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A Case Study Examining How Stakeholders Experience and Perceive Changes in Organizational Structure and Culture Throughout the Paradigm Switch From Traditional to Hybrid Secondary Education

Gabrielle R. Hoffman

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A CASE STUDY EXAMINING HOW STAKEHOLDERS EXPERIENCE AND PERCEIVE CHANGES IN ORGANIZATIONAL STRUCTURE AND CULTURE THROUGHOUT THE PARADIGM SWITCH FROM TRADITIONAL TO HYBRID SECONDARY EDUCATION

A Dissertation
Submitted to the School of Graduate Studies and Research
in Partial Fulfillment of the Requirements for the Degree
Doctor of Philosophy

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May 2018
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While secondary education districts are beginning to implement hybrid and blended learning programs, little research exists that provides insights and guidance into the challenges and organizational change associated with that implementation. One of the first secondary schools to implement blended learning, Cumberland Valley School District provided the site for this mixed methods case study. The research examined the process of implementing hybrid education in a secondary educational environment, and how students, parents, teachers, and administrators experienced and perceived changes in organizational culture and structure. In addition, this study examined challenges and barriers faced by stakeholders, and how the organizational system addressed these challenges in the view of stakeholders.

This mixed methods study used surveys, focus groups, interviews, and classroom observations to gather data about the organizational structure, culture, and barriers. The findings suggest that while the implementation was initially motivated by extrinsic resources, the school district and stakeholders continued the implementation pilot because they were motivated by the new and progressive nature of blended learning. The analysis also identified that the stakeholders faced numerous challenges during the second-year
implementation, with communication throughout the organization presenting the biggest challenge. Despite this, though, stakeholders identified many program successes including student engagement, technology, and flexibility of learning. The qualitative data showed that these successes warrant implementing blended learning in other school districts, and insights from the research provide recommendations for enhancing the implementation process.
ACKNOWLEDGEMENTS

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Thank you to my family—Mom, Patty, Dad, Bill, Sister, Shenley and boyfriend, Cody for your constant support, love, and encouragement. Failure was never an option and you have all supported me in editing, listening to my process, and picking up the loose pieces as I sit at the computer. Your support has meant the world to me.

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CHAPTER 1
INTRODUCTION

In Pennsylvania, the state and local governments are encouraging school districts and educational institutions to implement hybrid education in secondary schools. As a result, many school districts are accepting this challenge. However, little peer-reviewed research exists on this subject. There is no clearly defined framework has been established for implementing such programs. Schools are entering into this new territory with limited knowledge of its potential impact on student learning, school culture, and organizational structure.

To fill this gap, this case study will examine the experiences and perceptions of stakeholders in one high school during the paradigm transition from traditional to hybrid education. Using mixed methods, I will examine the development and transformation of stakeholder perceptions of hybrid education as the school embarks on the implementation process. The research question for this study is, “How do stakeholders in a public high school experience and perceive changes in organizational structure and culture as a school transitions from a traditional educational paradigm to a hybrid form of secondary education?”

The subject of the case study is the Cumberland Valley High School located in central Pennsylvania. I collected data through surveys, focus groups, interviews, observations, and document analysis. In this dissertation research, I explore how and in what ways stakeholders perceive learning and changes in
leadership and organizational structure. In addition, I examine strategies used to overcome challenges faced in the implementation process.

In this introductory chapter, I will provide a brief overview of the existing research on secondary hybrid education. I will also examine why, despite the lack of literature, state and local governments are encouraging school districts to implement secondary hybrid education. I argue that the accelerated implementation process of secondary hybrid education is related to a sense of urgency to teach 21st century learning skills. I will conclude this chapter by suggesting that a case study of Cumberland Valley High School will contribute to the creation of a conceptual framework for the implementation of secondary hybrid education.

**Statement of the Problem**

State and local government agencies as well as local school districts are putting aside a significant amount of funding to plan for and implement a hybrid education model in secondary schools (Cumberland Area Intermediate Unit, 2014; Pennsylvania Department of Education, 2014). Secondary hybrid education is a blend of traditional and digital methods of instruction for students who are in grades 6 through 12. The existing literature focuses primarily on the effects and impact of K-12 online education on secondary schools, and the impact of post-secondary hybrid education on college and university students. However, virtually no research addresses secondary hybrid education and its implementation, yet the differences between distance education and hybrid education are significant (Jackson & Helms, 2008), as are the developmental
differences between secondary and post-secondary students (Ahmed, 2010). Thus, these sources are not helpful for school districts that are interested in implementing hybrid education.

Despite these obstacles, secondary school districts are continuing to seek new educational models. In the following section, I will explore the absence of a conceptual framework for implementing K-12 hybrid education. Against that background, I will examine why policy-makers and students are pushing to make use of technology, the challenges associated with making these changes, and how the lack of research on K-12 hybrid education may affect student academic achievement.

Why New Educational Models?

The No Child Left Behind (NCLB) initiative of 2000 offered choices to families and students, thus creating healthy opposition amongst public school systems and other education sources (Stone, 2008). With the NCLB initiative, distance education and charter schools have increased in Pennsylvania, and public school systems face significant threats and challenges. As students leave the public school system for external education providers, the funding for the student leaves the public school system as well and follows the student to the external education provider. To keep students enrolled in their public institutions (Stone, 2008), and to retain tuition apportionments that they are otherwise required to surrender to charter schools (Stone, 2008), school districts are looking for innovative models of education.
Today’s students are eager to learn by using technology. This gives cyber or blended charter schools a distinct advantage over schools using older teaching models (Huett, Moller, Foshay, & Coleman, 2008; Stone, 2008). By creating new educational modalities incorporating the use of technology, such as distance and/or hybrid learning opportunities (Huett et al., 2008; Stone, 2008), school districts hope to retain students and avoid the financial burden of paying tuition to other institutions.

Providing distance or hybrid learning opportunities in public schools does not guarantee that students seeking innovative technology-driven education will attend the school. Further, implementing a new educational modality comes with its own challenges. Potential issues include discussing and rewriting teacher contracts and evaluations, earning the support of school boards and community members, and identifying adequate funding to pilot and implement the new educational modality. As school districts explore new educational models, they would benefit from having a conceptual framework for implementation to ease the transition. However, no such framework exists within the existing literature on secondary hybrid education.

**Lack of Secondary Hybrid Framework**

Online and hybrid learning is flourishing at the post-secondary level, with over 3.2 million students registered in no less than one entirely online or hybrid course during the fall semester of 2005 (Clark-Ibanez & Scott, 2008). At the post-secondary level, frameworks for implementation have been developed, focusing on student perceptions and motivation, the student as learner, the teacher, and
online training (Corry & Stella, 2012; Hoch & Tracy, 2011; Reid, Aqui, & Putney, 2009; Rice, 2009). However, the lack of research on K-12 hybrid education leaves school districts without a well-developed, workable framework for implementing K-12 hybrid learning. The question remains as to whether post-secondary frameworks can be adapted for a different stakeholder group, namely, secondary school students. In addition to this gap in research, to date, there has been almost no research on how a hybrid learning environment affects student academic achievement.

**Academic Achievement**

Implementing hybrid learning in secondary education can affect student academic achievement, positively or negatively. Without past research or literature on how to properly implement hybrid learning in secondary schools, school districts are going forward without knowing how it will affect student academic achievement. Not only is student academic achievement important for the student, it also affects teachers, principals, school district ratings and employment (Pennsylvania Department of Education, 2015). Given all these unknowns, why is there such a push from policy makers to implement new educational models? The answer to this question lies in the need for today’s students to acquire 21st century learning skills.

**21st Century Learning**

The United States is in the heart of a transformation in demographics, economics, politics, technology, and informational structures. The role of education is paramount in creating students who will be prepared for an unknown
future (Marks, 2013; Slade & Griffith, 2013; Tucker, 2014). Schools need to adjust to the changes with the intention to prepare students to live and work in a complicated, multidimensional, multi-tasking, technology-driven world (Tucker, 2014). Educational policy-makers and students want school districts to teach, practice, develop and master 21st century skills. Hybrid learning pulls students into course content while encouraging these skills (Bassendowski & Petrucka, 2013). Students are encouraged to collaborate, work in teams, solve problems, and be creative in the course of learning these new skills (Marks, 2013; Slade & Griffith, 2013).

How are secondary students going to respond to hybrid learning? No research exists on the topic. However, instructors’ perceptions of secondary students registered for online education courses have been documented. Among this group of instructors, the lack of social interaction inside the classroom was perceived as a shortcoming of this type of pedagogy (Hawkins, Michael, & Graham, 2011; Murphy, 2009; Thomson, 2010). Will a hybrid education model increase social interaction among secondary students? Will hybrid education provide students with the best of both distance and traditional education? Will implementing hybrid education in public schools retain enrollment in students’ home school districts? The answers to these questions remain to be answered.

This case study will be one of the first of its kind to explore the implementation of hybrid education in a secondary school. This case study will address the current gap in the literature on the subject of implementation of hybrid education at the secondary school level. The data compiled during this
case study will assist future researchers, school districts, and policy-makers to understand the dynamics between stakeholders during a change in educational modalities, thus overcoming one of the main obstacles confronting school districts that are implementing hybrid learning.

Having described the lack of research on the subject of secondary hybrid education, in the following section I will present the rationale and significance for completing a case study on the implementation of secondary hybrid education.

**Rationale and Significance**

One of the goals of the United States Department of Education is to foster student success and prepare for universal competitiveness by promoting educational excellence and guaranteeing equal access for all students (2014). One way to achieve this goal is through hybrid education. Secondary schools across the country have begun implementing various forms of hybrid learning. As such, federal, state, and local governments are providing experimental funding for this cutting-edge educational model and implementing new forms of learning for today’s students. In Pennsylvania, the Ready to Learn Block Grant was made available to public schools in 2014, allocating more than $10 billion in state funding to support public schools that implemented hybrid learning (Commonwealth of PA, 2014). A goal of this study is to provide the state, school districts, and schools with strategies and insights into the implementation process of secondary hybrid education. Ultimately, data from this case study and other similar studies will lead to developing a conceptual framework for the implementation of hybrid education in secondary education.
This case study is not only important to the stakeholders who are directly involved in the changes, such as the parents, teachers, students, school board members, and administrators, it is also important to taxpayers within the community, and to policymakers and organizations that provide funding to secondary education institutions. While this case study will not provide an evaluation of or guidelines for implementing hybrid education, it will provide knowledge and data that can lead to increased comprehension of its implications of benefiting multiple constituents. In particular, educators, community funders and policy makers can all benefit from a narrowed understanding of challenges, as well as perceptions of success, leadership, and culture.

This case study will not provide the wider community with an evaluation of, or a concrete framework for implementing hybrid education. However, it will provide knowledge of the challenges and barriers faced throughout the implementation process. Data gathered from stakeholders about their perceptions of success, leadership, and culture will also be valuable to the community.

The existing organizational structure of the secondary school, including faculty, leadership and school culture, will have a bearing on the success of the change from traditional education to hybrid learning. Overall, these changes are expected to impact the school’s structure and function as they did at the post-secondary level, where hybrid learning has been shown to change the organizational structure and culture of the institutions, increase student learning and personalization while creating greater student control and flexibility (Patrick,
Kennedy, & Powell, 2013). Structural changes may also include more effective use of human capital, facilities, time, resources and technology to support personalized learning (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Patrick, Kennedy, & Powell, 2013).

The literature suggests that challenges related to technological, pedagogical, and academic frameworks be addressed as part of the implementation process (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Graham, Woodfield, & Harrison, 2013). In keeping with these recommendations, this case study will report on how stakeholders are addressing the various changes and challenges to the school system in each of those areas.

In this section I have discussed why a case study on the implementation of secondary hybrid education will be meaningful and valuable to the wider community and to the educational community. In addition, I have provided an explanation of why critical observation of the changes in organizational structure can provide in-depth knowledge of the transition from traditional to hybrid education. The context of this case study will be further elaborated in the next section.

**Research Questions**

This case study examines the following research question: “How do stakeholders experience and perceive changes in organizational structure and culture during the transition from a traditional educational paradigm to the new hybrid system being implemented in secondary schools?”

