics. Each school's principal and assistant principals rely on the counselling and teaching staff to implement and run the specifics of the online program. It is possible that this shared leadership structure may have had an impact on the culture and success of the program. A district with separate online leadership at each school may have an entirely different structure and climate.

The details of the findings that follow describe the 3 core components of the online program under study as shown in Figure 1, and how the district's needs were addressed for each aspect of shared vision and goals, resources, and relationship building, as described in Chapter 1.

Core Area 1 - Clear Vision/Achievable Goals

In Chapter 2, I presented how complex the decision making for implementing an online program can be. There are many dimensions to be defined, such as whether the program will be synchronous or asynchronous, fully online or blended, what Internet devices to use, the degree of interaction between teachers and students, etc. Before a transformational program in online learning can be effective these issues should be fully explored. The history of this district indicates that the first attempts at online learning were isolated to only certain groups of teachers, and various types of need such as summer school, or credit recovery.

The district had tried several times over the last 15 years to make use of technology and online learning in various contexts and learning situations. The district itself was open to ideas, but there was no dedicated plan for allocating resources, planning options for students, providing the proper curriculum, or training teachers specifically to work with online students. Some of the earliest efforts were made by individual teachers and instructional technology staff. For

example, two math teachers at one high school wanted to try to provide Algebra I remediation to students who needed to retake the course. The Coordinator for Information Literacy, who has been with the district the longest, was part of the original movement toward online technology from the beginning. She reflected on the first effort:

We actually started with a class at Bennet High School ... and it was a math group.

There were two teachers over there and all of the folks that were involved in that pilot are all gone except for me. But we had an algebra class that had to do a retake. And so with that retake they had just created an algebra Blackboard class. So those two teachers took those students that needed the retake, and put them in that, to start with that virtual learning... What we learned from that is that the students, some of the students that weren't motivated in the face-to-face class, still weren't motivated online. And so really, what they had hoped for did not happen because some of these students needed it more face-to-face. So, it was not what we had anticipated because we were not as prepared.

Other programs centered on summer school classes, as well as courses offered by Virtual Virginia for advanced studies. As technology improved and demands for summer classes and on-time graduation rates became an educational and political focus, she described the early stages of online classes:

We started with the summer program, and that was mainly for credit recovery. So we did strictly all credit recovery, and once again it was giving those options for students who couldn't come in face-to-face, and couldn't get the credits that they needed. So this was just another option for them. It started very slow, I will admit. It didn't catch on."

In general, most of these efforts were not successful by the teachers' own accounts, especially in remediation. Teachers and leaders began to realize that students who were not motivated in face-to-face classes were similarly unmotivated taking online courses.

According to the Coordinator for Information Literacy for the district, updating the online program required a new Learning Management System (LMS) vendor to provide online curriculum and technology support. In order to get a full range of opinions, a team of district stakeholders was assembled to provide their input and expertise into the selection process. The team was asked to review their needs, interview vendor representatives, and establish goals that were achievable within the spectrum of desired outcomes and available resources. This 'Educational Technology Team' included the Executive Directors of Instruction, the Director of Guidance, the Coordinator for Information Literacy, principals, teachers, school counselors, curriculum leaders, teacher specialists, Curriculum Integration Technology Teachers (CITTs), students and parents. This team established priorities and created a rubric for interviewing and assessing potential program vendors. Forming this team provided a variety of perspectives and input from stakeholders that each had their own needs and priorities. The plan that evolved was more comprehensive than those that had been tried before.

To begin with, the supporters of the online program needed to clarify the goals, values, and expectations that they hoped to achieve, and gain the buy-in of the educational community. Important questions arose. Did school leadership have a clear vision of what benefits to student learning could realistically be achieved? How would the curriculum be improved, and who would participate in the design and framework of the online instruction? It was very difficult during the beginning years to produce an effective program because the Internet was still new, and the technology did not exist for the access to rapid information that we have today. There

was a great deal of resistance to the legitimacy of online learning. One of the administrators continued:

We dabbled around in it for quite some time. I don't think we really had a strong hold on it until these last four or five years. And even then it's been slow in coming. And I believe that the buy-in from administrators, and we still don't have that philosophy that you can be somewhere else and take the classes. You've got to come to school. And that's hard to break through. And I really think here, within the last, like I said, the last three or four years that has really changed.

The team took about six months to review and plan their new program that was put into action in the fall of 2011. In a rapidly advancing world of Internet access and laptop computers, reliable and readily accessible Internet was the most basic hurdle to overcome. One stipulation of the grant funding was that the teachers be fully licensed and special education certified, and that their special education students would be beneficiaries of the program. These teachers were hand selected by the principals in each school, based on their credentials and experience teaching in the district. In addition, the Educational Technology Team discussed the structure of the program, such as, what virtual courses would be offered, what services the LMS vendor would provide, the issue of seat-time requirements and other state regulations, whether they had enough trained teachers, should the classes be synchronous or asynchronous, how many licenses would be purchased, orientation, and how to release an active communication plan.

One team member recounted the following:

So we said okay, before we take this to the administration, we've got to take a look at it. Why these students were not successful, and once we looked at it we found out. Because, you know, the (previous) teachers had never had any training

in virtual teaching. And that's a whole different ballgame than face-to-face teaching... the difference is they (the new LMS) have a very structured program and we've evolved from that. Back then, they didn't. So I think the structure, the evolving of the teachers, and the reason the kids couldn't pass it back then have changed.

In summary, the successful planning of the current program was the result of a comprehensive review of what worked in the past and what did not, combined with a close examination of the needs and goals of the district. Past attempts had failed because of a lack of coordinated planning and preparation. There was no clear vision to focus the program. There was a lack of coordinated effort with only isolated individuals taking some initiative on their own. Teachers, students, and administrators were inadequately prepared for the new pedagogy and how to implement it. And finally, there was a mismatch of the most effective online methodology and LMS to the goals and desired outcomes for the students.

By gaining the support and input of all the stakeholders involved from the very beginning, the district was able to make decisions that were focused on end goals that were clear and meaningful. They needed to focus on why they were implementing online learning. For this district, the primary motivation was to increase on-time graduation rates. As the program grew and they were able to observe the responses of the students, other benefits emerged and were incorporated into the vision for the future.

Core Area 2 – Resources

As outlined above, there were three core factors of online learning programs that needed to be addressed by educational leaders. The previous section looked at how leadership approached establishing a clear vision and achievable goals for the district. The second core area

that is critical to an online program is providing the resources that will make achieving those goals possible. This section will evaluate how resources were utilized to produce the best outcomes for the students.

Once the planning stage had established the goals and priorities for the online program, the next step was to obtain and structure the resources that would put the plan into action. The second core area of successful online programs is the amount and quality of resources dedicated to the new pedagogy being introduced. Resources such as finances, scheduling student block time, up-to-date computer hardware and dependable Internet access are all basic considerations to be determined before the program starts. Once these components are in place, the curriculum providers and the teaching staff are the two critical resources that require the most important on-going examination and review. This sub-section will concentrate first on the qualifications and training of the teachers, and second on the effectiveness of the LMS.

The formalized elearning program currently in place in this district is the result of the feedback from the many sources of input provided by the Educational Technology Team, and on-going review since then. The basic structure visualized by the team was to provide a computer lab that was readily available to the students on campus, and open to them during the school day as well as during non-traditional hours. As a result, each high school has an exclusive elearning lab that offers students an alternative to the traditional educational setting. Students who take the asynchronous online courses have been pre-selected by the district's school counselors who have determined which students are allowed to participate and which classes they should take. Most of the students are assigned a block in their schedule to work in the computer labs, but they may also come during designated afterschool and weekend hours, if they choose, or work from home.

eLearning Staff

One of the most important resources for the technological reform was to provide a team of experienced teachers and counselors for each school. Each elearning lab is staffed by a highly qualified teacher, certified in special education training, who is identified as e-Learning Facilitators (ELFs). Each has previously taught face-to-face classes in the traditional high school environment. See Table 2. These teachers were hand selected by their principals in each school, and then trained by both the district online instructional team from downtown, and by the LMS vendor. Originally, the prime directive was for improving on time graduation rates for all students, but especially those in special education.

...when we first created our e-learning labs, we hired, we call them ELFs, e-Learning facilitators... it was through a grant, a special education grant. So the funding and the purpose of the grant was to increase graduation, and to move more students on a special diploma, IEP diploma, to a standard (diploma).

As a result, the teachers hired to be ELFs were not only certified in Special Education, they were also experienced classroom teachers who had been teaching in the district prior to their appointments to elearning positions. The administrative positions for the online program were highly qualified individuals who each were enthused to develop technology use in the classroom. The Director of Counseling was put in charge of the program in collaboration with the Coordinator for Literacy, both of whom had been in the district for many years. The third individual in the Central Office, the Instructional Technology Teaching Specialist (ITTS) had been a classroom teacher who had developed computer application skills and specialized in helping other teachers learn the technology for applying them in the classroom. These three

individuals alone possessed over 80 years of experience that they brought to the table for implementing online learning. See Table 2.

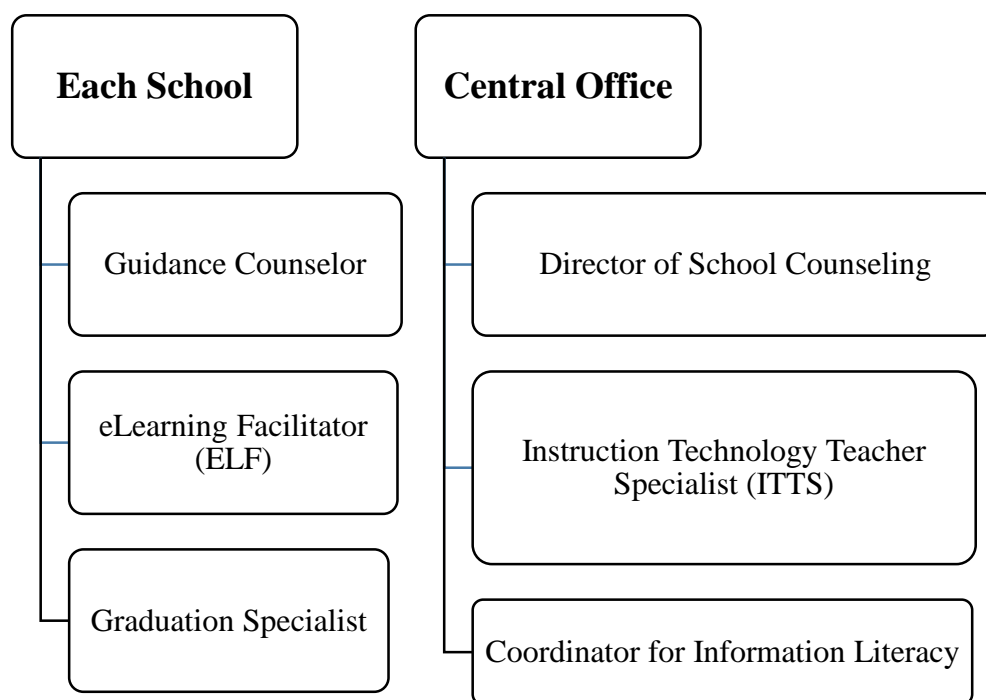
Table 2

Qualifications of High School eLearning Study Interviewees

Teacher (ELF) 1	Teaching 11 years. 5 years online. Certified in English. Master's degree in Special Education. Taught college level blended courses.
Teacher (ELF) 2	Certified K-12 Education. Taught middle school and high school 12 years
Teacher (ELF) 3	BA in Psychology, Masters in Counseling, EDS in Counseling. Certified Special Ed. 6 years teaching F2F. 2 years online.
Teacher (ELF) 4	10 years teaching experience. Highly qualified in English. Master's Degree. Working on a doctoral program.
Director of School Counselling	26 years in high school education. Began as classroom teacher teaching social studies, accounting, business law, and sociology, and then became a counselor. Has taught in Tennessee and Georgia before coming to this district.
Instructional Technology Teaching Specialist	In education for 18 years. Taught 5 th and 8 th grade. Became an Instructional Technology Resource Teacher, Teacher Specialist, and Curriculum Integration Technology Teacher (CITT).
Coordinator for Information Literacy	39 years teaching. Involved with technology since the 80's. Works with all of instructional technology and library services.

The management and administration of the elearning programs is handled by the three former teachers identified above, i.e. the Director of School Counseling, the Coordinator Information Literacy, and the Instruction Technology Teacher Specialist (ITTS). Of these individuals, the ITTS has the most hands-on, immediate contact with the teachers in the computer labs. Within each school the guidance counselors are essential partners of the elearning team. They are the ones that make the decision of what each child needs and they authorize placing them in their courses. In addition, the guidance counselors and ELF's work with the graduation specialists in each school to decide which students may enroll, and which courses they may take. See Figure 5.

Figure 5. Organizational Structure of eLearning Team Members



By providing a structure where there was an elearning team in each school as well as in the central office, the district established a coordinated effort that was consistent and

comprehensive in providing support at multiple levels for the teachers, and the students enrolled in online courses. The ELF's had regular interaction with staff within the school building to support the day-to-day operations. In addition, they had resources outside the building such as contact with other ELF's, the central office, and the LMS provider. The importance of these relationships will be examined in more detail in the section on relationship building.

The above structure of having the operation of the online program both centralized and distributed was a feature I found to be unique, well managed, and beneficial to the overall operations of the online program. It insured that the staff stayed well informed about the progress of the program, and kept each school in line with the goals of the district. The principals in each school had selected the teacher that they believed were well qualified for the ELF position, but left the operation of the elearning labs to the online staff. The online administrators in the Central Office interacted with the ELF's often, valued their contributions to the program, and felt that they were an excellent resource and essential to its success.

In the interviews, the administrators' comments were very positive about the teachers in the schools. They obviously felt that a major reason the program was a success, as opposed to earlier attempts at online learning, was due to the high quality of teachers, and the high respect they had for the ELF's' and the counselors' abilities. As described in one interview:

I feel like the (teachers) that we have in place are fantastic. They are very concerned with their children. They are very protective of them and it just seems like anything that comes their way they are able to handle. And they are just able to develop a relationship with these students.

The administration's recognition of the dedication of the teachers to their work was obvious. They knew that the teachers were very concerned about keeping the students motivated

and on track. They also discussed how the teachers were allowed to try new techniques, and came up with ways to show the students how to stay on top of their progress. Some teachers established extra meeting times to work with the students and give them one on one encouragement. The following description is an example of their respect and admiration:

The teachers themselves, the facilitators, are the huge huge huge motivating factor. They will meet with them (the students). We have some that actually have weekly meetings with the students, and they show them. They say, “okay you’ve progressed this far. This is where you need to be the next time I meet with you”.

Other members of the teaching staff were directly involved with the elearning program and contributed to its success. The school counselors were instrumental in selecting which students take online classes. They maintained contact with the ELFs to track the progress of the students, and worked with the graduation specialists to keep them on track for on-time graduation. They were an important part of the educational team as described by one of the ELFs:

Interviewer: Counseling? Do they get involved?

Reply: Yes they do. They are there, the backbone as far as knowing what class they need to take and not need to take. We’re both very much into correspondence. Of course I have their numbers almost memorized now.

<laughs>

Other teachers and specialist in each school are also involved in ensuring that students are staying on track. For example, each school also has a graduation specialist that works with the guidance department and with the teachers. There is usually at least one administrator, usually an assistant principal, who is responsible for the academics and

the attendance records of the students. Most of the schools have regular meetings with this whole team of specialists to review progress and discuss issues that come up. As a result the combined human resources of teachers, guidance counselors, specialists, principals, and Central Office administrators provided a wealth of expertise and hands-on knowledge of pedagogical techniques and experience that focused their efforts on what would most benefit the students.

Learning Management System (LMS)

The second important resource critical to success is the curriculum provider, the LMS. The curriculum has to meet the requirements of the Commonwealth of Virginia, as well as the school district's own guidelines and expectations. It has to be flexible enough to accommodate changes in the lessons and the topics covered in order to match the curricula in the traditional face-to-face classes. An aspect that all the participants brought up was the need to have rigor that challenges the students, as well as safeguards that prohibit the students from "gaming" the system. Previous providers had left the door open to allowing some sections to be by-passed or skipped if the student wasn't mastering the topic. Some felt that it was not implemented or supervised properly, without holding the students responsible for all of the work. When asked about previous LMS providers that had been replaced, a teacher indicated that the programs didn't work well:

We were asked for feedback on (the previous LMS) and it was kind of a resounding 'fail' on the way it was implemented by...at least the teachers that I talked to and the information and feedback we provided, we did not like the way it was implemented within our schools. So they went to (the current LMS) which had some more, they said,

fail-safes to keep it from becoming the paper factory that (the previous LMS) had become.

They chose a new LMS vendor that was more structured than previously used vendors, provided better tools for teachers to closely follow the progress of each student, and ensured rigor that met the requirements of the Virginia State Department of Education, as well as their own district curriculum guidelines. The selected LMS vendor provided technological expertise, training, and support for setting up computer labs, software, hardware, and maintenance of their program. As described by a member of the planning team:

And what we usually do is we go out and we have a rubric of all of the things that we are looking for. And with that rubric you go through the checklist, so you probably narrow it down to three or four. And then go through that rubric, and just outweigh the rubric which meets our needs the best.

The current LMS provided access to instructional materials and resources to the ELF teachers as well as district supervisors to help students in class. One ELF described the types of training and resources provided to the teachers that was provided in person as well as what existed within the instructional program itself:

The system also has a lot of resources available if needed, but the main focus of the training that I've gone to was to: 1) familiarize the teachers with the system, and show them the different tools and the different resources that they can use to help students stay motivated, or to move along, and help the students just get through it.

Another important aspect of computer resources is having staff to provide maintenance and support. Online classes depend on having reliable Internet access and computers, laptops, or

tablets that are well maintained. When students enter the computer lab they sit down to a computer to begin work. If they are unable to get immediate access to their online lessons, either due to interrupted access to the network, or computers that fail to boot properly, they become disruptive and impatient. Therefore, these resources are critical to the teachers being able to keep students on track and working productively. Each teacher interviewed reported experiencing excellent response times whenever they had an issue to report or a question to ask.

Email addresses and phone numbers have been provided to all of the teachers so that they can reach both district online staff as well as the LMS vendor contacts designated for their district. There was an initial adjustment period at the beginning of the school year, which was especially challenging for the new teachers in the online program. After the first few weeks all technology issues were satisfactorily addressed.

One of the newly hired ELFs walked into a situation where the teacher from the previous year left abruptly, and the computer lab was not ready for the new school year. The teacher was impressed at how quick the response times were for receiving technical assistance. She reported receiving immediate help in getting everything in working order:

When I first came the computers weren't up-to-date at the level at which the (LMS) vendor was used to running them. As soon as I let the people... know, they got finished quick. Because if they're not up-to-date my kids are going to be sitting, staring at me and we're not going to get done. So that was done within a matter of a week, after I made note of it.

In summary, resources must match the needs and goals of the schools, and must be carefully planned long before implementing online learning. Selecting the appropriate LMS for the district required trying several programs before identifying the one that best met their needs.

Because of the rapid growth of the educational technology industry, as well as continually changing requirements and policies, the selection process required ongoing input from multiple sources and stakeholders. The comments made by the online staff indicate that they had faith in the current LMS and felt it was a good match to their goals and values, for now. Online learning is an evolving methodology and requires constant review and feedback from its participants. These two major resources, human and technological, are interwoven in such close interaction, that they both require the highest standards to be effective. In order to maintain best performance, technology based educational communities need to build and maintain strong interpersonal relationships to advance.

The next section on relationship-building will describe how leadership provided the means to have a culture of positive communication and collaboration to achieve successful outcomes. Relationships are the glue that holds the learning community together, and helps to facilitate and make change more palatable. An atmosphere of collegial support and open communication as opposed to competition and distrust allows for innovation and expanded capacity of the learning environment.

Core Area 3 - Relationship Building

This case study analysis indicates that one of the reasons this school district has been able to succeed is by building relationships within a climate of open communication and mutual support. Strong interpersonal relationships built on a culture of mutual respect and shared trust has led to sustained commitment to the common goals of the educational community. In this section I conceptualize “relationship building” according to the themes that evolved from the interviews that elicited comradery and trust among the elearning staff. Themes such as support, common goals and values, open communication, and collaboration have been identified in the

literature as essential for building relationships, and all were evident in this analysis. Enacting change, in particular, requires these same relationship structures that are set by example of the top levels of leadership and filter down throughout the educational community.

Asking teachers and administrators to shift from past practices of having a teacher in the front of the classroom disseminating knowledge to passive students is asking for a major change in pedagogy. Any change is intimidating to most people, and is usually met with fear, stress, and resistance. Online learning has the additional challenge of being new technology and unfamiliar to anyone not born in this millennium. To tackle the risk and uncertainty of change, educators need to be able to turn to each other for support and exchange of knowledge and technique. The following sections will deconstruct the process of relationship building by looking at the components of 1) the existing culture of support; 2) the common goals and values shared by the elearning staff; and 3) trust and collaboration between teachers and administrators. But first I will identify the elements of resistance to change.

Elements of Change

For this district, the major change to be addressed was *how* the curriculum was to be delivered to students, and not the *content* of the curriculum. The content of the courses being offered had already been written by the vendor and approved by the Virginia Department of Education, and had been reviewed by district content specialists to match what was taught in the face-to-face classrooms. The significant change being made was that the ELF teachers, who were experienced classroom teachers, were being asked to change their pedagogy by facilitating students taking a variety of different subject areas in a computer lab setting. Therefore, the teachers' former zone of comfort, i.e. the subject matter that they were familiar with as well as creating their own lesson plans and grading, were no longer their responsibility. Those areas

were already done for them by the LMS vendor and the district curriculum specialists. The teachers' challenge was to adapt to an entirely different form of delivery.

Much of the resistance to change, in general, is based on fear and uncertainty. It takes a recently graduated new teacher 3 to 5 years to develop a level of comfort and confidence when they start their careers. For these experienced teachers, they were starting to learn a new methodology in terms of both technical knowledge and classroom management in a very short time frame. It would be expected that the new ELF's might have a fear of failure and of the unknown, of looking inadequate or foolish, and of being judged negatively and potentially receive reprisals as a result.

A primary responsibility of leadership in an atmosphere of change and uncertainty would be to address the valid concerns of the teachers and other stakeholders entering this unfamiliar territory. Everyone involved has in the back of their mind many questions about what the positive and negative outcomes could be. Because of their lack of expertise in a new pedagogy, their self-confidence would be lacking, and they would need to believe that they were supported, and know that they had reliable resources to go to that would be available when needed. They would need to be reassured that they would not be judged on their lack of experience. In order for these fears to be alleviated, the teachers as well as staff would need to trust in their colleagues, and be surrounded by a culture of support. These assurances are the responsibility of effective leaders.

The district believed that the time had come to provide new options for the students. However, since the original efforts, the goals of the program had broadened and included the development of eLearning programs available commercially as well as those from local and state departments of education. More recently, principals, guidance counselors, teachers and

administrators had become determined to help students to stay on track with their cohort, without sacrificing the rigor and quality of the instruction.

While observing and interviewing the teachers and administrators in this district, it became obvious that the leadership had created a community of support and trust. There were strong indications that everyone was aware that the goals and value system that had been established were to put the needs of the students at the forefront of every decision that was made. How they were able to create that atmosphere and commitment is the focus of the rest of this section.

Components of Relationship Building

In this sub-section, the relationship building aspect of leadership will be examined in detail, first looking at support and its sources. A culture of support was obtained from administrators, principals, other teachers or staff. Second, the importance of shared values and goals will be deconstructed to show how trust and interpersonal relationships were formed between colleagues. These common goals served to motivate and solidify co-workers' commitment to the students and to each other. Third, the aspects of trust and collaboration will be analyzed in terms of how all of these aspects of relationship building are intertwined. It would be difficult to support colleagues that did not share your values, or build caring relationships with people you never see or talk to. Each component has its separate contribution to building relationships, but they are also interdependent with each other.

Culture of support.

Relationships are built on trust, and frequently a sense of confidence comes from knowing that your co-workers "have your back" and will support you in times of need. When entering into unfamiliar territory, teachers and students alike need scaffolding to help them build

a new base of knowledge and expertise. For the ELF's in this study, support came from principals, from other staff in the building, from other ELF's in other schools, from the Central Office and from the LMS. The teachers I interviewed felt that they had ready access to support when they needed it. The following sections deconstruct the various aspects of support, and the value of having it from multiple sources.

Support from administrators.

The online learning administrators from the central office downtown began with training for the ELF's before the semester started, and they continued to provide support throughout the year as needed. They came to the computer labs for the first week or two to help with orientation and any issues that arose. The main administrative contact for the ELF teachers was the Instructional Technology Teacher Specialist (ITTS) located in the central downtown office. Her primary responsibility for the program was to provide support for the teachers, and be the point of contact for the LMS vendor. She interacted either in person or on the phone daily with the ELF's. Support from leadership and from those in authority is needed for teachers to feel empowered to do the best job possible for the students. Their best efforts are not always enough, and they need to have access to higher levels of influence and knowledge at times, to solve issues that are out of their field of knowledge or control, especially when dealing with new technology and situations.