The research objectives will explore:
• Stakeholder perceptions of hybrid education before and after the implementation process;
• Stakeholder perceptions of meeting the 21st century learning needs of secondary students in a hybrid education model;
• Organizational structure changes in culture, faculty, and leadership;
• Strategies used to overcome challenges faced in the implementation process.

However, in order to interpret and use the findings, it is essential to have a basic understanding of the subject, i.e., the Cumberland Valley High School. In the following section, I will discuss its location, demographics, and the reasons for the school district’s decision to implement hybrid education.

**The Case Study Site: Cumberland Valley High School**

The subject of my case study is Cumberland Valley High School in the Cumberland Valley School District (CVSD). Cumberland Valley High School provides extensive educational opportunities both inside and outside the classroom for over 2,573 students (CVSD, 2014). The High School is located outside of Harrisburg, Pennsylvania in a suburban/rural community. Overall, the high school population has a population of economically disadvantaged students (15.3%), English Language Learners (1.5%), a special education population (13.5%), and a non-White population (18.5%) (PDE, 2014).

Dr. Cody Smith, the Supervisor of Curriculum, Instruction, and Technology, reports that being forward-thinking is critical in order to meet the needs of all students in the school district (C. Smith, personal communication,
September 28, 2015). Therefore, the school district and its stakeholders are seeking to improve learning using an enhanced technological learning environment that promotes 21st century learning while maintaining rigorous academic standards (C. Smith, personal communication, September 28, 2015).

The motivation for initiating a hybrid learning environment at Cumberland Valley is made clear in their mission statement. As described in the school district’s mission statement, the High School “is committed to developing 21st century learning and thinking skills through rigorous, relevant, and comprehensive curriculum, while preparing students to be innovative, productive citizens in an interconnected world” (CVSD, 2014).

In addition, there is an emphasis within the state of Pennsylvania on “K (kindergarten) to Keystone.” Keystone refers to assessments that are designed to gauge adeptness in selected subject areas and are one component of Pennsylvania’s newly designed high school graduation obligations. The goal of the state is to use the Keystone Exams to assist school districts direct students in the direction of achieving state standards (Pennsylvania Department of Education, 2014). With the state highlighting this initiative, Cumberland Valley High School has begun to address the possibilities of increasing learning opportunities for their students. Dr. Smith states that the High School is exploring unique and flexible ways to meet the needs of Cumberland Valley students beyond the traditional school day, as part of the K to Keystone process (C. Smith, personal communication, September 28, 2015).
According to Dr. Smith, Cumberland Valley High School is prepared to enhance the school’s technological learning environment to connect the varying needs of its students (personal communication, September 28, 2015). In addition, he states that the High School is committed to thinking “outside the box” to move forward in offering varied opportunities, including hybrid learning for students. (C. Smith, personal communication, September 28, 2015).

**Case Study Focus**

This case study will focus on the process of introducing and implementing hybrid education at Cumberland Valley High School. The purpose of the study is to gather data from school stakeholders about how they experience and perceive changes in the organizational structure and culture during the shift in educational modalities. Insights gathered from this study may prove helpful to other secondary education schools that are interested in implementing a hybrid education. School stakeholders, such as parents, teachers, administrators, and students may also relate to the experiences and perceptions of the other stakeholders in this case study. Community members and stakeholders will also gain additional insight into their own perceptions about implementing hybrid education, or a different educational modality, in a school or school district in their community. This case study will add to the body of knowledge on hybrid education, specifically delivering insights into stakeholders’ perceptions and experiences about the organizational structure and culture during the process of implementing secondary hybrid education.
In order to better understand the case study, the reader should be familiar with Cumberland Valley’s academic achievement, course offerings, comprehensive and strategic plans, and its readiness to implement technology-enhanced learning, such as hybrid education. In the following sections, I will discuss these areas as related to Cumberland Valley High School.

**Academic Achievement**

Cumberland Valley High School is positioned as one of the top high schools in the state and nation. It is ranked 23rd in the State, and has a United States ranking of 1012/19,400 (Cumberland Valley High School, 2015). The average student SAT score at Cumberland Valley is 1633, which includes Writing (Critical Reading -544; Math-569; Writing-520) (Cumberland Valley High School, 2015). The school district’s academic achievement is driven by access to diverse and comprehensive program offerings that meet the various needs of the student body.

**Course Offerings**

According to the school’s website, the main goal of Cumberland Valley High School’s curricular offerings is to provide students with a broad educational program that challenges their learning, while giving students an opportunity to explore their potential in a variety of ways. While graduation requirements are similar to those in other Pennsylvania schools, the academic offerings, facilities, and extracurricular activities are unique to the region. For example, students have the option to participate in Agriculture and International Baccalaureate classes, Cumberland Valley has a “campus” where you find multiple
gymnasiums, state of the art aquatic facilities, and an outdoor commons area, as well as, numerous clubs and PIAA sports ranging from chess and debate club to cheerleading and football. The ultimate goal is to offer students an opportunity to learn when and where they learn best. Thus, Cumberland Valley would like to expand educational experiences to include internships and career and job opportunities (Cumberland Valley High School, 2015).

The new hybrid learning program is aligned with this goal. It will be implemented in a limited number of classes, including, German I, Level 3 Biology, Level 2 American Literature, and Government. Over time, the school district will seek to expand the initial blended learning opportunities to include more students in order to increase learning beyond the typical school day. The implementation of hybrid learning is included in the district’s current comprehensive plan.

The next section will highlight aspects of the district’s comprehensive and strategic plan that support the implementation of hybrid learning at Cumberland Valley High School.

**Comprehensive and Strategic Plans**

Cumberland Valley’s comprehensive and strategic plans identify many conditions for implementing diversified learning, including hybrid learning (Cumberland Valley School District, 2015). The school district’s comprehensive plan, allows the leadership to evaluate current facilities for the purpose of enlarging flexible learning areas. This includes making changes to the physical...
structure of the school. In addition, the district's strategic plan has identified goals that are precisely related to the implementation of hybrid learning:

- “Provide equipment and training so students and staff will be technologically competent.
- Revise and update curriculum systematically to provide students with the most current academic opportunities.
- Maintain an educational environment that meets the diverse academic, social, emotional, and physical needs of our students.
- Tailor teaching strategies and scheduling to meet the needs of students.”

(Cumberland Valley School District, 2015)

As can be observed in the district’s comprehensive and strategic plans, Cumberland Valley School District maintains a philosophy of moving forward, being progressive, and enhancing an already quality education for all students. Implementing a hybrid educational model is aligned with their vision. In the next section, I will discuss how Cumberland Valley has prepared thus far to implement hybrid learning.

**Readiness**

Dr. Smith states that a progressive school district, Cumberland Valley is constantly evaluating changes in instructional practices, assessment creation, data evaluation, and the utilization of technology. Regarding the latter, school district’s most recent Clarity Survey showed that 98% of teachers and students have access to the Internet at home and 95% and 96% of teachers and students
respectively have access to a device at home (Cumberland Valley School District (CVSD) & Bright Bytes, 2015). In addition, 66% of teachers report a typical student-to-computer ratio of 2:1 or 1:1, and 82% of teachers indicate that, when needed, they can access devices for their students more than half of the time (CVSD & Bright Bytes, 2015). In addition, 82% of teachers and 75% of students surveyed believe that using technology for learning and in daily life can enhance overall learning (CVSD & Bright Bytes, 2015).

Currently, the High School is revising graduation requirements to meet state guidelines as outlined in Chapter 4, as well as to give students the opportunity to individualize their learning to accommodate their personal interests and areas of need (Cumberland Valley High School, 2015). In light of this, Cumberland Valley’s Board of School Directors has adopted a Personal Electronic Devices Policy to include a Bring Your Own Device initiative (C. Smith, personal communication, September 28, 2015).

Through this initiative, students who attend Cumberland Valley High School are permitted to bring their own device to school and use the open network. In addition, the High School allows students to use their phones within the building during certain times of the day. Dr. Smith states that providing freedom with limitations allows the use of cellular devices for instructional purposes in the classroom and also helps students to prepare for life post high school (personal communication, September 28, 2015). If a student does not have access to a device, the school district provides one for that student to use during the school day.
The high school leadership team fully supports the use of technology by faculty as well as students. For example, teachers have not only embraced teaching with technology, they have also begun using technology, such as Eduplanet 21, as an on-line format for professional development. This model allows teachers to meet their individual learning goals, provides differentiated professional development, and allows teachers to understand how to use technology to learn (Cumberland Valley High School, 2015). In addition, the high school has four technology specialists who are full-time teachers and who provide technology training based on the needs of the teachers. Cumberland Valley High School promotes staff collaboration on curriculum, lessons, assessments, data analysis, and sharing best instructional practices (Cumberland Valley High School, 2015).

Finally, in the spring of 2014, the Montgomery County Intermediate Unit administered a technology audit for the school district (Cumberland Valley High School, 2015). The audit allowed the district to evaluate the needs of each building within the district. The findings of the audit have given the district a foundation for building the technology component of its Comprehensive Plan (Cumberland Valley High School, 2015).

In short, Cumberland Valley sees itself as a progressive, forward thinking school district and thus, positioned itself on the front lines of innovation. Piloting hybrid education as a pedagogical strategy is aligned with the district’s vision, mission, and position.
Summary

In conclusion, this chapter has established that despite the lack of research on implementing hybrid education at the secondary school level, policymakers are driving school districts to implement hybrid learning. Despite the lack of research, Cumberland Valley School District proceeds with implementation in order to meet varying students’ needs, including acquiring 21st century learning skills. The research question for this case study is thus very timely, in that it seeks to add to the body of knowledge on how stakeholders in a public high school experience and perceive changes in organizational structure and culture as the school transitions from a traditional educational paradigm to a hybrid form of education.

The next chapter will explain the components of the conceptual framework used to inform this case study. In addition, 21st century learning and past research will be discussed as they relate to the Cumberland Valley High School.
CHAPTER 2
LITERATURE REVIEW

The purpose of this study is to understand the implementation process of a hybrid education model at the secondary education level. I will focus my observations on stakeholder experiences and perceptions of changes in organizational structure and culture throughout the paradigm switch of educational modalities. In this chapter, I provide a literature review that supports the conceptual framework of this study. This chapter begins with an overview of terminology, followed by a review of research completed on distance and hybrid education. I then describe intellectual concepts that will frame this study. This begins with a discussion of the organizational structure of education, focusing on the influence of organizational culture and motivation, technology and structure contingency factors, and organizational flexibility. Then I examine the implications of pragmatism and connectivism when addressing a new model for secondary education. I conclude this chapter with my perceptions of hybrid education and what I believe to be missing from the literature.

Terminology

To make connections and develop a framework for this study, commonly used terms, such as hybrid education and distance education need to be defined to provide a common understanding. This section will contain the definitions of key terms used throughout this dissertation.
Definitions

**Education modality.** Education modalities refer to the organization and structure of how a student is receiving their education. In this dissertation, the educational modalities that are referred to are traditional education, distance education, and hybrid education.

**Traditional education.** Traditional instruction is face-to-face instruction that takes place between the instructor of a course and students (Hoch & Dougher, 2011; Rice, 2009). Traditional instruction is typically delivered in a classroom setting (Hoch & Dougher, 2011).

**Distance education.** Distance education is instruction designed to take place through the use of computer hardware and software, websites, web-based applications, services and resources, and communication technologies where the teacher and students are not in a traditional classroom environment (Corry & Stella, 2012; Rice, 2009). Distance education can take place either synchronous or asynchronous through various multi-media means (Corry & Stella; Rice, 2009). In distance education, face-to-face communication between the instructor and student often does not exist.