One of the new ELF's was asked to replace a teacher who had left abruptly the previous semester. She described how supportive the ITTS had been:

I contact the technology representative from downtown (the ITTS), and she has helped me a lot. Because it was a big mess because of no one being here at the end of the year to clean out the old information. So that had to be done at the beginning of the year in

addition to load in almost 150 students into the system... she actually did come help me those first two days because otherwise without her they probably would have... a week would've gone by before the students could have actually gotten started on their makeup work.

Another of the ELF's described her experiences when asked if she felt like she had good support in her position:

Oh yes definitely, get excellent support, and get excellent turnaround. It's not like a day or two days, it's probably like 10 or 20 minutes. I get an immediate callback or if I don't know or she'll say "I don't know" but I'll find out for you. And the information is good, it really comes through.

There is only minimal day-to-day involvement required by the principals and assistant principals in each school building's elearning lab. Principals and assistant principals are consulted regularly regarding progress of students, and resolving within-building issues, but they leave most of the online educational process to the ELF's. Some of the teachers felt a strong connection with their school principal and worked closely with them. Other teachers had very little interaction with their administrators on a daily basis. For these teachers, they believed that unless there was a special need or issue to address, they preferred being left alone, and not heavily supervised. They felt it indicated that the administration had confidence in them, but that they would be available if needed. An example follows:

Interviewer: So as far as your interaction with administration in the building, it's pretty minimal?

Response: It is.

Interviewer: And that's fine with you? Or would you like to have a little bit more?

Response: Probably not. Probably not. I think it would be an issue if I needed something and then you still act like I'm not here... That would be an issue for me. But I think the reason they're not always here is because they have confidence in my ability.

While discussing her relationship with the school principal, another one of the teachers was asked: "So do you feel like you have, as a teacher, you have a good working relationship with her as an administrator?" Her response was "Oh. She is, by far, the best administrator I think I have ever worked for. I feel completely, 100% comfortable, and I know everything she does is for our students."

Being able to establish a high level of confidence that a teacher's needs will be addressed in a timely fashion is a significant aspect of relationship building that depends on the contributions of leadership. Having the support of the administration gives a teacher confidence that she can do a good job. Providing support in a reliable way leads to stronger relationships and open communication that will address and solve problems that will ultimately provide a better learning experience for the students.

Support from teachers and staff.

Cooperative interaction between teachers, guidance counselors, central office support staff, and IT specialists created an atmosphere of mutual support and open communication in the schools that I visited. Two of the teachers were starting their first year as ELF's. Although they all had previous teaching experience in this district, the online program was relatively new to them. In spite of being new in this position, all the ELF's described having a lot of support and were in touch with each other regularly, by phone or email, and with staff who were ready, willing, and able to help them if a problem arose, or if they had questions. Each ELF felt comfortable sharing their problems or concerns with the staff. They were confident that their

concerns or issues would be addressed quickly. One teacher described how she was able get help for a technical issue, and how quickly the response came:

But all I do is shoot an email or shoot a work order, or I call and somebody will say “Oh we’ll be here before the day is out”...And I’ll say “okay no problem”. And then they’re here. I’ve come in some days and the guy is waiting here... “we’re trying to figure out what the problem was”.

The online teachers at the schools were somewhat isolated since they were the only teacher in the building that was qualified to be an ELF. This has been identified in the literature as a potential problem for online teachers in general. They are no longer in a traditional classroom environment where they address the students from the front of the class, usually working at the blackboard and lecturing or asking questions of the students. Instead, they are in a room where the students spend most of the time interacting with the computer. The teachers do not have regular face-to-face contact with other teachers in the building, and when they do, they are usually participating in an activity that is not related to online teaching. However, several of the ELF’s have been with the school district long enough that many of them have established relationships with other teachers in the building. Teachers new to a particular building have taken the initiative to seek out help and get to know other teachers so that they have a rapport with the other departments. For example, one ELF described how other teachers have worked with her:

They pretty much have been there for me, so if I still need them to help these kids get through it. That’s one thing at this school... They are there if I need them, they are there. If they can’t come during their planning period, they will try to make some time. So that’s the beauty of it.

The human aspect of being supported also applies to the technology on which online learning depends. The success of any online activity is highly dependent on up-to-date equipment that is maintained to produce reliable, 24-7 high speed connectivity. Classroom behavior and commitment by the students to completing their work requires dedicated technical support as a high priority. The teachers felt that they had in-building support whenever they needed it, with minimum interruptions in Internet access, and received prompt service from the Internet Technology specialist for their building. When asked if there were ever problems with computers or the system going down, one EFL replied:

If I have an issue with this, we have a tech person. He's here like every other day, so I would have to send in a request. And even if it was a big major issue I can always contact technology downtown and they will try to get it taken care of. Especially (since) without the computers we can't do anything. I have a class, and we are just here. So making sure these computers stay on... And he comes in and checks them every so often.

Coincidentally, during the interview with this teacher, the tech person for the building stopped by just to check and see if there were any issues. Again, this level of support leads to confidence in being able to provide the best learning environment for the students.

Support from other ELFs.

All the participants indicated that they felt confident contacting the ELFs in the other buildings for suggestions and guidance with a situation they had not dealt with before. Each teacher described some feelings of being isolated. Since they were the only teachers in their building doing the online lab facilitation, they did not have anyone to interact with on a daily, face-to-face basis. However, they frequently called or emailed the ITTS if they needed help or

support. The teachers commented that they never felt that they were left “hanging” or that they were strictly on their own.

So I never got the feeling “I’m really out here on my own, until we figure this out.” I didn’t have that feeling at all... So they have been... Even the other day they were emailing us pretty much all night long. You know...“how’s this going, how’s that going. Call us back; let us know.” So they’re very much in touch. Not out here in a sinking sailing ship.

Each participant interviewed not only felt that they had a lot of support from the other members of the online program, but they indicated a high level of respect and concern for each other. They expressed confidence in the abilities and professionalism of their coworkers, and felt that they were respected in return. This interaction of mutual respect and support being exchanged between coworkers has built trust in each other and in the professional educational community.

One of the new ELF’s was not familiar with a form she was filling out, and sent out an email requesting help from the other ELF’s. She relay the following example of their group interaction and support:

Yeah we do that a lot online. We write emails and chats. Even the other day when I was loading up the student there was a checkbox, and I wasn’t sure if we were checking it, or are we going to count or not count it? I sent it out to all of them, and they all responded “no, no, don’t do that... none of us are doing that”. <Laughs> “okay we won’t do that then”.

To review, the concept of support takes many forms and is expressed in the variety of ways described by the ELF’s in this section. Support did not come just from one source but from

administrators, co-workers, and staff in general. Having the broad spectrum of support indicates that the leadership of the district as a whole has set the stage and provided the example of mutually beneficial interpersonal relationships. Under other circumstances, teachers may resist seeking help or sharing their experiences if they fear that they will be judged, or assessed poorly. In this district they see each other as colleagues dedicated to the common values and goals of improving the educational experiences of the community. The second component of relationship building, having common goals and values will be looked at in the next sub-section.

Common goals and shared values.

The importance of having shared values has been discussed in the literature as being essential to building trust and respect between colleagues. When all the members of a group are dedicated to the same goals and outcomes in their work, they are more willing to work together and help each other. In this study it was clear that each teacher, staff member, and administrator was passionate about her commitment to providing the best opportunities available for the students.

This sub-section of relationship building unpacks the significance of working with colleagues who share your values and goals, and what those values are. For example if one teacher is more interested in getting her work done and not caring whether students complete their courses, there could be disagreement with other teachers who are more focused on the students achieving deep knowledge and sticking with it, no matter how long it takes. Some teachers will be more focused on discipline, while others may want to be ‘friends’ with their students, and be the nice guy. When values are in conflict, co-workers tend to avoid each other, and seek out those that share their goals instead. In this district the online teachers and administrators clearly expressed goals that were in agreement with each other.

Teacher commitment to students.

A frequent value that emerged from all of the interviews was how strongly each participant felt about wanting the students to succeed. One of the most frequently mentioned goals was the importance of improving student performance in order to help them graduate on time. Teachers were willing to go the “extra mile” to elevate the quality of the educational experience. Each participant, teacher or administrator, talked about how strongly they wanted to be able to help the students, and believed that online learning was challenging for the students, but was working for many of them.

When making decisions, the bottom line for all of them was determining “what will benefit the students”. The teachers were given the flexibility and opportunity to try new things, create their own class structure, and asked to share with everyone their ideas and suggestions. Most examples of their trying new approaches were focused on how to motivate students toward completion of their work, and they were usually able to get approval from their supervisors. One teacher saw research that some students work better if they can move around, so she requested and received chairs with rollers to put in the computer lab. Another teacher displayed charts of the completion rates of her different classes. At one location the teacher rewarded students who came for extra work time after school or on weekends with raffle tickets for gift certificates donated by local food vendors and businesses, and even a pizza party at the end of the month. As described by one of the ELFs:

I give every single one of our students access at home. As long as they have a computer and Internet access, I give them my cell phone number. If you have questions along the way, if you need be to unlock a test, if you need me explain something, give me a call, give me a text message, here’s my email. I’ll have kids who...I’ll wake up in the morning

and there will be emails from like 2:00 in the morning where they were working on English and okay, I'm to this question about Shakespeare, and I'm lost. So whenever you get this in the morning, just email me and I'll check it when I get up. I have kids who work full time, and they'll either log in before they go to work, or on a break at work, or after work. So they can work 24 hours a day if they wanted to.

One of the administrators described how she was always willing to go to bat for her students with unique situations that demanded extra consideration:

The original and still primary mission is to help students graduate on time. Any student. And opportunities for courses ... Student centered. I'm going to step on a parents toe, I may step on a teacher's toe, I may have to step on a counselor's toe, I'll step on the principal's toe, but I'm very seldom going to step on the student's toe.

Caring for the students' long-term success.

The common values that each interviewee shared was obvious from their dedication to the students and the passion that they put into their work. They cared deeply about the importance of a good education and being able to prepare their students for what would come after they left school. They were all concerned that if the students could not take school seriously and graduate that the rest of their lives would suffer from setbacks that they might never overcome. The teachers were vocal about the importance of each student not only completing the work, but understand how education impacts their lives in general. They tried to make the students see that school is for their benefit, and they need to take responsibility for themselves. As one teacher described it:

The majority of them (the students), they just don't care. So that's difficult trying to help a student understand that this is your life, this is your education, and you have to be

responsible for that.... This is for you. Not doing this for me, not doing this for mom and dad, this is for you. If you want to get to the next phase in life.

The teachers' top priority was consistently defined in terms of whatever will benefit the students. At times, the students did acknowledge the encouragement and personal interest that the ELF teachers provided. Students respond positively when they see that a teacher cares about them and believes in them. Each success story makes it all worthwhile for dedicated teachers. One ELF gave the following example of how strongly she cares about the students, and that the students sometimes do rise to the occasion and develop a new outlook:

Well one child I was talking about just a minute ago, this year she's doing remarkable. She had me print out her grades, she got all A's. She's like "I've never had that Ms. Smith". I will also look at all their classes, I don't just look at what they're taking here. I have access to pull up their whole file with data on them as well. So I was like "good!" She was like "I've changed this year". I was like, "yeah you have, but it's good, and I'm glad I got you junior year. You're a senior now and so I don't have to be on you as much." ... She's at a place where her senior year is truly her senior year, and she doesn't have an extra remarkable amount of classes to take. So it feels good.

Another example shows that the students appreciated the personal concern and encouragement that the teacher had provided, even after they had graduated. She received a letter from a former student who had gone on to college after graduating:

I had a letter somebody sent me, one of my kids from a few years ago, she's in college. She is like, "I just want to let you know I'm doing well. You always had my back". That's all you need is just one to keep you going, that holds you over.

Caring about each other.

An important aspect of building relationships is the personal interaction between people. When individuals care about each other it improves the ease with which problems get solved and new ideas are shared. A climate of caring lends itself to better communication, and confidence that others share the same values and attitudes toward reaching mutual goals, and will help resolve problems that arise.. When you know that a colleague cares about you and your work, then it is much easier to reach out to them when needed. As described by one ELF:

I believe that we're all like a tightknit family that look out for each other. If I don't know (an answer to a problem), I'll contact somebody else that's at a different school and if they don't know we will help each other out.

To summarize this section on how common goals and shared values help to build relationships, teams work better together when they are all committed to the same outcomes. The personal interest that leadership takes in helping to resolve problems by spending time with any member of the team who has asked for help leads to higher levels of support and trust for everyone. For any employee to believe that they have the ear of someone who can be objective and caring as well as in a position to help is very important to creating positive and long-lasting relationships. One of the administrators felt that building that relationships is a major part of her role in the district. "I probably feel like sometimes I'm 90% a counselor just listening to people <laughs>, solving people's problems, listening to them, handling conflicts and things of that sort. That's a big part of it." It is important for members of the team to know that they can discuss a problem in confidence without judgment or repercussion, and know that someone truly cares and wants what is best for everyone.

Developing Trust and Collaboration

The last concept of relationship building to explore that was a major theme woven throughout the study was how to develop relational trust in work groups. Trust has many components, but before a group can collaborate and have effective communication between each other, they must learn over time to trust each other. Trust is critical to the achievement of goals that require sustained collective effort.

Relational trust is the result of a strong belief that they have support from leadership and from co-workers. From the previous section, I have shown examples of how the teachers in this school division are supported, and have a high level of confidence in the school curriculum and the technology that is used to deliver it. The part that is difficult for them to adjust to is their new role in working with the technology and the pedagogy associated with it. This aspect is much more personal and a skill in which they have less self-confidence. The methodology is still evolving, and is unsettling for beginning teachers, let alone experienced teachers who have spent their careers in a face-to-face setting. It is important for colleagues to feel comfortable confiding in each other and be willing to collaborate openly in order to allow for professional growth and expanded capacity.

Although in the past traditional public schools have had a strict bureaucracy and a top-down approach to management, current trends confirm the research that over-reliance on rules and structured hierarchy can be counterproductive. To achieve compliance and adapt to the ever more complex demands on educating the highly diverse student population of today, different approaches to leadership are necessary. More modern structures of shared decision making and distributed leadership allow for more flexible and more productive educational communities. Collaboration and effective communication are an important part of sharing responsibilities and

joining forces to build capacity. Where trust levels increase, teachers are more willing to try new things, believe that they are part of a stronger professional community, and have a stronger sense of mutual obligation that binds the efforts of the group as a whole.

Cultivating collegial trust is a central feature of capacity-building. Trust enables the sharing of ideas, encourages support, provides increased understanding between members of the learning community, and inspires a culture of tolerance and receptivity to change. The faculty and staff of this district openly express opinions and share ideas that they believe benefits the online program which gives the students increased opportunities. As a result, the teachers are creative and flexible in addressing the needs of the students and genuinely feel supported by the rest of the faculty and staff. They are willing to innovate, provide feedback, and monitor the progress of program development.

Innovation in the classroom can be risky for teachers. Traditional classroom instruction requires a great deal of conforming to time-consuming lesson planning, pacing guides and learning standards that can prevent some teachers from doing anything new or different. Teaching has become buried in regulated curriculum and forced compliance to regimented and restrictive guidelines. That is not the case in this district being studied. The culture in these schools supports a very different approach to flexibility and deviating from the status quo. Online learning is a prime example. The district has become open to trying the elearning approach, and administrators are even considering expanding the program.

As discussed previously, a component of the camaraderie among the teachers and staff in this district is the shared common values and trust that result from working with people who are open and honest about their work. Since they shared common goals and were motivated by the same sense of purpose, there was an integrity that existed in their

trust in each other. Trust leads to sharing, and eliminates worry about being judged or losing respect. Their focus was on what is best for the students and their genuine dedication to helping each other, which, in turn, benefits the students in their classes. The bottom line for all of them was their concern for providing the best opportunities for each child according to their needs. As stated by one of the teachers:

We are all about individualized instruction here. Every kid when they come in, meets with the director, gets their own plan. I'm the lead teacher for the elearning down here. I meet with every single kid when they are enrolled.

The ability to trust and collaborate with other members of the educational community depends on open communication between all levels of the hierarchy, and makes the system transparent. Eliminating hidden agendas, unexpected changes in direction, or surprises at review time allows team members to have confidence in their future plans and goals. Knowing others are on the same page minimizes uncertainty and stress, and allows for the free exchange of ideas. The next sub-section analyzes the impact of open communication on this district's culture of collaboration.

Establishing open communication.

The leadership at the central office set the tone for the rest of the elearning community by involving multiple levels of input at the inception of the new online program, and encouraging collaboration. As previously described, they brought representatives from all the stakeholder groups to the table in order to set goals and guidelines for the new academic venture. The culture of openness and trust that is ubiquitous in this program opens the door to building positive relationships between teachers - teachers, and between administrators – teachers, and

ultimately positively impacts the students. One of the directors downtown described her efforts to bring people together to improve overall performance:

Interviewer: What would you consider to be your personal strengths to help to contribute to the success of the program?

Reply: Collaboration. I see the big picture. I see gaps, and I feel like I know who to bring to the table.

Interviewer: Now when you say collaboration... With whom?

Reply: Between school personnel, within the school, and across the district. Like for instance, last week I invited, we have an on-time graduation specialist in each of the four schools. We have a school counselor coordinator in each of the four schools. I brought all eight of them to the table with Dr. Wilson, Dr. Carson, and myself, and said, "Now, let's do best practices." So I said to one school tell me what your meeting schedule is. "We meet every Wednesday At 10 o'clock". Next building, what's yours: "we meet twice a month". Another school: "well we don't meet, we just kind of talk informally". Another school, what's yours: "we meet once a month". So now it's kind of like, let's talk about this. So we left there with this one person who has the lowest numbers in the division going back to her building and saying, "I need to develop an OGR team".

Interviewer: OGR?

Reply: On-Time Graduation Ratio. So we helped her see a need, and then Dr. Carson and Dr. Wilson were like, Dr. Wilson said, "if you need assistance helping in your building let me know". Dr. Carson was there... "Are there any reports you all need?"

Administrators set the example by providing training, initially, but also by continuing to support teachers by checking in on them regularly, asking what their needs are, providing

immediate feedback, and maintaining standards that are clear, established, and provide a reliable path to achieving goals. Leadership has established effective 2-way communication that keeps teachers informed about decisions being made and by listening to their input on making those decisions. Open communication builds trust and indicates that each member's abilities and efforts are respected, appreciated and welcome.

Effective communication requires a culture of openness, honesty and consistency. Leadership is no longer in an ivory tower, distant from other employees within the organization, and uninvolved with the work being done. Especially in a public educational environment where there are constant demands on performance and accountability. Leaders need to keep abreast of all activities within their schools, as well as political and social dynamics of the surrounding community, state mandates, and government regulation changes. They must constantly balance the requirements outside the school with the activities within the school concerning students, teachers, and parents.

As discussed previously, the bottom line should always be what produces the best outcomes for the student. Although, at times, it seems like an impossible balancing act, leadership benefits from having open communication with all stakeholders, and most importantly the teachers. Studies have shown that teachers have the greatest determining factor in student achievement, followed by principals coming in second place. By being supportive, knowledgeable, and available to the teachers in productive 2-way communication, leadership can create a positive culture that benefits the entire community.

The teachers interviewed in this study felt positive about almost all the leadership in their building as well as in the central office downtown. They expressed that they felt comfortable approaching them when issues arose, and felt that their performance and abilities were respected

and acknowledged. Each person interviewed felt that there were open lines of communication up and down the levels of command. When asked about her perceptions of leadership, one teacher expressed her experience as follows:

Interviewer: What do you value most about the leadership in your school itself?

Response: Let's see, I would say communication. And, they have your back. I think that's the one thing that you are able to talk to them and discuss with any issues or concerns and you can come to a happy compromise together. It's never been a point where I feel like I'm in it by myself.

Establishing an atmosphere of collaboration.

The teachers and administrators in this district communicate in a supportive, positive way as seen in the previous section, and it is the responsibility of leadership to create a culture allowing effective communication. Teacher collaboration and a supportive work environment lead to organizational trust. And in turn, organizational trust allows for open and effective communication.

Leadership at the central office made a conscious effort to encourage collaboration and hold group meetings to discuss progress of the online program. One administrator believed her main role in the district was to act as a mediator and bring people together to discuss issues. She felt it was important for participants in meetings to believe that they were safe to express themselves openly, without fear of judgment or bias, and that they were all in the same boat.

Interviewer: Do you feel like you create a climate or an environment that invites good exchange up and down as well as across?

Replay: I really try to. You know, let's all play in the sandbox nicely and not kick sand in our faces, has always been my mantra. Let's share, don't own something.

Don't create work, don't reinvent the wheel. And I want everybody to feel real comfortable.

An important element of open communication and collaboration is mutual respect. It is very difficult to build relationships with co-workers that you do not respect, both in terms of their ethics and values, but also in their abilities and their performance. It is important that all members of a team contribute to the collective activities and goals in a way that is reliable and competent. Co-workers who respect and trust each other will be more likely to work together cooperatively and be more effective. Collaboration is evident in the daily activities as well as in group meetings.

The teachers all felt that they were respected by their superiors, and believed that their abilities and opinions were valued. Several of the ELF's mentioned that they felt very comfortable giving their opinion, and appreciated being asked for feedback. They recognized that leadership had the final say, but they felt their ideas and suggestions were heard and taken into consideration. As described by one of the teachers:

I know no matter what is going on, I will have the support of my administrator here. She may not agree with me in the... she may not agree with my particular technique, but she is going to support my decision to do it, as long as I am not totally in the wrong or whatever. I know that she has...we have enough autonomy...she trusts our judgment.

An important aspect of collegial trust is confidence in situations of resolving mistakes or conflicts that can arise in a group. In adversarial climates individuals may refrain from contributing to the group for fear of being seen as incompetent or uncooperative, or be put in an uncomfortable position of having to "take sides" in a conflict. The environment observed in this district encouraged 'team learning behaviors, such as: feedback seeking, help seeking,

speaking up about concerns and mistakes, and innovation. The purpose of collaboration is to support students' academic achievement. In this study, the results have been capacity-building for the district, and have produced increased options and opportunities for the students. As described by one of the administrators:

We pull them together quarterly, and (the ITTS) probably talks to them weekly, if not daily. We just set a new best practice last year, at the end of the year we de-brief with them, just like we do with summer school, but we have a manual that I monitor, the guidelines and that kind of thing, but it's kind of like, "look at these, what are we missing, what are we lacking, what's not clear..."

Each of the ELF's had their own ideas about methodology and how to facilitate the student/computer interaction. The teachers demonstrated a sincere desire to encourage the students to complete their work in a timely fashion and stay on track. At the same time nearly all of them felt that their greatest challenge was motivating the students. Each teacher had tried a variety of ideas and techniques with varying levels of success. All of them were open to sharing their ideas that worked well with the rest of the group, and give feedback to each other on suggestions that were made. This level of collaboration promoted better pedagogy as well as contributed to strengthening the relationships between the teachers. Their ideas would also be passed on to the administrators in the downtown office, who, in turn, may share it with the LMS vendor to improve the curriculum. Everyone benefits, from the vendor to the students. For example:

And there's a lot of times that the teachers will say..."Hey. I just came up with this great idea or this great form that I use for my kids, or this great way of tracking this". We send it to Jane and she sends it out to everybody else. And says ..."Mary came up with this

great idea. This is how she is tracking to make sure her students are online, this is what she'll use." Or "Anna came up with this great contact information, letter of contact for the parents. Maybe you can use it in your classrooms.

The benefits of collaboration between departments becomes clear when observing the interaction between the ELF's and the guidance department. The elearning program is essentially run through the guidance department, graduation specialists, and Instructional Technology staff who work as a team in analyzing each student's needs. Since this program originated for the purpose of improving on-time graduation rates, a structure was set up to allow a great deal of tracking of at-risk student so as to minimize dropping out, or being unable to complete course work for graduation with their cohort. The program has expanded for the benefit of students who have personal situations that keep them from keeping up, and for students who want to graduate early or take advance placement classes. Some students are able to finish a single semester course in half the time, and request being able to take additional courses.

As previously mentioned, decisions about whether or not a student should take an online class is discussed in advance and determined originally by the school guidance counselor. Once a student is approved by guidance, the ELF teacher becomes involved, and establishes a database for that student with background information, and then tracks their progress throughout the taking of the online course. Data for tracking progress through a unit, number of hours online, number of efforts required for the students to pass a quiz or complete an assignment, etc. is provided by the curriculum provider's software. This progress data is reviewed by the teacher, and if problems arise, the school counselor gets involved. Many courses have prerequisites, and students may be ineligible for a certain course until other courses are completed. This level of

collaboration between different departments insures that students are taking the correct courses, and are catching up to their cohort by taking only the courses needed, and in the right sequence.

As a result of this collaboration, the ELF teacher has support for insuring that her students are in the right place, doing the right work, and making the progress needed. The risk of making errors is greatly reduced when colleagues join together and share their expertise for mutual benefit. As described by one participant:

And what they do is, they actually go through and see... Okay, what courses are they in, what courses are they not in, which ones... right now, I don't think there is any kid that doesn't have a course assigned to them online that they don't know about. So that's what I have to generate is... What courses the guidance counselors have set up... So it's pretty much like another set of eyes. This is where we say they are... These are the courses they are registered for online. These are the ones they're working on, what's their progress on it, when did they start it and where there is grade now. So that's what is kept up weekly, because they meet twice within a week.