**Hybrid education.** Hybrid education is a blend of traditional and digital methods of instruction using digital content, technology, and applications, and fosters some amount of student power over time, pace, path, or place (Cowan, 2012; Jackson & Helms, 2008; Lin, 2008). The percentage of each element is determined by the amount of teaching and learning. Hybrid education can also be referred to as blended education or blended learning.
Secondary education. Secondary education takes place at the conclusion of primary school and before post-secondary school. Students enrolled in secondary school are between the ages of 11 and 18 years old; however, they can be as old as 21 years old (Rice, 2009). In the United States secondary education fluctuates among school districts but usually consists of grades 6, 7, 8, and 9 through 12. However, grade 5 can sometimes be included. Students enrolled in grades 9 through 12 are most often in a “high school” environment. Secondary education is considered compulsory education in most countries; however, some countries only consider primary education as compulsory. (Pennsylvania Department of Education, 2018)

Post-secondary education. Post-secondary education is an optional or final stage of formal education that takes place after secondary school. Post-secondary education can be delivered to students at universities, colleges, and institutions of technology (Ackerman, 2008). Students may also attain a post-secondary education at vocational schools and trade schools.

Digital instruction. Digital instruction includes instructional strategies designed to integrate the use of computer hardware and software, technology, websites, web-based applications, services and resources, and communications technologies to enhance learning (Rice, 2009).

Cyber schools. Cyber schools are public or private schools that provide full time digital instruction to resident school-aged students.

21st century learning skills. Twenty-first century learning skills include innovative skills that will prepare students for success in an increasingly complex
life and work environment (Marks, 2013). Twenty-first century learning skills include the use of technology and teaching critical thinking, communication, problem solving, creativity, collaboration, and innovation (Marks, 2013).

With some of these terms, like “secondary education” have been in use for many years, others such as “hybrid education” and “digital instruction” have emerged only recently. These newer terms refer to the profound changes taking place in education, changes that constitute what we refer to as 21st century learning. What this is, and what it means for education is the subject of the next section.

21st Century Learning: A New Form of Learning

The United States is in the midst of a transformation, as technology advancements have led to new globalization in the last 20 years. This in turn has changed the landscape for the workforce of tomorrow. Therefore, education is critical in preparing students who are already skilled with the technology itself, but who are capable of adapting to the changing workplace environment and culture. These new skills are often referred to as 21st century skills.

Schools must adapt to the changing demographic, economic, political, technological, and informational structures to prepare students to live and work in a multifaceted, multi-tasking, technology driven world (Tucker, 2014). Twenty-first century skills will include the use of technology, critical thinking, communication, problem solving, creativity, collaboration, and innovation (Marks, 2013; Slade & Griffith, 2013). And in order to facilitate mastery in these areas
today’s schools must utilize new types of learning (Marks, 2013; Slade & Griffith, 2013).

In light of this, Irvine, Code, and Richards (2013) argue that 21st century learners have expectations that are not met in the traditional classroom. For example, 21st century teaching should include more pull, instead of push. This means that teaching should focus on skills that encourage processes that involve collaboration, cooperation, building communities of learners, and engagement with students (pull) instead of educators passing information onto their students through typical methods, like lecturing (push) (Bassendowski & Petrucka, 2013).

Research suggests that hybrid learning may be the best environment in which to develop, practice, apply, and master 21st century skills (Bassendowski & Petrucka, 2013; Marks, 2013). For example, case studies with post-secondary students found that the combination of traditional and online instruction was necessary to develop new forms of learning (Marks, 2013). In this study, the students experienced the most growth in classifications of learning and innovation skills, and information and technology after completing a hybrid course.

In order to prepare students well for these new workforce demands, educators are increasingly feeling it is imperative to evolve the educational system to support 21st century skills. The next section will review past and current research as this evolution is taking place.
Review of Research

Introduction

Today’s education is significantly different than education 50 or even 20 years ago due to the development of the internet, and the emergence of distance education. And as distance education developed researchers began to identify its potential and challenges, and to develop online pedagogy. As a result, hybrid or blended learning then surfaced and a new way of learning and teaching was launched. Hybrid learning is fairly new and has been implemented and studied predominantly in post-secondary education. Further, the focus of most studies has been on student and faculty perceptions. However, more recent studies have begun to look at the actual implementation process and components of possible educational frameworks. The following section examines the development and transformations of distance and hybrid education to date.

Research on How Distance Education Has Changed Education

Distance education has transformed education. Emerging slowly at first, distance education was grown exponentially in most recent years, as the development of the Internet, online tools, software delivery, and social media has expanded distance education beyond the walls of televised lectures (Corry & Stella, 2012; Rice, 2009). Today, web-or internet-centered education refers to the method of distance education that takes place on the Internet for curriculum content delivery and can include virtual schools (Rice, 2009). Virtual schools offer an alternative to education K-12 and post-secondary students (Reid, Aqui, & Putney, 2009; Rice, 2009). Reid et al. (2009) noted that the first reference to
virtual schools in the literature was in Canada, with the United States first two virtual schools established in 1997. Since then, presence of virtual schools and online courses has grown significantly. Corry and Stella (2012) indicate that more than one million of the 63 million primary school students in the United States have completed an online course. In addition, one out of every four college students and one in 20, K-12 students have taken at least one online course (Corry & Stella, 2012).

Furthermore, Rice (2009) found that forty-two states presently offer K-12 supplemental or full online programs. In addition, some states are taking the distance education trend a step further and mandating that K-12 students experience some form of online learning before graduation (Corry & Rice, 2012). Further, all states now have a method of offering cyber-online school operating within its boundaries (Rice, 2012). As distance education continues to grow and transform, one challenge for stakeholders is to effectively understand and evaluate how distance education impacts the student.

**Research on Educational Outcomes Using Distance Education**

In one of the earlier studies, Reid et al., (2009) examined one school district during their first year of a virtual high school program. The evaluation’s purpose was to examine why the school district established the program, the challenges faced during implementation, the evolution of the program, and issues to be considered in the future. The researcher proposed that implementing a virtual high school would offer four benefits for students: “expanded curriculum offerings, technology-rich instruction, wealth of information available on the
Internet, and enhanced teacher technology skills” (Reid et al., 2009). Observations, document and web-page content, and interviews were used to qualitatively evaluate the implementation of the virtual high school (Reid et al., 2009).

Through that study, the school district realized that the use of forward thinking technology did not promise educational success (Reid et al., 2009). Indeed, this case study found that in this situation, a virtual high school needed more than competent online teachers and courses for student success, specifically, that “organizational, structural, and legal requirements associated with achieving local, state, and national academic goals need to be met” (Reid et al., 2009). Throughout the implementation of the virtual high school, the school district also revised and created policies to address challenges faced. One such revision was that all students interested in the virtual high school were to be screened based on prior academic achievement, school absences, disciplinary record, and were to complete a face-to-face interview with a virtual high school staff member before being accepted for the next school year (Reid et al., 2009).

Later research gathered data from three distance education rounds and compared data using descriptive statistics (Rice, 2009). Rice (2009) found that K-12 distance education can impact the traditional educational setting and provide additional opportunities for students. In addition, the “results of this study provided a framework for K-12 distance education that placed a focus on 1.) evaluation of course design and delivery, 2.) best practice, 3.) accountability, 4.)
access, 5.) online learning/learners, 6.) professional development, 7.) accreditation/standards, 8.) funding, and 9.) technology.”

Corry and Stella (2012) gathered data and empirical research on innovations and breakthroughs in the field of distance education prior to its implementation in the classroom. Through rigorous research, Corry and Stella developed a conceptual framework for K-12 distance education with the following nine components: “learners, teachers, materials, delivery, methodology, evaluation, administration, international, and history.” (2012) The researchers believe that the categories of the conceptual framework allow relationships to be defined and discovered, as well as, provide direction for future research (Corry & Stella, 2012).

In another study, Abrami, Bernad, Bures, Borokhovski, and Tamin (2011) quantitatively verified the significance of three types of interaction that are necessary in K-12 distance education in order for it to be successful. The results of Abrami et al. (2011) verified the significance of student-student, student-content, and student-instructor interaction for student learning to take place. Abrami et al. (2011) argued that based on the study, the next generation of distance education ought to be created to promote and facilitate more purposeful interactions using principles from the theories of self-regulation and multimedia learning, research-based motivational principles and collaborative learning principles.

Research conducted by Powers, Alhussain, Averbeck, and Warner (2012) found a need for a dramatic change in the implements that are used in today’s
technology-based distance education. The focus of the study was on how to use today’s technology and social media to engage students in active, life-long learning experiences. It found that teachers needed to change the pedagogy used in their classrooms (Powers et al., 2012). Based on this, Powers et al. (2012) argued that distance education will need to evolve with time to use new collaborative technological tools that will ensure learning today and into the future.

In another study, Murphy (2009) found that distance education needed to provide an opportunity for students to meet face to face with other students, and with the instructor. Further, students in Hawkins’ (2011) and Thomson’s (2010) studies were successful in the distance learning environment if they were already advanced learners; however, students who struggled in traditional education, also struggled in distance education. The literature suggests evidence-based pedagogy needs to be developed that meets the needs of not only the high achieving students, but also those students who struggle. I suggest that hybrid learning may meet the needs of students who are not already high achievers.

**Research on Hybrid Learning**

Hybrid learning was developed by integrating two educational environments—face-to-face or traditional learning with online learning (Lin, 2008). A traditional learning environment offers verbal communication, with visual cues and body language “transmitted in real time, whereas online communication occurs in virtual time in written text without the aid of body language” (Lin, 2008). However, students involved in online learning
communicate through feelings, personal greetings and humor. (Lin, 2008). In addition, written communication affords students the opportunity for reflection and precision of expression, whereas face-to-face communication is fast paced and spontaneous (Lin, 2008). Lin suggests that these two distinct learning environments thoughtfully integrated should logically increase the educational possibilities for today’s students.

**Research on the perceptions of hybrid learning.** Students’ attitudes have been assessed to better understand hybrid learning by comparing traditional with online learning, as well as their attitudes toward hybrid learning. One study with post-secondary students found that the students who preferred online learning were those who valued “convenience and flexibility more than interaction with the instructor and their peers” (Lin, 2008). Despite this, students who were taking online courses were less satisfied with the overall course than students taking the same class in a traditional learning environment (Lin, 2008). Further, in the beginning of this one-year case study, students’ attitudes towards hybrid learning varied.

However, ultimately the results showed that a majority of the students held positive views on hybrid learning, despite several students facing challenges. Research found that the hybrid learning environment provided the opportunity for diversified teaching and learning, which was preferred by 81% of the students enrolled in the hybrid class (Lin, 2008). However, students enrolled in the hybrid class reported that they lacked technological skills needed to be successful and encountered difficulty with accessing high-speed internet (Lin, 2008). These
barriers negatively impacted students’ attitudes towards their learning (Lin, 2008). Lin argues that while the majority of today’s students have grown up using technology, they have also grown up learning in a traditional classroom. Thus, students need to be educated regarding the educational benefits of combining online instruction into the learning environment.

Yudko, Hirokawa and Chi (2008) also built on studies that examined the attitudes of college students in a hybrid course. They found that students’ attitudes towards the hybrid course were positive, although many students believed that the hybrid course would have a negative impact on their attendance (Yudko, Kirokawa, & Chi, 2008). Despite this though, students did not self-report an actual impact on their attendance for the duration of the hybrid course (Yudko, Kirokawa, & Chi, 2008). All in all, students in this study felt that the addition of technology benefited their learning; however, this was the truest for students who declared themselves computer/Internet literate (Yudko, Kirowkawa, & Chi, 2008).

In another study completed by Ahmed (2010), post-secondary students’ acceptance of hybrid learning was measured using the following factors: “instructor characteristics, information technology infrastructure, and organizational and technical support.” Structural equation modeling was used to examine the relationship among the three factors and their effects on the learners’ acceptance of hybrid learning. The results showed that “all three factors significantly and directly impacted the learners’ acceptance of hybrid courses.” (Ahmed, 2010) Instructor’s attitude concerning hybrid learning methods were greatly dependent on the organizational support and the willingness and
consistency of the information technology provided (Ahmed, 2010). This then positively or negatively affected the attitude of both learners and instructors. In line with other studies, Ahmed’s (2010) study revealed that learners’ attitudes regarding hybrid learning were mostly positive despite challenges faced.