To review this sub-section on trust and collaboration, when the working environment reflects a culture of teamwork, open communication, and sharing of best practices the results are reflected in expanding capacity and mutual gain. When leadership shares the responsibilities of implementing change and obtains the buy-in from all the stakeholders involved, open exchange benefits the district as a whole, but most importantly, the students. Relationship building has been seen to include a broad base of support, shared values that in this district were distinctly student-centered, and establishing trust among co-workers through transparency and consistent and productive sharing of creativity and expertise. Each concept is distinct but interdependent, and all are necessary to produce the best results.

Perceived Benefits of the Program

Adequacy of technological and human resources, the culture of relationship building and support in the educational community, and clear vision with achievable goals are the trifecta of success in implementing the reform that is online/blended learning. As to whether the online learning program in this district is successful, the determinant of success comes from the teachers and administrators. All of the ELF's felt that they saw definite benefits of the program for their students in terms of flexibility and watching the students take ownership of their learning. In this section, we will look more closely at these perceived benefits.

Flexibility

The most frequently mentioned benefit of the online program as set up by this district was solidly the flexibility it provided. It allowed the district to give the students multiple choices in terms of when they take their courses, what courses they take, when they do their work, and where they work. Each student's own personal situation was taken into account for determining which courses they were approved for, and the circumstances dictated when they could take them.

The program began as a remediation effort to help more students graduate on time. Students who had not passed a course required for graduation had to repeat the course. This required them to either attend summer school, which the students had to pay for, or to repeat it in a later semester. Some courses are only offered in the fall semester, or in the spring semester, which automatically set the students back a year from the rest of their cohort. By allowing the students to take the course online during the school day, in addition to their other required courses allowed them to come current with pacing schedules for graduation.

The program expanded to allow students to take electives that they wanted but were not offered in their school for lack of resources, such as qualified teachers in a subject area such as advance math or a foreign language. Many students want to graduate early, or take Advanced Placement classes that allow them to get a head start on college requirements. Having the opportunity to take classes online that would otherwise not be available was recognized as a great benefit to the students, and allowed the school system to personalize their education according to each student's needs.

Online learning also provides flexibility for accommodating each student's daily activities and personal situations. Students can work on their studies at school, but are also able to work from home, or anywhere they can get access to the Internet. Many students participate in extracurricular activities, have jobs, or are in personal situations that require them to be away from school, thus having fewer options for taking all the courses that they need or want. By taking a course online they can work in the evenings, or over the weekend. Teachers and administrators spoke enthusiastically about being able to offer these choices to students, and were happy to be flexible about their own working situations to help their students.

One of the participants in the study described the situation as follows:

Some of our students are not going to go to college, and we understand that. And so being flexible...they have to work full time jobs. Some of them have families of their own that they are already trying to support. Trying to, you know, make up for a parental issue. And so the flexibility for them is a huge issue.

Another teacher made the following observation:

We do have some students who want to graduate early. They have been approved by the school system to graduate early so there are some courses that are uploaded for them, that they are able to take.

...with this program, it allows students to be able to take it at any time. It doesn't matter what semester you didn't pass it in, you can still retake it any time."

Taking Ownership

A significant benefit of online learning is the requirement that students must be self-regulating and motivated. They cannot be passive learners or allow themselves to get behind by sleeping through a face-to-face lecture, or not read the required material. Traditional classroom settings allow for a student to assume that it is the teacher's responsibility to figuratively spoon-feed knowledge into them, as they sit in their seats and potentially take notes. Online learning forces the student to continuously read or listen, and frequently prove that they have learned the lesson by taking quizzes or performing assignments as they go. They soon learn that learning is up to them, and they must take responsibility for getting their work done, or they won't pass.

Nearly all the interviewees talked about how the students are surprised to find that they have to work harder by taking a course online, than face-to-face. The excuses of 'the teacher doesn't like me' or that they fall asleep in class are removed. The ELF's were able to make the students understand that they must take ownership of their own success. They provided assistance whenever they could, and had ways of helping them stay on track, but the students themselves soon discovered that if they did not do it themselves, no one else would. One teacher was asked about how much administrators in their building take an interest and observe the students in the computer labs:

Oh yeah, lots of walk-throughs over here. Because I think they want to see that, they want to see the program that they bought is being implemented. The kids are actually on task, because it's really very flexible, it's very low key over here. It's a lot of work that's gotta be done, so there's not a lot of talking in here.

Another teacher relayed a conversation she had with her students when they asked her how they would be graded:

Teacher: "I don't give your grade, you grade yourself based on what you've done and how well you come in here and work every day. The system requires 7% per day. So when you do not perform at 7% per day Monday through Friday, you are behind."

Interviewer: Is that eye opening?

Teacher: It is. It's like you see the light bulb.

Criteria for Evaluating Outcomes

Administrators of online programs were asked to evaluate the outcomes based on their specific needs, goals, and expectations. What is considered to be 'success' may vary between teachers and administrators. If online programs are continued or expanded, it can be concluded that the administrators consider the program to be successful.

Teacher "buy-in" and acceptance of online teaching has been identified as an important outcome in determining successful online learning implementation in their school. Teacher outcomes can be measured by their comments during interviews, examples of original ideas and contributions to the program, activities added to the program voluntarily, and maintaining positive relationships with other teachers and staff. If teachers continue to teach online rather than return to traditional classrooms, and their students' achievement is comparable or better

than those in face-to-face settings, they could be identified as seeing the online program as being successful.

Perception of Success

At the end of each interview, I asked the administrators and the teachers what they thought the future of the online learning program would be. They all thought the benefits of online learning were worth having it continue, although they felt it was still evolving and would become better with time. They all hoped that it would expand to include more students and more subjects.

They felt the possibilities for increasing the number of electives available online, as well as more advanced subjects gave students more opportunities for preparing for college or other interests. Many felt that online learning was the future, and that it did not matter whether the students were planning to go to college or were headed into a career after graduation. Computers are being used everywhere. The more familiar students are with them by taking online courses in high school, the better their performance would be once they were out in the world as adults with jobs and nearly any activity they became involved with. One teacher expressed her desire to see the offerings expanded:

I would love to see it grow to more students trying to get prepared for college and the APs, I would love to see the Advanced Placement. I would love to see more electives offered. I don't think we have a lot of electives. We are very limited with what we have. And I understand that that has a lot to do with...you have to have a certified teacher facilitating that.

The simplest measure of whether the district considers the program to be a success is their decision to not only keep the online classes but to expand the program.

Interviewer: Do you see the program expanding for the online for the number of students being offered that opportunity as well as the number of courses being offered?

Reply: I do, it has actually grown steadily for the past three years. And as more recognition comes to it, and the counselors, more courses are added, they're going to be putting the students in those courses.

Another measure of the success of the elearning program as seen by the administration is their willingness to fund it. Originally, the funding came from grants, but those revenue sources have expired. The district has committed to continuing funding the program indefinitely. Clearly the educational leadership in this district has provided the components of vision, resources and relationship building, and they have found their program to be a success.

In evaluating the components of success the online community members interviewed found that the benefits of elearning go beyond the convenience and flexibility of being able to accommodate the students' schedules. The program promotes active participation in the learning process, increases rigor, and staying on task with the motivation and help of the ELF's. Further, the methodology forces the students to take ownership and responsibility for their learning, and understand that they are not *given* their grades, they *earn* them.

Summary of Chapter 4

The findings in this case study have helped to identify significant factors that lead to effective leadership in school reform. Three core areas have emerged from the data, and have as their central theme 1) clear vision and achievable goals; 2) reliable and up-to-date technological and resources that sustain the reform effort; and 3) leadership that values and promotes relationship building.

Relationship building can be seen as the most nuanced aspect of leadership, and its subtleties can tip the otherwise balanced equation toward being effective and positive, or inadequate and destructive. Interpersonal skills, leadership approaches, political agendas, and personal ethics all come into play in creating a positive and supportive climate of change. When leadership shares openly with the educational community in the goal setting and decision making process they create a culture of support that has a ripple effect of expanding capacity, and providing a better educational experience for teachers and students.

Components of relationship building begin with a culture of support—support from administrators, and mutual support between peers. Within the culture of support are shared values and goals that focus on student-centered learning, individualized for the maximum benefit to each student. Collaboration was found to exist not only within the online learning department alone, but between departments in the schools. An environment of caring and sharing improves performance and helps to establish an atmosphere of collaboration.

The findings of this case study reveal that the overall success of this district's educational reform requires three core endeavors that require effective leadership. First, clear vision and achievable goals that are determined by the educational community of stakeholders before implementation will produce superior results. Goal setting provides a sense of direction as well as a measure of success and accountability. Second, the resources necessary to achieve the desired goals need to be identified and funded to produce results that will not only make the desired outcomes possible, but will grow and continue to expand capacity that benefits the students. Finally, these two core components must be provided in a climate of relationship building and support that eases the resistance to change. The take-away from this research is that

cooperative efforts and shared responsibility for common goals creates a culture of positive outlook and determination to succeed.

CHAPTER 5 – DISCUSSION, CONCLUSIONS, and IMPLICATIONS

Discussion of Findings

In this case study, administrators were asked about the beginning stages of the new implementation of online learning. They began with questions such as who was involved, and to what degree, and what their goals and expectations were for determining the success of the program. They were asked to describe what training and support was provided to the teachers and staff, what personal strengths they believed to be important for the success of the program, and their vision for the future. These questions were designed to obtain not just facts and historical information, but more to elicit attitudes toward the relationships that were created, team building efforts, the climate that existed in the school culture, and their willingness to create an atmosphere of support and teamwork. Their responses clearly showed a great deal of respect for the abilities of the teachers and counselors in each school building. They considered their contributions to be critical to the success of the elearning program.

Teachers working in the four high schools that participated in the study were asked to describe their experiences when facilitating the online programs; i.e., their training, their relationships with students, other teachers, and administrators, challenges they faced, benefits they perceived, support they received, and their expectations for the future. Each teacher responded enthusiastically that there was open communication and support provided by both leaders and fellow colleagues. This kind of culturally positive energy is self-perpetuating. When you are surrounded by others who encourage and support you, the entire organization is incentivized.

The administrative leadership in the district's central office defined their objectives and implementation strategy by collaborating with all stakeholders involved in the online program. By building relationships these leaders created a culture of trust, open-communication, and support and established a positive climate for starting a technology based reform. They sought input and guidance from all levels of stakeholders which encouraged buy-in, and mutually agreed upon values and goals. The teachers in the schools confirmed that they each felt supported by their administrators and colleagues, and were comfortable in their expectation of being a part of the decision making process with a willingness to collaborate on issues that arose. All participants kept a student-oriented focus by emphasizing that what was best for the students was their basis for decision making.

The highlights of the findings tend to center on the importance of relationship building, trust, and collaboration. Leadership style can take many forms, and is manifest in different personality characteristics and management skills. However diverse the individuals are, in an organization, there is common ground to be found in having all members contribute to the best of their ability to a shared, desired result. Each individual has unique skills that, when combined with those of the others in the group produce a larger, expanded capacity in that the whole is greater than the sum of its parts.

As an example, an analogy can be made of the interaction between the members of a symphony orchestra. The leader of an orchestra is the conductor who uses their skills to arrange music, to listen to each section of strings, or brass, or percussion, and bring them all together to produce a performance that is harmonious and enjoyed by the audience as well as the performers. Each member of the orchestra brings their own individual talents and experience to the group, and follows the guidelines provided not only in the score, but by listening to the other performers

under the direction of the conductor. The result is a full rich blend of harmonies built on combining each individual's performance.

This concept of orchestrated management requires mutual respect, enthusiasm, and confidence in the abilities of all members of the organization. Each member needs to know what is expected of them, and be given the instruments necessary to accomplish their task. Listening carefully and exchanging constant feedback keeps everyone in tune and on track and able to contribute to the group effort. Those needing extra support can receive it through the guidance of their director or their peers. Passion and high expectations are contagious. When the leader is enthusiastic and skilled, it motivates and elevates the rest of the members to perform better, ultimately expanding capacity and achievement. Interpersonal relationships and collaboration are instrumental to positive outcomes.

The years of less than successful online instruction were the result of multiple deficiencies that the administrators and teachers were determined to learn from. Those first efforts were initiated by a handful of teachers who were innovative and experimenting with a new technology. However, the efforts were trial and error and were not successful. Teachers and administrators were finally able to come together and plan a course of action that would bring success by means of collaboration and support. As described by Fullan & Donnelly (2013):

Poor implementation support can cause an innovation to crumble... when an innovation is dropped into the school without support or when implementation is left up to the teachers, schools, and school system to figure out on their own, sometimes there is a lack of focus on implementation because it is assumed the design of the product is intuitive and doesn't require training; (pg. 18).

By all accounts, this district did a thorough job, four years ago, of preparing for a new elearning program in their schools through collaboration, and continues to support and review the methodology in order to ensure its continued use. There have been regular opportunities for providing feedback, and suggestions for improvement, and the program continues to adapt and grow.

Importance of Trust

The study is an example of how relationships are built on trust, and “trust is an enabler of change” (Handford & Leithwood, 2012, pg. 194). There are five main traits that have been identified in the literature as being among the most prominent for building trust in leadership (Fullan, 2010; Handford & Leithwood, 2012; Leithwood, Harris & Hopkins, 2008). All five traits i.e., competence, consistency, openness, respect, and integrity were described by the participants in the study. Some of them mentioned previous leadership that they felt lacked at least one of these traits, and expressed their discomfort in having to deal with them. The culture of this atmosphere of openness and respect made the participant comfortable with expressing their needs and concerns without fear of reprisals. As a result, they shared their techniques, ideas, and innovations with each other in order to make the whole program improve, leading to capacity building for the whole district. These same characteristics centered on relationship building based on trust and on effective communication. It became obvious that mutual trust existed between the leadership and the teachers. These traits that create trust were based on actions or deeds that the participants observed and experienced in their co-workers and leaders.

As described by Leithwood & Hopkins (2008), it is the indirect influence of leadership that supports and influences the culture of performance. The building of successful working relationships appears to have had a very positive affect on the school climate as described by the

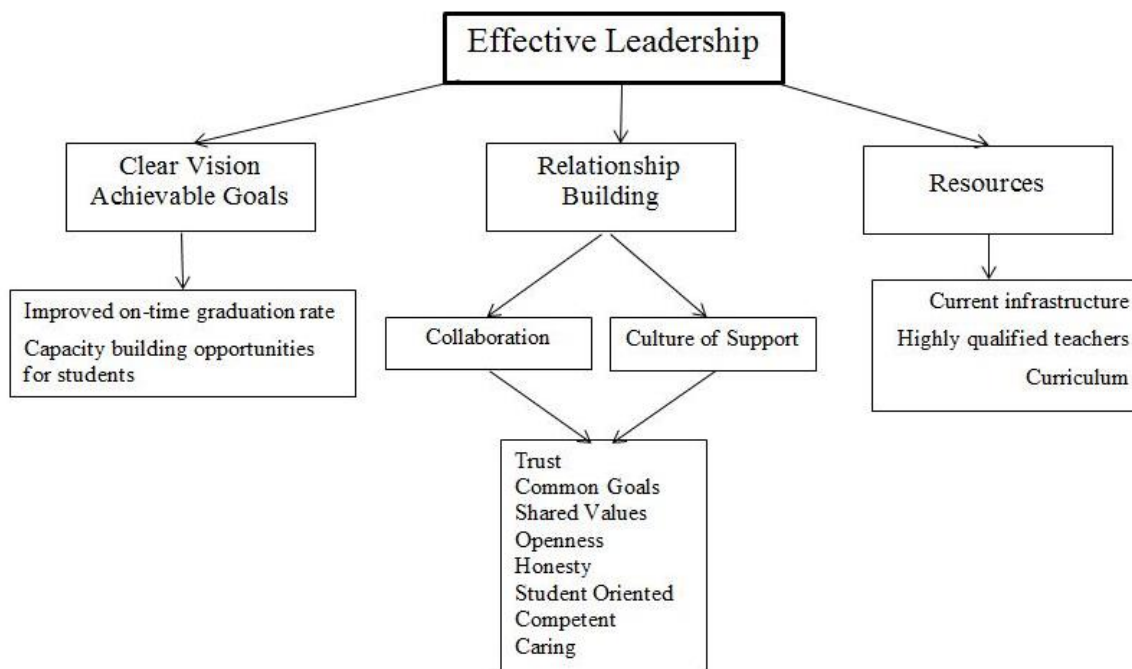
participants. “Most available evidence indicates the trust is a core component of leadership” (Handford & Leithwood, 2013, pg. 194). The members in the online program in the district under this study put special emphasis on relationship building and maintaining a positive and supportive culture.

Importance of Relationship Building

As previously stated, implementing online learning in a public school setting is a complex process that involves 3 core areas that support the success of educational leaders. They are 1) clear vision with achievable goals; 2) well-funded and selective investment in capital and resources; and 3) a culture and climate that contributes to a smooth transition in teaching methodology. Each of these 3 core areas have components that must be addressed before implementation can begin, as has been discussed in detail in both the literature review and the findings, chapters 2 and 4. The focus here is on how orchestrated leadership can directly affect these core areas in either positive or negative ways.

Merely having identified goals and possessing technological resources are not the whole story of implementing online learning and they do not guarantee success. MacBeath & Dempster (2009) argue that “It begs an understanding of the structural and cultural mechanisms to help to enable change, learning and improvement to take place.” (As cited by Rhodes & Brundrett, 2009, pg. 364) As in any work environment, school leaders have relationships with educational staff, and teachers have relationships with each other as well as with their students. These relationships and, in particular, the feelings of mutual trust that arise from leadership’s actions, help to improve the capacity of the educational community (Cosner, 2009). The example set by leaders has a trickle-down effect and will be reflected in the actions of the rest of the educational community.

Figure 6. Successful Online Learning Program Core Area Details



The expanded graphic in Figure 6 of the core areas of effective leadership provides the specifics of what is needed in each of the three categories. Our focus in this case study has gone beyond just saying it is important to build relationships. The findings indicate that collaboration and a culture of support are instrumental to building relationships. As mentioned in the literature, what teachers value most in their leaders are the elements of trust, common goals, shared values, openness, honesty, student oriented decision making, competence, and caring individuals. All of these elements contribute to both a culture of support, and an atmosphere of collaboration. When leadership can orchestrate a climate of enthusiasm and mutual support, it can make the difference between successful outcomes and disappointing results.

Figure 6 portrays a more detailed framework for this district's successful online learning program. "Leadership effects vary greatly depending on the particular type of leadership practice under consideration... Evidence about effective leadership practices is not the same as

evidence about the capabilities that leaders need to confidently engage in those practices.” (Robinson, 2010, pg. 2). Research shows that instructional leaders have a significant impact on student outcomes. As a result, it becomes increasingly important to understand how to make instructional leadership more effective (Robinson, 2010). Having sufficient resources and good intentions will not be enough.

Any major effort toward change or organizational reform requires the support of the people on the “front lines” of the program. In school reform, it is the teachers in the classrooms and the administrators in the buildings, who interact with the students who will determine the level of success that will be achieved. However, it is the indirect influence of leadership that supports and influences the culture of performance. The building of successful working relationships appears to have a very positive affect on any organizational activity, but is particularly relevant in school culture. The members in the online program in the district under this study put special emphasis on relationship building and maintaining a positive and supportive culture. It appears that for this district, relationship building may have been the key to success.

Importance of Collaboration

This study found that communication between teachers, and between teachers and administrators occurred on essentially a daily basis. The teachers emphasized how readily available help and support were. They participated in group meeting several times a year. More commonly they emailed and called each other, or the support group provided by the LMS vendor.

A significant aspect of this district’s efforts to rebuild their online learning program was to include all the stakeholders in the planning process. Participants that were around preceding the new program were able to provide their opinions and experiences to the new structure. As

part of their ongoing review and improvement, throughout the year, the ELF teachers are asked to provide feedback about the program, and relay what is working and what needs to be reviewed. This ability to contribute and be heard helped the teachers to feel more engaged in the process, and to take ownership of its outcomes.

Effective communication enables the sharing of ideas, encourages support, provides increased understanding between members of the learning community, and inspires a culture of tolerance and receptivity to change. Encouraging collaboration came from leadership in both word and deed. By providing a culture of open communication leaders discuss how they learn from teachers by seeing multiple perspectives, which improves planning and problem solving. Teachers learn from other teachers through shared technique and support. Teachers learn from leaders by getting clearer identification of goals and objectives, as well as understanding administration's limitations and challenges.

Implications for Practice

To achieve a collaborative culture, leadership must gain the trust and respect of the educational community. Too often teachers and principals fear repercussions if they depart from the 'status quo' and try to be innovative. Trying a new approach may not work as well as expected, and because of the hardline demands of improving student performance, a failed venture could be used as evidence of incapability or inferiority. Educators need to eliminate an atmosphere of competition, and instead reward creativity, sharing, and collaboration. Teachers and principals should be encouraged to share their work and best ideas and not keep them to themselves in order to be ranked above the average. Student-centered learning requires best practices to be shared so that everyone can benefit. Teamwork and professional learning

communities not only benefit the profession, they create a more harmonious and rewarding working environment.

Current trends toward assessing not only students, but teachers and principals as well, create stress and fear of deviating from rigid structures for teaching methods and high risk testing. Teachers are time constrained and forced to “teach to the test” rather than to use creativity and trying new approaches that will ultimately benefit the students. Instead, an atmosphere of flexibility and support for innovation and collaboration should be rewarded and encouraged. Students will need to be taught in a new climate that utilizes technology and engages them in productive ways. Major changes require leadership that inspires trust and builds productive relationships.

Implication for Research

This study focused on how leadership can meliorate change aversion in the context of implementing the use of technology with online learning. This is only one district and one example of the importance of relationship building and culture. Further studies could look at their effect in other districts, or in other circumstances of change. This orchestrated approach to leadership can be studied in a full range of circumstances to determine its impact on such issues as productivity, innovation, morale, or profitability.

Another area of research that is found in the literature is the proliferation of Professional Learning Communities (PLCs). Some have had success while others have not. Perhaps the influence of leadership’s ability to encourage and model relationship building and support could be studied to determine the success of PLCs.

Work environments in general have been studied in regard to culture and leadership style, but without the focus on encouraging and rewarding collaboration instead of arbitrary measures

of achievement. Some work environments deliberately encourage competition between individuals or departments. However, many organizations are departing from strict hierarchies and structures in order to attract younger employees who are encouraged to be more informal and creative in the work place. Further research could examine how these business trends could be applied to educational environments.

Conclusion

Yesterday's educational system can no longer sustain the demands of tomorrow's technologically based world. Politics and demands for heightened accountability for poor performance require administrators to share the roles of educational leadership. Rigid hierarchical structures of the past should be replaced by flexibility and innovative pedagogical practice. Change is awkward, scary, and difficult. Effective leadership through a culture of open communication and collaboration will make it a welcome challenge to be met by innovators who are not working alone.

Decision making on curricula, pedagogy, and educational goals should be a collaborative process. The explosion of rapid communication and information availability by means of the Internet means that schools and libraries are no longer the keepers or guardians of knowledge. No single individual can keep up with all the possibilities of best practices and students' educational opportunities. How to properly guide the learning process must be determined through shared goals, values, and experiences that will lead to expanding the capacity of our school systems. Teachers and administrators need to turn to each other for ideas, affirmation and direction. To achieve success, the educational environment must be open to effective communication and collaboration.

These elements of trust, support, and collaboration are not exclusive to education. They can be applied to many organizations and leadership situations. Education, however, is highly interactive with multiple occasions for developing relationships between students and teachers, teachers and other teachers, and between teachers and all levels of the school hierarchy. Especially in times of change and reform, having cooperative collaboration and trust among the members of the educational community appears, in this district, to have created a highly responsive and positive outcome.

REFERENCES

- Allen, I. E. & J. Seaman (2006). *Making the Grade: Online Learning in the United States, 2006*. Needham, MA: The Sloan Consortium.
- Anderson, R. E., & Dexter, S. (2005). School technology leadership: An empirical investigation of prevalence and impact. *Educational Administration Quarterly*, 41, 49-82.
- Archambault, L. & Crippen, K. (2009). K-12 distance educators at work: Who's teaching online across the United States? *Journal of Research on Technology in Education* 41(4), 363-391.
- Barbour, M. & Ferdig, R. E. (2012). Virtual schooling. In McLeod, S. & Lehmann, C. (Eds.), *What school leaders need to know about digital technologies and social media*. San Francisco, CA: Jossey-Bass.
- Barbour, M. & Reeves, T. (2009). The reality of virtual schools: a review of the literature. *Computers & Education*, 52 (2009), 402-416. doi: 10.1016/j.compedu.2008.09.009
- Beachum, F., & Dentith, A. M. (2004). Teacher leaders creating cultures of school renewal and transformation. *The Educational Forum*, 68(3), 276–286.
- Beem, K. (2010). Virtual classes, real policy. *School Administrator*, 67(4), 10-15.
- Bleakley, D. A., & Mangin, M. M. (2013). Easier Said Than Done: Leading Technology Integration. *Journal of Cases in Educational Leadership*, 16(1), 14-26. doi: 10.1177/1555458912475213
- Bol, L., & Garner, G. (2011). Challenges in supporting self-regulation in distance education environments. *Journal of Computer Higher Education*, 23, 104-123. doi: 10.1007/s12528-011-9046-7
- Brenninkmeyer L, Spillane J (2004) *Instructional leadership: How expertise and subject matter influence problem solving strategy*. Paper presented at the annual meeting of the American Education Research Association, San Diego, CA
- Bryk, A. & Schneider, B. *Trust in Schools: A Core Resource for Improvement*, Russell Sage Foundation: NY, NY. https://www.russellsage.org/sites/all/files/bryk_tables_figures.pdf
- Cavanagh, C., Barbour, M., Clark, T. (2009). Research and practice in K-12 online learning: A review of open access literature. *International Review of Research in Open and Distance Learning*, 10 (1), 1-22.
- Cavanaugh, C. (2009). Effectiveness of cyber charter schools: A review of research on learnings. *TechTrends*, 53 (4), 28-31.
- Changing Minds Website:
http://changingminds.org/explanations/values/values_morals_ethics.htm
- Chory, R. M., & Hubbell, A. P. (2008). Organizational justice and managerial trust as predictors of antisocial employee responses. *Communication Quarterly*, 56(4), 357-375. doi: 10.1080/01463370802448121
- Christensen, C.M., Horn, M. B., & Johnson, C. W. (2008). *Disrupting Class*, New York: McGraw Hill.
- Clarke, (2011). An integrated conceptual model of respect in leadership, *The Leadership Quarterly* 22, 316–327.
- Cosner, S. (2009). Building organizational capacity through trust. *Educational Administration Quarterly*, 45(2), 248-291.
- Cousin, G. (2005). Case study research. *Journal of Geography in Higher Education*, 29 (3), 421–427.