A study completed in 2011 comparing a traditional post-secondary course with a hybrid course found consistent results with previous studies. Hoch and Dougher (2011) found that students who showed less satisfaction with the hybrid course may have been less satisfied as a result of student biases, instead of the different educational modality. Hoch and Dougher’s (2011) study found that students who preferred hybrid learning did so because of the increased flexibility and independence, but the students who favored traditional education, disliked the reduced instructor contact in a hybrid learning environment. Learning outcomes were not statistically different based on the educational modality (Hoch & Dougher, 2011). Therefore, Hoch and Dougher (2011) concluded that previous online and traditional learning experiences affect student attitudes towards hybrid learning.

**Lessons learned through research on hybrid learning.** In addition to examining student perceptions, researchers have also begun to study hybrid learning’s strategies, implementation, evaluation, and frameworks. For example, a study completed by Cowan (2012) placed an emphasis on collaborative problem-based learning using hybrid education. Cowan (2012) found that program completion and retention rates were greater than online programs, and higher even than tradition face-to-face post-secondary programs. One key to this
program's achievement was the use of a community of practice model that used the following four strategies: 1.) established a community, 2.) take advantage of professional experience diversity, 3.) provide a process for community development, and 4.) use multiple levels of expertise (Cowan, 2012). The program saw some success, particularly with continuing community; however, the study noted some challenges as well. Specifically, some students struggled working in teams and interacting with several different peers (Cowan, 2012).

Another focus in literature has been on creating a new "learning space" for students. Wilson and Randall (2012) completed a study on an environment for implementing hybrid learning that would be intended to develop collaborative and small group learning and enable and simplify the use of new technologies. The "pod room" was developed to be different than the traditional classroom. The "pod room" had student pods or desks for collaboration, a teacher workspace, informal breakout areas, and whiteboards throughout the entire room for student and instructor use (Wilson & Randall, 2012). The study found that this environment enhanced learning experiences and opportunities for students by creating an environment that expanded and enhanced the collaboration that took place in the online portion of the hybrid learning environment. In line with other studies, it was evident that professional learning opportunities for staff could optimize student perception of learning and delivery of content (Wilson & Randall, 2012).

Later research by Owston (2013) found that despite the advantages of hybrid learning, many universities are struggling to implement and increase
enrollment. Owston (2013), suggests that in order to increase enrollments in blended learning and to implement the new learning modality successfully, there needs to be a “champion” or advocate who will initiate and sustain the initiative, particularly in the beginning stages. In addition, Owston (2013) discovered in implementing hybrid learning, faculty involvement in course re-design and a shared vision are essential. These concepts related to institutional change are new; however, it is important to remind stakeholders that the implementation of hybrid learning is not unlike proposing any kind of innovation to existing organizations. Alignment of instructional goals and coherence during the implementation process is key to hybrid learning’s success (Owston, 2013).

The results of Gedik, Kiraz, and Ozden’s (2013) research suggest that the combination of two learning environments demanded a new design approach that requires harmonizing the environments. The study found that the joint use of online and face-to-face environments aroused student interest and flexibility, and allowed more time for student activities. In addition, hybrid learning increases teachers’ ability to easily track student growth, and to engage students in extensive interaction, collaboration, and communication (Gedik, Kiraz, & Ozden, 2013). However, the instructor was challenged by managing the course workload and overlaps (Gedik, Kiraz, & Ozden, 2013). In this instance, the pedagogical approach was determined to be a critical factor in the course design. The researchers identified motivation, interaction, communication, and cooperation as key instructional strategies in creating harmony between the online and face-to-face environment (Gedik, Kiraz, & Ozden, 2013), and argued that hybrid
education should build upon these characteristics. Like other studies, instructor competency in regards to technology and technical issues such as, availability, usability, and maintenance were critical, and that they directly impacted the success or failure of the hybrid learning implementation (Gedik, Kiraz, & Ozden, 2013).

Limited research exists regarding how course design and delivery affect course outcomes, and how these processes affect student reported satisfaction and achievement. A study on post-secondary students examined how applying the seven principles of effective teaching—high expectations, student-faculty communication, timely feedback, collaboration among students, active learning, time on task, and respect for various talents and several ways of learning, impact student satisfaction and achievement (Sowan & Jenkins, 2013). Students who reported high satisfaction with the course were those students who participated in a course that focused on these seven principles (Sowan and Jenkins, 2013). This led them to conclude that the principles led to a successful interactive hybrid course. The actions also suggested that self-regulation be added as an eighth principles to ensure an efficient delivery process and satisfying learning experiences for students.

Graham, Woodfield, and Harrison (2013) were among the few researchers to focus on the implementation of hybrid learning in higher education. In this study, the researchers identified three stages of implementation. The first, awareness and exploration, places a focus on the school or institution identifying a problem that needs to be solved, and a goal of improving the problem with the
implementation of hybrid learning (2013). For most institutions, this problem involved addressing challenges to do with growth, cost, or need. Stage 2, adoption and early implementation, placed the focus on modifying organizational structures to help the initiative succeed. In particular, institutions established resources for instructor pedagogical training and course development (Graham, Woodfield, & Harrison, 2013).

In the final stage described in the study, mature implementation and growth, the institution focused on evaluation and data-driven decision making (Graham, Woodfield, & Harrison, 2013). In all of the institutions in Graham, Woodfield, and Harrison’s study hybrid learning began at the faculty level and gained momentum when an administrator became its advocate. Despite the success in all cases, the majority of adoption and implementation work was geared toward helping and supporting faculty rather than on students, and the majority of barriers faced involved institutional policies, structures, and lack of technological support (Graham, Woodfield, & Harrison, 2013).

Summary

Research has shown that traditional education was first transformed by distance education, which has currently led to the adoption of hybrid or blended learning. The majority of studies performed in post-secondary education have found significant success with providing students with a flexible learning environment, collaboration, and motivation to succeed. However, lack of technological support and teacher preparedness have been identified as significant downfalls to hybrid learning at this level. To date no published
research exists regarding how the implementation of hybrid learning will impact students in grades 9-12. However, the existing research will assist in developing the framework that will guide this case study’s design to answer that question. The following section will describe the conceptual framework I will use to conduct the case study.

Conceptual Framework

Organizational Structure

Studying the organizational structure of the hybrid learning environment is important to the overall implementation of hybrid learning, because the organizational structure can define how tasks are divided, grouped, and coordinated throughout the school environment. The structure of the hybrid learning environment can clarify the roles that stakeholders have, how they perform those roles, and can make clear each individual’s responsibilities to the group. Organizational structure is the first influence I will discuss as it informs the researcher about secondary hybrid education.

Figure 1. How organizational structure informs secondary hybrid education.
One of the foremost sociologists, Max Weber studied modern bureaucracy in the early 1900s. Theory development has moved from Weber’s ideal-type model of bureaucracy to today’s contemporary elements of organizational structure. Elements from modern organizational theory to contemporary organizational theory may be useful in examining the adaptability of stakeholders during the implementation of hybrid learning at Cumberland Valley High School. The following section will provide a brief overview of historical and theoretical background of organizational structure and how it will contribute to this study.

**Weber’s theory of bureaucracy.** While today’s organizations have evolved to become more complex, Weber’s ideal-type model of bureaucracy can still be useful in understanding those organizations. Two of Weber’s six elements of bureaucracy have been extracted from his work and will be used to examine the transformation of traditional education to hybrid education. Weber’s original six elements of bureaucracy are: (a) division of labor, (b) hierarchical structure of office, (c) written guidelines prescribing performance criteria, (d) recruitment to offices based on specialization and expertise, (e) office holding as career, with the ability to rise in position within the system, and (f) duties and authorities attached to a particular position, not the individual (Jaffee, 2008; Tompkins, 2005). In this section I will focus on Weber’s division of labor and hierarchical structure of office.

As secondary education systems seek to adapt and create a new form of education using a hybrid model, Weber’s theory of bureaucracy may be used to understand the management and implementation of the new academic system.
Weber’s theory of bureaucracy may also inform the researcher on how stakeholders can manage organizational tension, conflict, and stability (Jaffee, 2008). Finally, understanding Weber’s concept of division of labor and hierarchical structure will assist the researcher in creating meaning and understanding about the organizational structure of the hybrid learning environment.

**Division of labor.** In Weber’s bureaucratic theory individuals are recruited based on their qualifications for a particular task (Jaffee, 2008; Tompkins, 2005; Weber, 1946). Each individual is assigned to specific duties, with clear responsibilities and authority based on their capacity and skills (Jaffee, 2008; Tompkins, 2005; Weber, 1946). This concept can be used to analyze stakeholder’s assignments to jobs based on their certifications and skills. If Weber’s division of labor is evident within the hybrid learning system I should observe clear definitions of stakeholder responsibilities and authority within an employee manual or contract.

Characteristics of Weber’s division of labor are apparent in current literature discussing the creation of an implementation team. Cowie and Nichols explain that an implementation team, especially for hybrid learning, should consist of team members with varying specific job expertise (2010). Cowie and Nichols (2010) and Graham, Woodfied, and Harrision (2013) discuss that successful implementation teams consist of experts in single skill areas that complement each other, instead of creating a team of individuals who are proficient in many different skill areas. As in the literature, this concept will guide
data collection and analysis regarding the division of labor, including the skills, responsibilities, and authority with implementing the new hybrid program at Cumberland Valley.

Hierarchical structure. In Weber’s bureaucratic structure each organization is arranged hierarchically according to the individual’s assigned authority. This organizational structure differs from charismatic or traditional administration in that the bureaucratic system has clearly defined chain of command where the individuals with more authority have control over the activities of those below them (Jaffee, 2008; Tompkins, 2005).

In the traditional education system, a clearly defined chain of command exists where by certain individuals have the authority to control and coordinate activities of their subordinates. For example, principals of traditional education schools have the authority to direct and communicate educational requests to teachers, and teachers are expected to follow their principal’s requests. Coordination and communication is accomplished in a bureaucratic system through superior-subordinate relationships depicted and developed, thus demonstrating a top-down organizational structure (Jaffee, 2008; Tompkins, 2005). Understanding Weber’s hierarchical structure and its chain of command may be useful in analyzing the line(s) of authority that exist as the hybrid education system is developed.

Merton’s modifications to Weber’s theory of bureaucracy. Weber’s theory of bureaucracy placed a focus on the technical analysis of bureaucracy with a defined focus of accomplishing concrete tasks. Weber deliberately
restricted his theory and intentionally left out non-rational variables, such as emotions, individual needs, and politics (Tompkins, 2005). Thus, while Weber largely ignored the dynamic relationship between organization’s structure and human interaction, Merton examined the dynamic changes that take place in organizations (Tompkins, 2005).

Merton brought a new conceptualization of bureaucracy to the surface. Unlike Weber’s theory that was based on predictability, Merton argued that bureaucratic behavior is highly dynamic (Tompkins, 2005). Merton’s image of bureaucracy was built upon the idea that change was the norm in bureaucracies and stability was the exception. Weber’s theory, as modified by Merton, placed a reliance on personal authority and interpersonal relationships, sometimes aiming to satisfy the basic maintenance needs of the organization and stakeholders, not just the purpose of the organization (Tompkins, 2005).

Organizational studies conducted by Merton and his followers in the 1950s provide insights that may be useful in examining the adaptability of contemporary organizations. These insights regarding personal authority and interpersonal relationships will be useful in explaining the role of authority and interactions among key stakeholders in the present case study.

**Bottom up organizational structure.** Much like the organizations Merton studied, today’s organizations are dynamic and in need of the ability to adapt to change. Introducing change in an organization is risky and requires organizations to leave their comfort zone and be willing to fail. Many organizations today are taking a new approach to entrepreneurial projects—they
are facilitating change, rather than leading it from the top (Bohle Carboneel, Dailey-Hebert, & Gijselaers, 2013). Bohle Carboneel, Dailey-Hebert, and Gijselaers (2013) explain that organizational change can be presented in two ways—first, from the leadership and flow down, very much like described by early organizational theorists or, second, it can be initiated by the faculty and rise to the leadership level. Both approaches have advantages and disadvantages; however, bottom-up organizational structures put a focus on the dynamic structure of today’s organizations that Merton’s students described. Despite this, Bohle Carboneel, Dailey-Hebert, and Gijselaers (2013) caution that transitioning from what may be considered a traditional bureaucratic top-down approach of leadership to a bottom-up approach can be challenging.