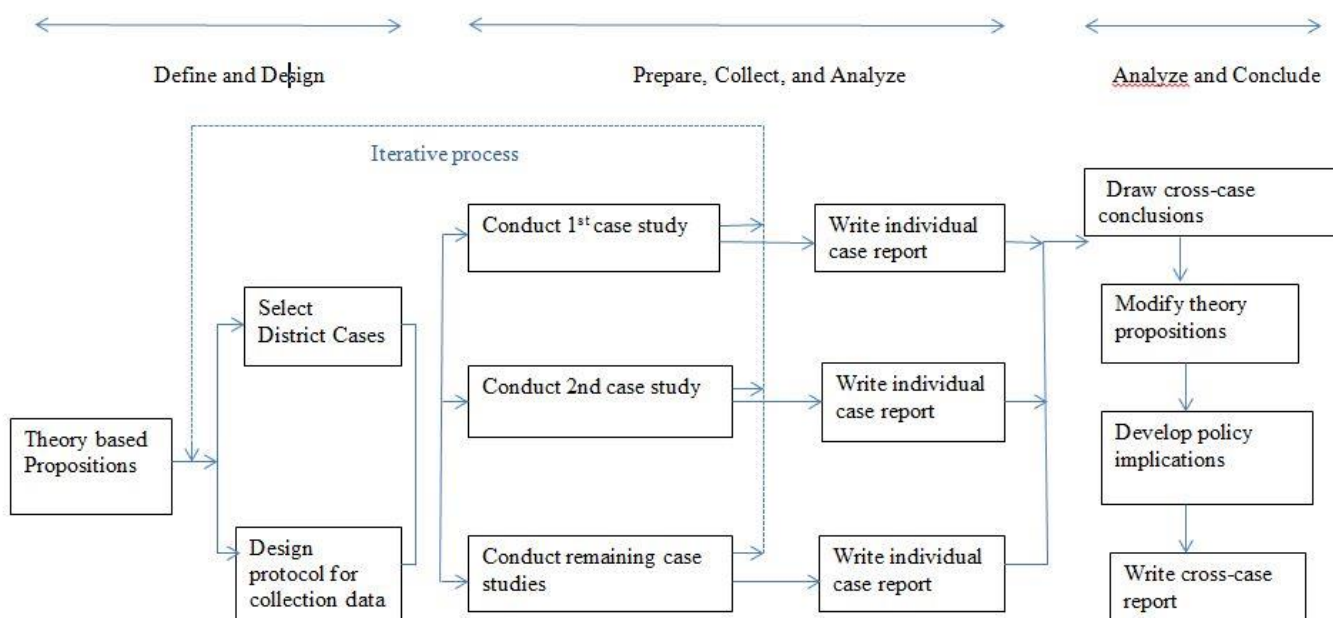
- Darling-Hammond, L. (2010). *The Flat World and Education*. New York: Teachers College Press.
- Dawson, C, & Rakes, G. (2003). The influence of principals' technology training on the integration of technology into schools. *Journal of Research on Technology in Education*, 36(1), 29-49.
- Demir, Kamile, (2015). "The effect of organizational trust on the culture of teacher leadership in primary schools." *Educational Science: Theory & Practice*, 15(30), 621-634. doi: 10.12738/estp.2015.3.2337
- Dexter, S. (2011). School technology leadership: Artifacts in systems of practice. *Journal of School Leadership*, 21(2), 166-189.
- Dictionary.com (2015). <http://www.dictionary.com/browse/honest>
- Dunleavy, K., Rebecca M. Chory, & Alan K. Goodboy. Responses to deception in the workplace: Perceptions of credibility, power, and trustworthiness. *Communication Studies Volume 61, Issue 2, Apr-Jun 2010*, 239-255. doi: 10.1080/10510971003603879
- Elstad, Eyvind (2008). Towards a theory of mutual dependency between school administrators and teachers: bargaining theory as research heuristic. *Educational Management Administration Leadership*, 36, 393-414. doi: 10.1177/1741143208090596
- Evans, J. (2010). *Administrators' Challenges and Opportunities: Part one. A K12 and Project Tomorrow White Paper*. Retrieved from: <http://www.k12.com/sites/default/files/pdf/Leveraging-Technology-white-paper-092911.pdf>.
- Fowler, F.C. (2013). *Policy Studies for Educational Leaders*, 4th ed. Pearson: Boston.
- Frost, D. 2008. Teacher leadership: values and voice. *School Leadership and Management* 28, no. 4: 337–52.
- Fullan, Michael (2001). *Leading in a Culture of Change*. Jossey-Bass: San Francisco, CA
- Fullan, Michael (2010). *Motion Leadership: The Skinny on Becoming Change Savvy*. Corwin a SAGE Company: Thousand Oaks, CA.
- Fullan & Donnelly, (2013). *Alive in the swamp: assessing digital innovations in education*. NESTA Operating Company: London. Downloaded from <http://www.nesta.org.uk/publications/alive-swamp-assessing-digital-innovations-education>.
- Futrell, M. (2011). Redefining leadership: Working together to change America's education paradigm and prepare for tomorrow's world. *Journal of School Leadership*, 21, 635-648.
- Garrison, D. R., and Arbaugh, J.B. (2007). Researching the community of inquiry framework: review, issues, and future directions. *Internet and Higher Education*, 10 (3), 157-172.
- Garrison, D. R. and Vaughan, N. D. (2013). Institutional change and leadership associated with blended learning innovation: Two case studies. *Internet and Higher Education*, 18, 24-28.
- Gerard, L. F., Bowyer, J. B., & Linn, M. C. (2008). Principal leadership for technology-enhanced learning in science. *Journal of Science Education & Technology*, 17(1), 1-18. doi: 10.1007/s10956-007-9070-6
- Goleman, D. (2000). Leadership that gets results. *Harvard Business Review*, 78(2), 78-90.
- Goodyear, P., G. Salmon, J. Spector, C. Steeples, and S. Tickner. 2001. Competencies for online teaching: A special report. *Educational Technology Research and Development* 49 (1): 65–72.

- Grover, Steven L. (2013). Unraveling respect in organization studies, *Human Relations*, 67(1), 27-51. The Tavistock Institute, Sagepub.co.uk. Downloaded from hum.sagepub.com at OLD DOMINION UNIV on August 16, 2015. doi: 10.1177/0018726713484944
- Handford, V. & Leithwood, K. (2012). Why teachers trust school leaders. *Journal of Educational Administration*, 51 (2), p 194-212. Emerald Group Publishing. doi: 10.1108/09578231311304706.
- Hawking, A., Graham, C.R., and Barbour, M. K. (2012). Everybody is their own island; Teacher disconnection in a virtual school. *The International Review of Research in Open and Distance Learning*, 13(2), 123-144.
- Hays, D. G. and Singh, A. A. (2012). *Qualitative Inquiry in Clinical and Educational Setting*. NY: Guilford Press.
- Hord, S. M. (1986). A synthesis of research on organizational collaboration. *Educational Leadership*, 43(5), 22–26.
- Irvin, M. J., Hannum, W. H., de la Varre, C., Farmer, T. W., & Keane, J. (2012). Factors related to rural school administrators' satisfaction with distance education. *Distance Education*, 33(3), 331-345.
- iNACOL, 2015. Keeping Pace with K-12 Digital Learning, 12th Edition. *Evergreen Education Group, Nov 2015*. Downloaded from the iNACOL website: <http://www.inacol.org/wp-content/uploads/2015/11/Keeping-Pace-2015-Report.pdf>
- Ketterlin-Geller, L. R., Baumer, P., & Lichon, K. (2015). Administrators as advocates for teacher collaboration. *Intervention in School & Clinic*, 51(1), 51-57. doi: 10.1177/1053451214542044
- Leithwood, K., Harris, A., and Hopkins, D. (2008). Seven strong claims about successful school leadership. *School Leadership and Management*, 28(1), 27-24.
- Leithwood, K., Mascall, B., Strauss, T., Sacks, R., Memon, N., & Yashkina, A. (2007). Distributing leadership to make schools smarter: Taking the ego out of the system. *Leadership & Policy in Schools*, 6(1), 37-67. doi: 10.1080/15700760601091267
- Little, M. E., and Houston, D., 2003. Comprehensive school reform: A model based on student learning. *Journal of Disability Policy Studies*, 14(2), 54-26.
- Lynch, J. M. (2012). Responsibilities of today's principal: Implications for principal preparation programs and principal certification policies. *Rural Special Education Quarterly*, 31(2), 40-47.
- MacBeath, J., and Dempster, N. eds. 2009. *Connecting leadership and learning: Principles for practice*. London: Routledge. As Quoted by Rhodes & Brundrett
- McAllister, D., (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, Vol.38, No 1, 24-59.
- McCornack, S. (1992). Information manipulation theory. *Communication Monographs*, 59(1), 1-16.
- McLeod, S., Bathon, J. M., & Richardson, J. W. (2011). Studies of technology tool usage are not enough: A response to the articles in this special issue. *Journal of Research on Leadership Education*, 6(5), 288-297.
- McLeod, S., & Richardson, J. W. (2011). The dearth of technology leadership coverage. *Journal of School Leadership*, 21(2), 216-240.
- McLoughlin, C. (2002). Learner support in distance and networked learning environments: Ten dimensions for successful design. *Distance Education*, 23(2), 149-162.

- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. *Washington, DC: U.S. Department of Education, Office of Planning, Policy, and Evaluation Development, Policy and Program Studies Service*. Retrieved from: <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>
- Mishra, A. K. (1996). Organizational responses to crisis: The centrality of trust. In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 261-287). Thousand Oaks, CA: Sage.
- Natale, C. F., & Cook, J. (2012). Virtual K-12 learning: New learning frontiers for state education agencies. *Peabody Journal of Education, 87*, 535-558.
- Oliver, K., Osborne, J., Patel, R., and Kleiman, G. (2009). Issues surrounding the deployment of a new statewide virtual public school. *Quarterly Review of Distance Education (10(1))*, 37-49.
- Olson, L. (1999, April 14). Following the plan. *Education week (29)*, 32.
- Onorato, M. (2013). Transformational leadership style in the educational sector: An empirical study of corporate managers and educational leaders. *Academy of Educational Leadership Journal, 17(1)*, 33-47.
- Patrick, S., & Sturgis, C. (2011). Cracking the code: synchronizing policy and practice for performance-based learning. Report. *International Association for K-12 Online Learning*. Retrieved from: <http://www.eric.ed.gov/PDFS/ED537322.pdf>
- Picciano, A. G., & Seaman, J. (2007). K-12 Online learning: A survey of the U.S. school district administrators. *Journal of Asynchronous Learning Networks, 11(3)*, 11-37.
- Picciano, A. G., Seaman, J., Shea, P., and Swan, K. (2012). Examining the extent and nature of online learning in American K-12 Education: The research initiatives of the Alfred P. Sloan Foundation. *Internet and Higher Education, 15*, 127-135.
- Raz, J. (2001). *Value, Respect, and Attachment*. Cambridge: Cambridge University Press.
- Reid, K.M., Aqvi, Y., & Putney, L.G. (2009). Evaluation of an evolving virtual high school. *Educational Media International, 46 (4)*, 281-294.
- Repetto, J., Cavanaugh, C., Wayer, N., and Liu, F. (2010). Virtual high schools: Improving outcomes for students with disabilities. *Quarterly Review of Distance Education, 11 (2)*, 91-104.
- Rice, K. (2009). Priorities in K-12 distance education: A Delphi study examining multiple perspectives on policy, practice, and research. *Educational Technology & Society, 12(3)*, 163-177.
- Rhodes, C. & Brundrett, B., (2009) "Leadership development and school improvement". *Educational Review, Vol. 61, No. 4*, November 2009, 361-374. doi: 10.1080/00131910903403949
- Robinson, V. (2010). From instructional leadership to leadership capabilities: Empirical findings and methodological challenges. *Leadership and Policy in Schools (9)*, 1-26. doi: 10.1080/15700760903026748
- Roblyer, M.D., & Marshall, J.C. (2002). Predicting success of virtual high school students: Preliminary results from an educational success prediction instrument. *Journal of Research on Technology in Education, 35(2)*, 241-255.
- Rogers, Kristie M., Ashforth, Blake E., (2014) Respect in organizations: Feeling valued as "We" and "Me". *Journal of Management Vol. XX No. X, Month XXXX 1-31*. Downloaded from jom.sagepub.com at OLD DOMINION UNIV LIBRARY on August 16, 2015. doi: 10.1177/0149206314557159