Contemporary literature suggests that school districts and schools use a bottom-up organizational structure approach to implementing hybrid education (Bohle Carboneel, Dailey-Hevert, & Gijselaers, 2013). A bottom-up organizational structure approach to implementation means that the faculty would be empowered to be creative and initiate the changes in instruction and learning instead of the administration solely having this responsibility (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013). In this organizational structure, faculty would be empowered to lead changes throughout the implementation process.

Policies and guidelines would not be passed down from the administration; instead the faculty would meet with the administration; to discuss and make changes in current policy in a collaborative manner. This organizational foundation places value on the employee’s buy-in to the
implementation process. Employees in a bottom-up organizational structure are provided the opportunity to give input and assist in adapting the current mission and vision statements (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Patrick, Kennedy, & Powell, 2013).

Bohle Carbonell, Dailey-Hebert, and Gijselaers (2013) describe many advantages to a bottom-up organizational structure approach for faculty and students. The overwhelming advantage discussed was that students and faculty are active participants in the educational modality changes (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013). This allows faculty to communicate their concerns, opinions, and innovative teaching ideas throughout the implementation process. However, there are shortcomings that exist in bottom-up leadership. Innovative teaching and learning not being communicated throughout the entire organization appeared to be a shortcoming in Bohle Carbonell, Dailey-Hebert, and Gijselaers’s study. Despite teacher involvement in the implementation process, teachers often held onto their innovative and progressive teaching ideas and did not share them with other teachers (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013).

Leadership and administration positions within a bottom-up organizational structure often hold positions without clear responsibilities and guidelines (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Graham, Woodfield, & Harrison, 2013). Stakeholders, including students, faculty, and administrators have to be committed to having an entrepreneurial spirit, collaborate, and believe that hybrid learning can be successful in a bottom-up organizational structure (Bohle
Carboneel, Dailey-Hebert, & Gijselaers, 2013). In light of this, a bottom-up approach may be used to analyze how stakeholders—employees, administrators, students, and the community—assist in the overall implementation of hybrid education, creation of rules and guidelines, and the authority structure of the new hybrid educational modality.

The organizational structure of the hybrid learning environment can define how tasks are divided, grouped, and coordinated throughout the new school environment. Therefore, it is important to study the organizational structure of the hybrid learning environment and analyze the roles that stakeholders have, how they perform those roles, and clearly identify each individual’s responsibility as part of the group. I use the characteristics of Max Weber’s theory of bureaucracy, Merton’s student’s modifications to Weber’s theory, and bottom-up approach to organizing an educational setting to make meaning of the newly implemented hybrid learning organizational structure I am observing. These varying theoretical elements of organizational structure may play a role in the adaptability of the organization and its’ stakeholders during the adoption of hybrid learning.

**Organizational Culture and Motivation**

The organizational culture of any educational system influences the organizational structure and interactions between stakeholders. Knowledge and literature surrounding organizational culture and organizational culture in already established hybrid learning systems may assist in providing meaning and understanding to the organizational culture established in the newly implemented
hybrid learning system. Preexisting literature on interactions between stakeholders in a hybrid learning system may also inform the researcher about the incentives that may be used to motivate teachers and students in this new education model. Organizational culture and motivation is the second concept that will help to inform the researcher about secondary hybrid education.

![Organizational Structure](image)

**Figure 2.** How culture and motivation inform secondary hybrid education

Organizational culture is unique to each individual organization, including each educational setting. The culture of an organization can be defined as the shared values and beliefs that connect the members of the organization together (Bohle Carbonell, Dailey Hebert, & Gijselaers, 2013; Tompkins, 2005). According to Graham, Woodfield, and Harrison (2013), the culture of a school and the incentives used to motivate teachers and students play an imperative role in the effectiveness of the hybrid learning system (Cowie & Nichols, 2010).
The development of shared culture, basic assumptions, and motivation has been identified in the literature as key characteristics of successful hybrid implementation processes (Cowie & Nichols, 2010; Graham, Woodfield, & Harrison, 2013). The following literature supporting the development of a shared culture, basic assumptions, and motivation will inform the researcher of culture, artifacts, espoused values, basic assumptions, and motivation that have been evident in past implementation processes.

**Culture.** Culture refers to shared beliefs and characteristics that have the ability to influence the individual's level of loyalty, commitment, and performance within the organization (Graham et al., 2013; Tompkins, 2005). The culture of an organization can be found in the member’s unique language, metaphors, objects, and rituals (Tompkins, 2005), Culture has the ability to inform the researcher’s thinking about the organization and the interactions between its stakeholders.

Redefining an organization’s culture during a time of change has proven difficult in current research. Organizations that have transformed from a traditional education setting to a hybrid educational setting have discovered challenges in adapting and creating a new culture and shared beliefs (Bohle Carbonell, Dailey-Hebert, & Gijselaer, 2013; Cowie & Nichols, 2010). Cowie and Nichols (2010) found that communication between stakeholders about individual cultural differences assisted in creating new-shared understandings within the organization. In addition, open communication between stakeholders and all hierarchical levels was found to be imperative in the overall cultural change that took place within the changing organizations (Bohle Carbonell,
Dailey-Hebert, & Gijselaers, 2013; Cowie & Nichols, 2010). Understanding the process and challenges past organizations have faced when transforming and implementing a new culture to their organization provides me with knowledge that may be useful in creating meaning surrounding a culture change in the hybrid education system I am studying.

**Artifacts.** Artifacts of a changing culture assist in providing meaning to stakeholders about the new hybrid learning culture. Artifacts are the visible manifestations of the culture’s underlying values and basic assumptions (Tompkins, 2005). The artifacts of the old and new culture may be useful to study because the transformation of an organization’s culture is often observed in its artifacts. Artifacts include, mission statements, organization specific language, and stories that may be passed on throughout the organization (Tompkins, 2005).

In the literature, artifacts that have been established throughout the hybrid education implementation process, such as rewritten mission and vision statements, newsletters, and website postings have supported the success of the newly implemented hybrid learning system (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Cowie & Nichols, 2010). Most importantly, artifacts have been used to communicate the change in culture to all stakeholders and have helped to establish the espoused values for the new educational modality (Cowie & Nichols, 2010). Understanding how artifacts can influence an organization’s culture and how past hybrid educational systems have used artifacts to communicate the change in organizational culture to all stakeholders should
assist the researcher in making meaning of the artifacts used in the hybrid learning system that is studied.

**Espoused values.** Espoused values are not visible, but are values of the organization that the members claim to be committed to uphold (Tompkins, 2005). Espoused values include respect, integrity, and social responsibility that exist among stakeholders. Literature states that in order for implementation of a new organization to be successful that faculty and stakeholders need to identify with the new organization (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Cowie & Nichols, 2010). The espoused values of the organization and the stakeholders will help to inform the researcher about how the stakeholders feel and are responding to the organizational culture change.

Post-secondary organizations that have implemented hybrid learning models have used espoused values to redefine and restructure their organization, as well as, clarify their mission and goals to stakeholders (Graham et al., 2013). The goals and philosophies of the hybrid learning system guide the decisions made and how a particular goal is accomplished (Graham et al., 2013). Understanding the espoused values of the stakeholders and how they influence the success and adaptations to the implementation of the hybrid learning system can provide insight into how stakeholders are adapting and accepting the new educational model. In addition, research has found that the basic assumptions of all stakeholders can impact the overall success of hybrid learning implementation (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Cowie & Nichols, 2010).
**Basic assumptions.** Basic assumptions take place at an unconscious level for the individuals in an organization; however, they advise each individual how to think and feel about situations and what actions to take in different situations (Tompkins, 2005). Research has described implementation of hybrid learning at the post-secondary level as being most successful when stakeholders can identify with hybrid learning and perceive it as being successful (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Cowie & Nichols, 2010). Understanding how basic assumptions have influenced the overall success of past hybrid implementation programs provides insight into the influence that stakeholder’s basic assumptions can have on the new hybrid implementation process.

Teachers’ and students’ perception of implementation success have been found to directly impact the implementation of hybrid learning at the secondary education level (Lin, 2008; Yukdo et al., 2008). In one study, teachers thought that implementing hybrid education would have a detrimental effect on attendance (Yukdo et al., 2008). In another study, students perceived that they would learn better in a traditional classroom (Lin, 2008). These perceptions impacted how the stakeholders responded to the change in organizational culture and implementation; however, the data collected demonstrated that both of these situations may be invalid (Lin, 2008; Yukdo et al., 2008). The basic assumptions found in current research can provide insight into some of the challenges that an organization may have when changing and adapting their culture and implementing a new hybrid education system. Stakeholders’ motivations also
can influence their acceptance of a new learning modality. The next section will discuss why stakeholders’ motivations are useful to study.

**Motivation.** An individual’s motivation begins with his or her personal needs and desires (Tompkins, 2005). Individuals are driven to complete a task because they are internally driven to meet their needs and desires (Tompkins, 2005). All stakeholders will bring their individual needs and desires to the implementation process. Literature has found that a goal of the implementation committee is often to resolve any differences in stakeholders’ needs and desires, in order to establish shared needs and desires for the hybrid learning implementation process (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Cowie & Nichols, 2010). Understanding the role that individual stakeholders’ needs and desires play in the overall implementation process can shed light on how the new hybrid learning community reacts to stakeholders’ needs and desires.

In addition, the literature supports the development of faculty and student motivation by using intrinsic and extrinsic motivators while developing and implementing new hybrid learning models in post-secondary education (Garrison & Vaughan, 2013; Graham et al., 2013). Research found that student and faculty motivation throughout the hybrid implementation process, as well as once the education system has been successfully implemented, is important because hybrid learning is dependent on individual motivation—for both students and faculty (Garrison & Vaughan, 2013; Graham et al., 2013). Understanding each student’s and faculty member’s personal needs and desires can help to provide
intrinsic and extrinsic motivation throughout the learning process (Garrison & Vaughan, 2013). As the researcher, understanding the impact personal needs and desires may have on the implementation process can provide me with meaning and purpose in discovering what the personal motivators are for various stakeholders throughout the new hybrid implementation process.

In conclusion, culture and motivation will transform throughout the implementation of hybrid education. The organizational culture of a new hybrid learning system most likely will follow suit, and like already implemented hybrid learning systems influence the organizational structure and interactions between stakeholders. Past literature has shown that stakeholder’s perceptions, values, and motivations can impact their acceptance of the educational change and the overall success of the implementation process (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Cowie & Nichols, 2010). The knowledge of stakeholder’s perceptions, values, and motivations can inform this study and assist in providing meaning and understanding to the organizational culture established in the newly implemented hybrid learning system. In addition, literature discussing the interactions between stakeholders in a hybrid learning system may also inform the researcher on the incentives that may be used to motivate faculty and students in this new education model.

**Technology and Structure Contingency Factors**

One of the most visible changes in the implementation of hybrid learning is the new technology and how it may be used and perceived by all stakeholders. Technology and structure contingency factors are the third concept that will
influence the researcher about the implementation of secondary hybrid education.

*Figure 3.* How technology and structure influence secondary hybrid education.

There are many things that can influence an organization’s structure; however, the change and use of new technology as a source of learning in the hybrid learning system can greatly impact the education system as a whole. As the researcher, understanding how educational systems hope to use new technology and implement it can provide insight into the successes and challenges schools may have implementing a new learning system. It may also shed light on how technology has impacted education’s organizational structure.

Schools today are placing an emphasis on 21st century learning skills and themes that include innovative skills that will prepare students for success in an increasingly complex life and work environment (Marks, 2013). Twenty-first century learning skills include the use of technology and teaching critical thinking,
communication, problem solving, creativity, collaboration, and innovation (Marks, 2013). Studying the technology that may be used in a hybrid learning environment and its purpose of preparing students to use 21st learning skills provides insight to the researcher of possible reasons that school districts may be making educational modality changes and why school districts may believe this change is needed.

The most prominent structure contingency factor in the literature in regards to making a shift in educational modalities is the lack of support given to teachers and students (Hawkins, 2011; Thomson, 2010; Zhu et al., 2010). Burton and Obel (1998) argue that if support is not provided to stakeholders, there is an increased chance that the operation of the technology will be inefficient and/or ineffective. Several hybrid implementation frameworks list professional development for teachers as a characteristic or component of the implementation process (Hawkins, 2011; Rice, 2009; Thomson, 2010). Despite this, teachers state that professional development had limited value (Hawkins, 2011; Rice, 2009; Thomson, 2010).

Rice (2009) described professional development or training during the implementation process as critical for faculty, as well as, administrators, students, and parents (Rice, 2009). Research explains that quality and availability of professional development for all stakeholders appears to impact the overall satisfaction and perception of success for teachers and students in post-secondary education (Hawkins, 2011; Thomson, 2010; Zhu et al., 2010). Understanding the role that professional development has played throughout the
literature related to new technology can provide insight into the role it may play in the implementation process of hybrid education.

Burton and Obel (1998) explain that rules and procedures are needed in education to standardize behavior. School districts implementing hybrid education need a higher reliance on formalization and centralization (Burton & Obel, 1998). Creating an infrastructure as described by Garrison and Vaughan (2013) and Graham et al. (2013) that places an emphasis on the development, restructuring, and clarifying stages of implementation has been found to be important to the success hybrid education. The transition from traditional learning to hybrid learning is best established when institutions transition with clear goals of implementation (Graham, Woodfield, & Harrison, 2013). The goals and procedures that are established during the implementation process at the case study site will inform me about the implementation stage and process.

Technology alone is an important characteristic or component of the implementation process. Technology is a component of the majority of post-secondary and 6-12 hybrid and blended learning implementation frameworks (Donorfio & Healy, 2008; Edgenuity, n.d.; Rice, 2009). The technology used and how the school district proposes to implement it inform my understanding on what technology is available and what technology school stakeholders believe may fit its students the best. Edgenuity (n.d.) breaks technology down into the three categories—hardware, software, and physical space. Research suggests that school districts consider several stakeholder’s opinions when selecting technology for a new hybrid learning system (Donorfio & Healy, 2008; Edgenuity,
 Numerous scholars suggest that school districts discuss student device needs, internet connectivity, and classroom set-up to make the implementation of hybrid learning successful (Donorfio & Healy, 2008; Edgenuity, n.d.; Rice, 2009). The implementation of hybrid learning will bring many changes in organizational structure related to culture and technology; however, existing district implementation frameworks will provide insight for the researcher.

**Flexibility**

With changing organizational environments, organizations must be flexible and malleable (Jaffee, 2008). Today’s organizations are marked by rapid and innovative change and emerging markets that require the flexibility of the organization, its’ employees, and customers. According to Jaffee (2008) organizations today must be prepared to restructure, reengineer, learn quickly and adapt to change. Education is an organization that has faced numerous internal and external structural changes over the years and a change to hybrid learning will most likely cause additional changes to the organizational structure of the school and school district. Therefore, flexibility is the fourth concept that will be used to inform the researcher during the case study on the implementation of secondary hybrid education.
Understanding the use of flexibility and adaptability may help to provide meaning to why the school district I am studying is implementing hybrid education. Marks (2013) describes implementing a hybrid learning system as the school system’s way of adapting learning to meet the needs of more students and families through the 21st century learning initiative. As students’ new learning needs are being met, school administrators will be the leading and guiding force for the school system as they take on the role of adapting and making changes throughout the entire implementation process (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Cowie & Nichols, 2010). As the researcher I will be observing and interviewing teachers and students about the challenges faced throughout the implementation process. These challenges and support from stakeholders will help to assess the flexibility of stakeholders and the school district as a whole as they implement hybrid learning.
Both Garrison and Vaughan (2013) and Garrison et al. (2013) included adaptation/flexibility in their framework for implementing hybrid education at the post-secondary level. Adaptation, described as part of the implementation framework also includes the ability to foresee and respond to possible shortcomings or challenges that arise throughout the hybrid implementation process (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013).

Summary

Taken together, the concepts of Max Weber’s theory of bureaucracy and the bottom-up approach to organizing an educational setting can provide insight and meaning into understanding a new organizational structure. We have also discussed how organizational culture, technology, and flexibility relates to an organization’s structure, and can provide the researcher with new knowledge to make meaning of events, procedures, and stakeholder’s actions throughout the implementation process of hybrid education. The next section will examine learning theories that can be used to inform research on the implementation of hybrid learning. In this section I will discuss how pragmatism and connectivism can inform the design and maintenance of hybrid learning.

Learning Theories

This section covers a brief overview of two learning theories, pragmatism and connectivism, and how they help shape the meaning that the implementation of hybrid secondary learning has for students and teachers. These learning theories prove useful in studying why secondary school districts are transitioning to a new educational modality. As such, they will guide my data collection and
analysis regarding how stakeholders experience and perceive changes in organizational structure and culture through this transition.

Figure 5. How learning theories (pragmatic and connectivism) inform secondary hybrid education

**Pragmatism**

The focus of this section is on pragmatism and the education process, including John Dewey’s pragmatic philosophy of teaching, the theoretical influence on educational modality changes, the role of the teacher, and holistic learning using the pragmatic theoretical framework. Finally, I will discuss how the pragmatic worldview relates to the implementation of hybrid education.
Pragmatism extends back to the early 1900s and John Dewey’s action-oriented philosophy of science (Taatila & Raij, 2012). Pragmatics is the study of the link between action and truth and practice and theory. This philosophy is paramount in a reality where change is continually taking place and the individual holds an active role in the transformation, by thought or action (Taatila & Raij, 2012). In hybrid learning, the student will be the individual who is holding the active role of transforming his or her education. It is useful to use John Dewey’s pedagogical practices to inform the study of implementing secondary hybrid learning because Dewey’s pedagogical theories provide insight into how students best learn. In order to provide a clear vision to stakeholders an educational change should be embedded with philosophical thinking (Georgescu, 2008). The next sections will examine the pragmatic philosophy of education as it relates to the theoretical influence on educational modality changes, the role of the teacher, and holistic learning using the pragmatic theoretical framework.

**Pragmatism’s influence on educational modalities.** John Dewey’s theory of pragmatism has a central goal of education that enriches and expands everyday experiences (Bennett & Oliver, 2011; Pugh, 2011). Dewey believed that students should be provided with learning that is meaningful and authentic (Pugh, 2011). Hybrid learning places an emphasis on authentic and problem-based learning where students are the “conductors” of their own learning. A student’s learning environment can be described as one that provides authentic learning opportunities that allow the student to create inquiry, anticipation and then act and apply their new knowledge in the real world (Bennett & Oliver, 2011;
Pugh, 2011). From the beginning, traditional education and its curriculum had become an end unto itself with few experiential consequences in the eyes of John Dewey (Pugh, 2011). However, today hybrid learning emphasizes characteristics of pragmatic theory in education by shifting from materials and instruction to social competence, collaboration and situated performance (Bennett & Oliver, 2011).

I am curious to know what John Dewey would think of hybrid learning implementation at the secondary level. Not only does hybrid learning push students to expand their perception of the world through meaningful application of real world events, but it also strives to create lifelong learning, self-regulation, and critical thinking (Pugh, 2011). Self-regulation and critical thinking are important characteristics of pragmatic learning theories (Pugh, 2011), characteristics also needed for students to be successful in hybrid learning at the post-secondary level (Hawkins, 2011; Murphy, 2009). Students enrolled in hybrid learning courses will have to manage their tasks independently at times and be able to think critically and problem solve in order to learn and draw conclusions about their learning. As the researcher, I hope to see these characteristics of student learning when I complete my observations and through student stakeholder interviews.

Pragmatism, as explained by Taatila and Raij (2012), is useful in explaining the importance of multiple methods of teaching to support student learning. Taatila and Raij (2012) explain that an instructor must master numerous methods of instruction to support student learning in order to create
authentic and meaningful learning that expands each student’s perception of the world (Pugh, 2011). In the hybrid learning environment, teachers will have to use different forms of media, such as videos, graphics, media, and text to engage students. Pragmatic theory also places a focus on learning new technology, while focusing on its application and pursuit of behavioral evidence of improved learning outcomes (Bennet & Oliver, 2011; Stone, 2008). As the researcher I may observe this learning through the use of media and technology in the virtual and traditional classroom.

**The role of the teacher, described using pragmatic theory.** Pragmatic learning theory describes the role of the teacher and student as something that the student and teacher do together (Biesta, 2010; Taatila & Raij, 2012). The role of the teacher is to be the mentor or facilitator of student learning (Biesta, 2010; Taatila & Raij, 2012), while guiding students to create their own meaning and reality of the world with their new knowledge (Pugh, 2011). The concept of students and teachers working together will be a sensitizing concept in my interviews, focus groups, and classroom observations. Pragmatic theory is useful in creating meaning and understanding of the relationship amongst students and teachers in a hybrid learning environment. In a hybrid learning environment the role of the teacher is to be the facilitator of learning, while providing students with the tools and knowledge to accomplish real life tasks in evolving situations.

Pragmatic learning theory also puts the student in charge of their own learning and the application of their learning (Taatila & Raij, 2012). This is an
ultimate goal of hybrid learning (Murphy, 2009; Thomson, 2010). In addition, the theory reminds teachers and administrators that participation is not about physical proximity, but it is about the teacher and student having a shared outlook on the real world and a meaningful summarizing activity (Biesta, 2010). Participation in the hybrid learning community will at times place students and teacher in close proximity, but at other times students and teacher may not be in the same building while learning, but they should have a shared learning goal. Learning, as described by pragmatic learning theory, should be about the processes of participation, collective meaning making, and communication (Biesta, 2010). This type of learning has been described throughout post-secondary hybrid learning literature. Now that I have described how pragmatic learning theory can be used to inform the researcher about the role that a teacher may have in a hybrid learning environment, I will describe how pragmatism is used to create a holistic view of learning.

A holistic view of learning. The pragmatic worldview of learning is a holistic approach to learning where the student and teacher’s minds are continuously active (Duemer & Zebidi, 2009). Pragmatists believe students’ minds are continually reinterpreting information and creating new meanings based on new knowledge (Duemer & Zebidi, 2009; Taatila & Raij, 2012). Change is continually taking place and the student is an active conductor of transforming information provided to them into meaningful real life thoughts or actions (Taatila & Raij, 2012). As the researcher, this knowledge will help to create my sensitizing concepts that I will use when observing both the traditional
and virtual learning aspects of the hybrid learning classroom. In addition, I will ask questions in interviews and focus groups related to the student’s role in the classroom and their learning. Pragmatists also believe that theory should be used to help students better understand the world by applying the most appropriate approach to solving a problem or a mixture of approaches in the real world (Bulajeva, Duobliene, & Targamadze, 2009; Duemer & Zebidi, 2009; Pugh, 2011).

The pragmatic holistic worldview of learning can be used to inform the type of learning that will take place in a hybrid education system. School districts are transferring traditional classrooms into hybrid learning classrooms in hopes of encouraging 21st century learning, complex thinking, and problem solving skills (Marks, 2013). The characteristics of pragmatic thinking and learning are evident in the research that describes hybrid education. In addition, the pragmatic worldview can be used to understand the learning and teaching that will be taking place in a hybrid education system. Learning and teaching will be holistic in nature and student driven, while placing the student in charge of their own learning and application of their learning. When observing classrooms, I looked for variations in student projects because the students themselves picked the project. I will also ask questions in interviews and focus groups about the role the student and teacher had. The teacher will provide students with the learning environment to apply their new knowledge in the real world, as described by the pragmatic worldview. Thus, in my observations I will look for students who are
engaged with real world materials and media. My hope is that I do not see
students sitting at a desk taking notes.

**Connectivism**

This section describes a learning theory that many researchers believe is
relevant and appropriate to describe learning in a digital age, although it lacks
rigor and empirical research (Alkella, 2012; Bell, 2011; Kop & Hill, 2008).
Connectivist learning is a form of learning that takes place through networking
and recursive processes of operation, way finding, sense making, and innovation
interaction (Wang, Chen, & Anderson, 2014). Despite, connectivism’s lack of
empirical research, it may be used to inform the researcher about how
technology and students are learning in a non-traditional learning environment.
In this section I will describe research about the evolution of connectivism and
discuss the role of the student and teacher as described by the connectivism
learning theory.