- Sahlberg, P. (2013, May 15). What if Finland's great teachers taught in U.S. Schools? [Pasi Sahlberg Web log post]. Retrieved from: <http://pasisahlberg.com/what-if-finlands-great-teachers-taught-in-u-s-schools/>
- Schrum, L., Galizio, L. M., & Ledesma, P. (2011). Educational leadership and technology integration: An investigation into preparation, experiences, and roles. *Journal of School Leadership, 21*(2), 241-261.
- Senge, P. (2006). *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Currency/Doubleday.
- Silins, H., and B. Mulford. 2002. Leadership and school results. *Second international handbook of educational leadership and administration*, ed. K. Leithwood, P. Hallinger, K.S. Louis, P. Furman-Brown, P. Gronn, W. Mulford, and K. Riley, 561–612. Dordrecht, the Netherlands: Kluwer. As quoted by Rhodes, C. & Brundrett, B.
- Singleton, D. M., (2013). Transitioning to blended learning: The importance of communication and culture. *Journal of Applied Learning Technology, 3*(1), 12-15.
- Spillane, J. P. (2005). Distributed leadership. *Educational Forum, 69*, 143-150.
- Stake, R. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage.
- Steinel, W., & De Dreu, C. (2004). Social motives and strategic misrepresentation in social decision making. *Journal of Personality and Social Psychology, 86*, 419–434.
- Stewart, C., Raskin C., and Zielaski, D., (2012). Barriers to district level educational reform: A statewide study of Minnesota school superintendents. A manuscript published by *NCPEA Publication, (1.5)*, 1-12.
- Styron, J., Wang, S., & Styron, R. (2009). Considerations of distance education integration: A qualitative study. *Journal of Educational Technology Development and Exchange, 2*(1), 79-98.
- Teague, G. M., & Anfara, V. A. (2012). What research says: Professional learning communities create sustainable change through collaboration. *Middle School Journal, 44*(2), 58–64. Retrieved from <http://www.jstor.org.proxy.lib.odu.edu/stable/41763120>
- Tomlinson, C. (2015). Teaching for excellence in academically diverse classrooms. *Society, 52*(3), 203-209.
- Tschannen-Moran, M. (2009). Fostering teacher professionalism in schools: The role of leadership orientation and trust educational administration 45: 217. doi: 10.1177/0013161X08330501
- Tucker, B. (2007). Laboratories of reform: Virtual high schools and innovation in public education. *Washington, DC: Education Sector*. Retrieved from http://www.educationsector.org/sites/default/files/publications/Virtual_Schools.pdf
- Virginia Department of Education, Instruction, Virtual Learning (2015). Retrieved from http://www.doe.virginia.gov/instruction/virtual_learning/index.shtml
- Virtual High School Web site, April, 2015, retrieved from: <http://www.govhs.org/Pages/AboutUs-ParticipatingSchools>
- Watson, J., and Gemin, B. (2009). *Promising practice in online learning: Policy and funding frameworks for online learning*. Paper. iNACOL.
- Watson, J., Murin, A., Vashaw, L., Gemin, B., & Rapp, C. (2012). *Keeping pace with K-12 online learning: An annual review of policy and practice*. Evergreen Education Group. Retrieved from: <http://kpk12.com/cms/wp-content/uploads/KeepingPace2012.pdf>
- Yin, R. K. (2009). *Case Study Research: Design and Methods (4th ed.)*. Thousand Oaks, CA: Sage.

APPENDIX 1 – RESEARCH DESIGN FOR CASE STUDY



APPENDIX 2 – INTERVIEW QUESTIONS

Teachers Interview Questions:

Introductory questions:

- How long have you been teaching?
- How long have you been at this school?
- How does this school compare with others you have taught at? (If no others, skip to next question)

1. When did you start teaching online curricula? How did that come about?	
2. Describe the online class structure and typical experience for the student and the teacher.	
3. How does online learning benefit your students?	
4. What aspect of teaching online is most challenging?	
5. Who do you go to for help with course issues and methods?	

6. Do you feel comfortable seeking help?	
7. Do you feel confident that problems you have will be addressed or resolved?	
8. What kind of interaction do you have with your administration/principal?	
9. What do you value most about the leadership in this school?	
10. What are your concerns?	
11. What training have you received?	

Leader/Administrator Interview Questions:

Introductory questions:

- How long have you been working in education?
- How long have you been in your current position?
- Describe the school's technology base. Have you found it to be adequate for online access? Was it already in place when you began the online classes? Is it well supported? How is it funded?

1. Were you involved with the implementation of online learning here? Who else was involved?	
2. What outcomes and benefits from using online/blended learning did you consider to be most important and relevant to your school?	
3. How do you measure the outcomes of the online/blended learning programs?	
4. What professional development training and staffing considerations were involved in the implementation? Is there ongoing PD and review?	
5. How often do you visit the classrooms where they have implemented online/blended learning?	
6. Do you seek input from teachers regarding the online program?	
7. Do you meet with online/blended learning teachers individually or as a group? How often?	

8. How would you describe your approach to leadership and interaction with your teachers?	
9. What do you consider to be your personal strengths in supporting this program/school?	
10. What is your vision for the future in online education?	

APPENDIX 3 – ICF

Informed Consent Form for Research Participants

Principal Investigator: Nadine Rupp
Old Dominion University
Sponsor: Dr. Jay Scribner
Project: Dissertation

This Informed Consent Form has two parts:

- **Information Sheet (to share information about the study with you)**
- **Certificate of Consent (for signatures if you choose to participate)**

You will be given a copy of the full Informed Consent Form

Part I: Information Sheet **Introduction**

For my dissertation for completing a Ph.D. in Educational Leadership at Old Dominion University, I am doing research on the challenges that educational leaders and teachers deal with when implementing online/blended learning in the curriculum of high school students. I would like to invite you to be part of this research. Before you decide, you can talk to anyone you feel comfortable with about the research. If this consent form contains information that you do not understand, please ask me to stop as we go through it, and I will take time to explain. If you have questions later, you can ask them of me at any time.

Purpose of the research

Online/blended learning is becoming a part of public school education in many parts of the country. As you know, there is now a requirement in Virginia that high school students must take at least one course on-line before they graduate. Since you have already begun online/blended learning in your school, I would like to learn from your experiences about the challenges you have faced, and how you have dealt with them. It is the intent of this study to help other teachers and administrators in implementing successful online/blended learning programs in their districts.

Type of Research Intervention

Participants will participate in semi-structured individual interviews with the primary researcher for approximately 45- 60 minutes.

Participant Selection

You are being invited to take part in this research because your school recently implemented online/blended learning in the classrooms. The choices you considered are recent and provide a timely opportunity to reflect on current issues that you deal with in your community and in your school. Your thoughts and considerations in making this choice can contribute much to our understanding of the issues important in the implementation process, and may help guide other district leaders in making their choices.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. The choice that you make will have no bearing on your job or on any work-related evaluations or reports. You may change your mind later and stop participating even if you agreed earlier.

Procedures

I am asking you to help us learn more about the issues you encountered in providing online learning in your school. If you accept, you will be asked to participate in an interview with me. During the interview I will sit down with you in a comfortable place at the school or in your office. If you prefer we can also meet at another location of your choosing, that will ensure confidentiality.

No one else will but the interviewer will be present unless you would like someone else to be there. The information recorded is confidential, and no one else will have access to the information documented during your interview. The entire interview will be tape-recorded, but no-one will be identified by name or by school on the tape. The tapes will be destroyed at the completion of the project.

Risks

There is a small risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable talking about some of the topics. However, we do not wish for this to happen. You do not have to answer any question or take part in the interview if you feel the questions are too personal or if talking about them makes you uncomfortable. You may contact Dr. Scribner to receive help with your concerns, and his contact information will be provided to you.

Benefits

There will be no direct benefit to you, but your participation is likely to help identify the challenges and benefits to other school districts, and provide better educational opportunities for children in communities similar to yours. In addition, it is hoped that the process of sharing experiences and insights may provide feedback and self-reflection that may identify ways to improve your program. Since online/blended learning is a new methodology and still evolving,

this study may help review what is working well, and what needs work in the classrooms. It may provide recommendations for expanding your online/blended curriculum and for improved protocols for the future.

Confidentiality

I will not be sharing information about you to anyone outside of the research team. The information that we collect from this research project will be kept private. Any information about you will have a code on it instead of your name. Only the researchers will know what your code is and it will not be shared with or given to anyone.

Whenever something out of the ordinary is being done through research, any individual taking part in the research is likely to be more easily identified by members of the community. We will take extra precautions to ensure your anonymity.

Sharing the Results

What you tell us today will be analyzed as a case study and published as part of the dissertation. However, nothing will be attributed to you by name. The knowledge that we get from this research will be shared with you when we complete the study.

Right to Refuse or Withdraw

You do not have to take part in this research if you do not wish to do so, and choosing to participate will not affect your job or job-related evaluations in any way. You may stop participating in the interview at any time that you wish without your job being affected. I will give you an opportunity at the end of the interview to review your remarks, and you can ask to modify or remove portions of those if you do not agree with my notes or if I did not understand you correctly.

Part II: Certificate of Consent

I have been invited to participate in research about the decision making process in providing online learning classes in my school district. I have read the foregoing information. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print Name of Participant _____

Signature of Participant _____

Date _____

Day/month/year

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

- **The participant will be interviewed in regard to the implementation process of providing online/blended learning classes in this school.**

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual was asked for consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Print Name of Researcher/person taking the consent _____

Signature of Researcher /person taking the consent _____

Date _____

Day/month/year

VITA

Nadine K. Rupp
 Department of Educational Foundations and Leadership
 Old Dominion University, Norfolk, VA

Professional Profile

- Post graduate experience in conducting qualitative research in online learning best practices at Old Dominion University, Norfolk, VA; and in collaboration with Idaho Digital Learning Academy, iNACOL, and Northwest Nazarene University.
- Active Teaching License: State of Virginia - Certified in Middle School Math & Science
- Adjunct Faculty Experience: University of Delaware, Newark, DE and Tidewater Community College, Virginia Beach, VA
- Proficient in HTML, Microsoft Word, Excel, Access.
- Virtual learning environments experience with Schoolnet: dashboard and instructional management and assessment system; and Blackboard: learning management system.
- Software Experience with:
 - Rumm2020 – Rasch unidimensional measurement model software
 - SPSS – Statistical Analytics Software; Dragon – speech recognition software
 - NVivo-10 – data analysis software.
- Business background in project management and change implementation at ARA Services, Philadelphia, PA.

Education

Ph.D. in Educational Leadership. Old Dominion University, Norfolk, VA.
 Dissertation topic - “Online Learning and Effective Leadership: The Importance of Relationship Building and Culture”

MBA: University of Delaware, Newark, DE. GPA 3.44.

BS Food and Nutrition: University of Delaware, Newark DE. GPA 3.36

Information Systems Technology Certificate, Internet Specialist:
 Tidewater Community College, Virginia Beach, VA. GPA 3.65.

Educational Research and Teaching Experience

Local Assessment Research Analyst, Department of Assessment, Research, and Accountability (ARA) Norfolk Public Schools, Norfolk, VA 3 years

Graduate Research Assistant, Old Dominion University, Norfolk, VA.
 Assist faculty in preparing syllabus, reading materials, text notes, and class activities for doctoral level educational leadership courses. 3 years

Teacher, Middle School Math & Science, Virginia Beach City Public Schools

Publication

Transforming K-12 Rural Education through Blended Learning: Teacher Perspectives, iNACOL, December 2014.
 iNACOL Research Committee member and contributor, conducting interviews and transcribing data. <http://files.eric.ed.gov/fulltext/ED561327.pdf>