**Learning theories must evolve.** Learning theories must evolve to
encompass today’s students. Further theories are necessary to explain change,
to design interventions, and renovate policy, such as connectivism.
Connectivism is a learning theory for the 21\textsuperscript{st} century student (Akella, 2012; Bell, 2011), who is constantly transforming, eager to use new technology, and
intuitive. Akella (2011) questions if current learning theories are complex enough
to inform students’ learning in today’s digital age. Current learning theories are
unable to address how learning occurs through information kept within
 technological tools (Akella, 2012). However, connectivism reaches beyond the
traditional classroom and encourages students to work together and use multiple media forms to learn (Akella, 2012; Bell, 2011). Collaborative learning and the use of the newest technologies and media are key concepts in hybrid learning. Bell (2011) explains that researchers cannot expect a single all-encompassing theory to inform the type of learning that is taking place in today’s world. Therefore, as the researcher, I used both pragmatic learning theory and connectivism to inform my understanding of student learning and interaction during the secondary hybrid education case study.

Connectivism is a learning theory that can inform my understanding of student’s learning through communities, personal networks, and work-related tasks (Siemens, 2004). Connectivism encourages the learner to connect to, share, and discover new information, and then modify his or her beliefs based on new learning (Kop & Hill, 2008). Finally, the learner will make new connections and share their information with new learners (Kop & Hill, 2008). As I observed teacher instruction and conduct focus groups of stakeholders who are participating in the hybrid learning case study, I looked for evidence of connectivism as students collaborate on key projects and problem solve using innovative technology and gadgets (Brown, 2002, Kop & Hill, 2008).

**The role of the student and the teacher, as described by connectivism.** Interaction, motivation, persistence, and deep learning are all associated with connectivism and can be observed in students who are participating in a hybrid learning environment. Connectivism describes the teacher, not as the teacher and holder of all information, but instead as the
facilitator of learning (Kop & Hill, 2008). One critique of connectivism describes it as a new take on pedagogical views, instead of a learning theory because connectivism places a focus on different types of interactions both with humans and network resources (Wang, Chen, & Anderson, 2014). Siemens (2004) describes a student’s learning as growing exponentially as their learning extends beyond the classroom to objects, both concrete and abstract (Wang, Chen, & Anderson, 2014). In the hybrid learning environment I expected to observe students engaged in classroom material, but also within their concrete community and their virtual (abstract) community.

High levels of learner autonomy are needed for a student to be successful in a learning environment where the student learns, applies, and demonstrates his or her knowledge with the technology (Akella, 2012; Kop & Hill, 2008). Akella (2012) describes four key principles of connectivism that sets it apart from other learning theories: “(a) learning and knowledge is dependent on a variety of opinions, (b) learning is a process of connecting to specialized sources of information, (c) learning may reside in non-human applications, and (d) the ability to connect to sources of information facilitates continuous learning”. As the researcher, these four principles inform my thinking and observation of students and teachers participating in the secondary hybrid implementation case study. For example, I looked for specific examples of these concepts in my observations and focus groups. These concepts acted as sensitizing concepts when developing my focus group and interview questions.
Sensitizing Concepts

Table 1

<table>
<thead>
<tr>
<th>Sensitizing Concepts</th>
<th>Literature Influencers</th>
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<tbody>
<tr>
<td>Organizational Structure</td>
<td>Organizational Structure, Pragmatic Learning Theory</td>
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<td>Organizational Culture</td>
<td>Culture and Motivation</td>
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<tr>
<td>Flexibility</td>
<td>Pragmatic Learning Theory, Connectivism, Flexibility, Technology and Contingency Factors</td>
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<tr>
<td>Technology</td>
<td>Technology and Contingency Factors, Pragmatic Learning Theory, Connectivism</td>
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The above sensitizing concepts were developed from the literature review: organizational structure, organizational culture, flexibility, and technology. Each sensitizing concept was developed based on previous literature completed in post-secondary blended education and secondary distance education.

**Organizational structure.** Elements of organizational structure, including hierarchical structure and leadership were identified as concepts that may become evident during focus groups and interviewing stakeholders. Characteristics of pragmatic learning theory and the bottom-up and/or top-down approach to leadership helped to shape the sensitizing concept of organizational structure.

**Organizational culture.** Throughout the literature organizational culture proved important and acted as a key motivator for implementing and continuing the implementation of both blended learning and distance education. Therefore, from literature gathered related to culture and motivation including organizational
values, intrinsic motivation, and extrinsic motivation I created the second sensitizing concept.

**Flexibility.** Flexibility, including how today’s organizations are adapting to change through restructuring, reengineering, and knowledge were key components of post-secondary blended learning and led to flexibility being identified as the third sensitizing concept. In addition, flexibility in technology and learning was identified in the literature as a motivator for stakeholders to participate in both blended and distance education. Pragmatic learning and connectivism also identified flexibility and autonomy of student learning to be valuable characteristics for students. Flexibility was used as a key sensitizing concept throughout the entire data analysis of the case study site.

**Technology.** The use of technology in education has evolved and includes hardware, software, and physical space. Technology was a component of most implementation frameworks for post-secondary blended education and secondary distance education and will act as a key sensitizing concept during this case study. The researcher used elements of pragmatic learning theory and connectivism and their relationship to technology to make meaning of the implementation of blended learning at the case study site.

**Summary**

After completing research and reading the current literature on hybrid education I am able to see the benefits of both the traditional learning environment and distance learning environment. Despite this, I am fearful of distance education for secondary students. I believe that secondary education
students still need socialization, motivation, and communication skills that in my opinion can be best provided to the students in a traditional learning environment. However, I do believe that a mix of traditional and distance education may be the best solution for secondary students seeking a more flexible educational environment. My positionality and the lack of previous literature on secondary hybrid education has motivated me to complete a case study on how stakeholders experience and perceive changes in organizational structure and culture throughout the paradigm switch from traditional to hybrid secondary education. Current literature does not address secondary hybrid education. Instead the current literature addresses stakeholder perceptions and evaluates post-secondary hybrid education and secondary distance education. With little to no research on secondary hybrid education and school districts beginning to discuss the need for hybrid education, this case study will add to the body of literature on secondary hybrid education.

Chapter Three will present the methodology for completing this case study. It will describe the mixed methods research design and research paradigm of the study. I will then provide a description of Cumberland Valley High School—the school where the case study will take place. Finally, I will explain the sampling methods, data collection, data analysis, and data quality.
CHAPTER 3

METHODOLOGY

The purpose of this study was to understand the implementation process of a hybrid education model at the secondary level. In this chapter, I will describe the mixed methods research design, research paradigm, and discuss my own researcher positionality. Then, I provide a description of Cumberland Valley High School—the school where this case study will take place. Sampling methods, including sampling strategy and sample size, are then discussed. Finally, the chapter concludes by providing an overview of data collection, data analysis, and data quality.

Mixed Methods Research Design

A mixed methods research design was used to conduct research for this case study. This study aspired to capture the intricacy of a single secondary hybrid education implementation process. Case studies, often used in education, seek to understand the complexities and activity in one situation, case, or event (Patton, 2002). A case study can be used to study a village, neighborhood, organization, or program (Patton, 2002). However, case studies are often composed of many smaller cases, such as specific individuals, families, and organizational units (Patton, 2002). Case studies do not claim any specific method of data collection or data analysis (Patton, 2002). Instead, researchers usually use a combination of data collection methods such as informal and formal interviews, observations, and focus groups (Patton, 2002). Some of these methods were used to conduct the case study on the implementation of hybrid
secondary education at Cumberland Valley High School. This case study sought to study the objective culture and the interpretive cultural meanings of various stakeholders.

In addition, mixed methods research yields both statistics and stories that provide understanding and meaning to the numbers obtained (Patton, 2015). Patton (2015) describes quantitative evidence as the bones of the study and the qualitative analysis as the flesh. The quantitative, deductive reasoning of this case study aimed to describe the population of stakeholders in the study. Quantitative research within a mixed methods design is deductive in nature and fits varying perspectives into predetermined categories (Patton, 2015). Quantitative research approaches make it possible to measure reactions and perspectives of a large number of individuals and limit them to a set of questions, thus providing the ability for comparison and statistical aggregation of the data (Patton, 2015). Quantitative data provides a broad, generalizable set of findings (Patton, 2015).

In contrast, qualitative research design provides an abundance of detailed information about a reduced number of stakeholders (Patton, 2015). Qualitative research allows for openness to whatever theories and answers emerge from the data (Patton, 2002). As the researcher, I did not have predetermined boundaries on the findings. This allowed me to be open to discovering the meanings and experiences of the stakeholders involved in the secondary hybrid implementation case study. In addition, not having predetermined limits on the findings allowed
me, as the researcher, to pursue new emergent themes and patterns that developed throughout the study (Patton, 2002).

Despite the inductive nature of qualitative inquiry, no researcher enters an inquiry with a completely blank slate (Patton, 2002). Researchers completing fieldwork often use sensitizing concepts, which are beginning points in thinking that help to organize the initial direction of the study (Patton, 2002). Sensitizing concepts provide a way of breaking the complexities of planned human interactions into distinguishable, manageable, and observable elements (Patton, 2005). The sensitizing concepts described in Chapter 2 will provide insight into the secondary education hybrid community’s worldview.

Despite being a mixed methods research design, this study places a primary focus on the qualitative data gathered through focus groups, interviews, and observations. However, the quantitative surveys distributed during the study assisted in creating sensitizing concepts used during the qualitative data collection. Now that I have discussed the research design of the study, I will reflect upon how the social constructivist paradigm has impacted my research and study.

**Research Paradigm**

I worked from the social constructivist paradigm to research the implementation of secondary hybrid education. Researchers working in the social constructivist paradigm believe that individuals seek understanding of the world in which they live and work (Creswell, 2014). These individuals develop subjective meanings of these experiences that are varied and complex in nature
(Creswell, 2014). As a researcher with a social constructivist worldview, I looked for the complexity of views among stakeholders rather than narrowing meaning.

Working in the social constructivist worldview does not start with a theory; rather I inductively developed a theory or pattern of meaning over time (Creswell, 2014). Social constructivist research relies heavily on participants’ views of the situation being studied (Creswell, 2014). Over the course of this study, patterns emerged from focus groups, observations, and written documents produced by the stakeholders in the secondary hybrid implementation process. The qualitative aspect of mixed methods research is ideal for fieldwork using the social constructivist worldview and assisted the researcher in generating meaning from the data collected (Creswell, 2014; Patton, 2002). I discovered emerging themes in the meanings that stakeholders had formed about their experience in the secondary hybrid implementation process. However, as a researcher working in the social constructivist paradigm, I need to identify my positionality and how it may impact and show bias in particular situations.

**Researcher Positionality**

In mixed methods and qualitative research, the position or perspective of the researcher is important to consider during the study. Researchers in the traditional sociological paradigm believe that objective knowledge exists independent of the researcher’s position; however, no researcher enters into fieldwork with a completely blank mind (Patton, 2002). As a researcher using the social constructivist paradigm, I recognized that my own background shapes my interpretation of experiences (Creswell, 2014). Therefore, I addressed my
potential biases as the researcher studying the implementation of secondary hybrid education.

I am a 32-year-old middle school (6th-8th grade) Family and Consumer Sciences teacher who teaches in a traditional educational environment. The majority of my education has taken place in a traditional educational environment; however, I have taken distance education graduate classes. I have been equally successful in both environments. I see the benefits of both environments; however, I am fearful of distance education for children who I believe still need socialization, motivation, and communication skills that can be provided, in my opinion best in a traditional learning environment. Despite my personal beliefs, I have seen the success of distance education programs for secondary education students. However, I do believe that a mix of traditional and distance education may be the best solution for secondary students seeking more flexibility in their educational environment. This is one of my personal reasons for studying the implementation of secondary hybrid education.

In addition, my current school district has implemented a hybrid learning environment at the high school. I am not a teacher at the high school where the hybrid education program was implemented. Thus, I focus this case study on Cumberland Valley High School. This was not a program evaluation; therefore, I do not believe my role as a teacher in the district will exponentially enhance or hinder my understanding of the experiences of the stakeholders in the secondary hybrid implementation program. However, I was aware that my own personal
experiences and views may still heighten or impede my complete understanding of stakeholder’s experiences.

As the researcher, I developed my opinion on what I expected to find throughout the case study on Cumberland Valley High School. Based on the literature and my own experiences, I expected to find that stakeholders’ opinions of hybrid education will become more positive as they are engaged in the experience of hybrid learning. I believe that certain stakeholders, such as parents, will be hesitant to enroll their students in the hybrid learning courses at the beginning of the study. In addition, I believed that students, teachers, administration, and parent perspectives of hybrid learning will be negative around times of technology difficulty, but as the school overcomes challenges, stakeholder opinions and perspectives will become more positive. I foresaw Cumberland Valley High School being able to overcome particular challenges with technology during the implementation process.

In my opinion, I thought that the school culture and organizational structure would change with the implementation of hybrid learning. Literature has stated that students often become more engaged with their learning and become the drivers of their education in a hybrid learning environment (Hawkins, 2011; Murphy, 2009). I expected to observe this and hear similar feedback in stakeholder focus groups. In addition, I believed that the culture of learning throughout the entire high school would change with the implementation of hybrid learning. Cumberland Valley School District appeared to be a forward thinking school. With this culture and the implementation of hybrid learning, I predicted
that hybrid learning would “take off” at Cumberland Valley High School and create a new cultural norm.

My position as the researcher and my expectations of the study were important to understand in this case study. Throughout the case study, I self-assessed my positionality during the focus groups and observation process by recording field notes after each focus group and observation discussing how my position related to my findings. My hope was to collect quality data that was not influenced by my research expectations, nor my personal position. In addition, I enhanced the quality of my data by completing an audit trail and member checks at the conclusion of the focus groups.

Now that I have described my position and expectations, I will provide a description of Cumberland Valley School District and High School’s composition, including location, demographics, and composition.

**School District Composition**

Cumberland Valley School District is located in Mechanicsburg, Pennsylvania. The high school serves four townships; Hampden, Middlesex, Monroe, and Silver Spring in Cumberland County (Cumberland Valley School District [CVSD], 2014). The school system area is essentially rural and suburban, located fifteen miles west of Harrisburg, and extends from Carlisle to Camp Hill, Pennsylvania (CVSD, 2014). The combined junior-senior high school opened in September 1954 with 800 students (CVSD, 2015). The school has progressively grown since that time. The current school for 9th through 12th grade students includes 2,573 students, 186 professional staff, and a student to
faculty ratio of 16 to 1 (CVSD, 2014). During the 2014-2015 school year 81.48% of Cumberland Valley High School students were White, 10.54% were Asian, and the remainder identified as American Indian/Alaskan Native, Black or African American, Native Hawaiian or other Pacific Islander (not Hispanic) (Pennsylvania Department of Education (PDE), 2014). In addition, 15.3% of the students who attended Cumberland Valley High School in 2014-2015 were from low-income families (PDE, 2014).

The high school currently has one superintendent, three assistant superintendents, a head principal, an associate principal, and 4 assistant principals for each grade level 9th through 12th (CVSD, 2014). In addition, there are eight counselors; two per grade level who follow the students all four years of their high school career (CVSD, 2014). There are also six supervisors, one for each core subject—mathematics, science, social studies, and English, and a world language and special education supervisor (P. Miller, personal communication, July 9, 2015). At Cumberland Valley High School there are nine class periods per day, each 41 minutes in length (CVSD, 2014). The school is on a six-day cycle for all major core subjects over a 36-week period (CVSD, 2014).

In order for a student to graduate from Cumberland Valley High School they must complete the following requirements: four credits in English, four credits in social studies, three credits in science, three credits in math, with one additional credit in math or science, two credits in arts and humanities, two credits in health/physical education, and job shadow a professional in a job or
career of the student’s choice (CVSD, 2014). Cumberland Valley High School students need a total of twenty-three credits to graduate. Therefore, electives make up the balance of the required credits and the minimum graduation requirement. Curriculum options include 17 International Baccalaureate courses, 28 Advanced Placement courses, 18 honors courses and college credit courses (CVSD, 2014). In addition, Cumberland Valley is a member of the Cumberland-Perry Vocational Technical School. As a member of the vocational technical school selected students who elect this program will attend this school on a half-day basis in grades 9 through 12 (CVSD, 2014).

**Blended Learning at Cumberland Valley**

The mission of Cumberland Valley School District is, “through a partnership of students, educators, parents, and community, to help students develop skills, knowledge and talents to achieve their fullest potential and to become lifelong learners and productive responsible citizens” (CVSD, 2014). With this mission as the school district’s guiding principle they have established a want and need to implement blended learning. *Hybrid and blended* learning are terms that Cumberland Valley School District consider interchangeable. Patty Miller, the high school head principal explained that students need authentic experiences that will help to prepare them for their future (personal communication, July 9, 2015). Blended learning will garner flexibility in scheduling, allowing Cumberland Valley to provide new authentic learning experiences and provide students the opportunity to take college courses while attending Cumberland Valley High School (P. Miller, July 9, 2015). It will be
beneficial for students to have a variety of experiences learning from different modalities as they prepare for a future beyond high school (P. Miller, July 9, 2015).

The new strategic plan data, which took into account various stakeholders opinions via a survey, found that parents and staff were open to the concept of a blended learning program. However, Mrs. Miller believes open communication between district administrators and stakeholders is imperative (personal communication, July 9, 2015). Mrs. Miller also feels that the high school faculty are open to the implementation of a blended learning program (personal communication, July 9, 2015). However, the current culture at Cumberland Valley High School is slightly scattered and the implementation of hybrid learning may cause some challenges to the faculty morale. There are a majority of staff members who fall in the middle and will simply do what they are told because it is best for the students; however, with a large staff there are outliers who are both resistant to change and those who are beyond eager to get involved (P. Miller, personal communication, July 9, 2015). In order to help build a positive culture for the blended learning community at Cumberland Valley High School the initial implementation teachers were hand selected (P. Miller, personal communication, July 9, 2015).

The initial group of teachers selected for the blended learning program consisted of a foreign language, science, English, and social studies teacher. In addition, the district selected a team to consist of the teachers listed above, a media specialist, the head high school principal, the supervisor of Curriculum,
Instruction, and Technology, an Assistant Superintendent, and the Superintendent. This team applied for and won a $50,000 grant from the Cumberland Area Intermediate Unit in October 2014 to research and design a blended learning program for Cumberland Valley High School. At the completion of the initial grant the blended learning team applied for a second grant for two hundred thousand dollars to implement their blended learning plan. However, Cumberland Valley High School was not the recipient of this grant. Despite not being the recipient of the grant the school district moved forward with the support of the school board and community and began a pilot implementation of blended learning.

Cumberland Valley School District began the phasing in of the blended learning program during the 2015-2016 school year. There were four blended learning classes offered—German I, Level 3 Biology, Level 2 American Literature, and Government. All classes are yearlong classes except Government, which was a half-year course. The grade level of each course varied. Therefore, depending on a student’s schedule the student may have been able to take more than one course the first year. The course was blended in learning; however, students would be required to be in the school café or classroom during the course period if there would be online work to be completed. Students were not permitted to work from home at this time. The instructor of record would be available in the course café or classroom during the period the course was being offered to assist students. In addition, the same course was offered at the same time in a traditional setting for any students who
was not initially successful in the blended learning environment. At that time the student was able to easily be transferred to the traditional learning environment.

Roughly 60-80 students had the opportunity to take a blended learning class based on their need for the course and a placement survey. Students who were eligible for the blended learning courses received a letter in the mail prior to the beginning of the school year. The students and parents were then instructed to take a survey to identify their interest in the blended learning course and an inventory depicting if the school district could foresee the student being successful in the blended learning program (P. Miller, personal communication, July 9, 2015).

Mrs. Miller saw getting the blended learning program up and running as the biggest initial challenge (personal communication, July 9, 2015). As of the summer before the 2015-2016 school year the district had chosen their blended learning LMS and content providers; however, the actual courses had not been created (P. Miller, personal communication, July 9, 2015). The district hoped to overcome future challenges by providing consistent communication to all stakeholders and having commitment from the Superintendent all the way to the teachers (P. Miller, personal communication, July 9, 2015). In addition, teachers who were teaching in the blended learning environment were receiving an extra duty contract.

Mrs. Miller acknowledged that there would be obstacles and challenges along the way; however, the flexibility of scheduling, differentiation, and learning in a different way would outweigh the challenges that the district may face.
(personal communication, July 9, 2015). Now that I have explained the composition of Cumberland Valley High School and the district’s initial plan of blended learning implementation I will discuss the sampling methods, including the sampling strategy and sample size I plan on employing during this case study.

**Sampling Strategy**

I gathered data, including surveys, focus groups, and observations from the following stakeholders—parents, students, teachers, and administrators who are a part of the hybrid learning community. This was the target population. The initial surveys were administered to parents and students involved with the blended/hybrid learning program. With the responses that I received, I employed a maximum variation sampling to establish focus groups for parent and student participants. I then aimed to do a complete target population sample for the remaining stakeholder focus groups—administrators and teachers. I was not able to schedule a time that was adequate for all participants in the administrative stakeholder group, therefore I completed interviews, using the focus group questions. The overall goal of the focus groups and/or interviews was to gather varying stakeholder experiences and perceptions. After gathering data from stakeholder surveys and focus groups I planned on using purposeful sampling to complete classroom observations. Despite this, only one teacher agreed to have her classroom observed. Therefore, I observed this teacher teaching in a traditional and blended classroom setting. Now that the target
population has been described and the sampling strategies discussed, I will provide an overview of the recruitment method and sample size.

Recruitment Method

In order to find stakeholders who were interested in participating in the study I sent home a letter and email (Appendix A) to all students and parents of students who were registered in the hybrid learning program. Letters were sent home with the students. After not receiving adequate stakeholder responses after waiting at least a week I sent out a follow up email (Appendix B). As a result, I created my sample group of students and parents from the responses received. I sent out an email asking hybrid learning teachers and administrators to participate in the study. Again, after a week of not receiving feedback I sent out a follow up inquiry and an informed consent form for all study participants (Appendix C).

A pre-implementation survey (Appendix D) was distributed to students and parents who responded to the inquiry to be part of the hybrid implementation case study. The survey consisted of Likert Scale questions. My plan was to take a maximum variation sample based on diversity of the stakeholder’s perspectives to include 3-8 representatives from the parent and student stakeholder group who will be asked to participate in the study and a pre-implementation focus group (Appendix E). However, due to the lack of responses from parents and students I took a complete target population sample of respondents and requested their participation in the focus group. The remaining focus groups were composed of stakeholders—teachers, and administrators who responded to
the initial inquiry. There were four focus groups, one for each stakeholder group—students, parents, teachers, and administrators at the start of the school year. The questions asked addressed stakeholder perceptions of hybrid education, 21st century learning, and organizational structure and culture changes.

The plan was to use the survey questions and focus groups to take a purposeful sampling of classrooms to observe 21st century learning skills, organizational structure, organizational culture, and possible challenges within the hybrid implementation process. However, only one teacher provided consent to observe her classroom. Therefore, only that one teacher’s classroom was observed. The purpose of this study is to observe 21st century learning skills, organizational structure, organizational culture, and challenges.

Towards the conclusion of the secondary hybrid course I sent out a survey (Appendix F) to parents and students via email. I sent out a follow up email a week later to all stakeholders who did not complete the first Likert scale survey (Appendix B). I planned on taking a maximum variation sampling based on the diversity of parent and student perceptions that responded to the survey and invite them to participate in a focus group (Appendix E). However, I aimed to take a complete target population sample of participants who answered the survey questions because of the low number of participants. Some participants chose not to participate in the focus group. No less than one and no more than eight stakeholders participated in these two focus groups. I aimed to have a complete target population involved in the teacher and administrator focus
groups. I had a complete target population of administrators and a complete target population of teachers who responded to the survey questions. All stakeholder groups—students, teachers, parents, and administrators were represented in the focus groups. In the focus groups I asked questions related to my research objectives:

- Stakeholder perceptions throughout the hybrid implementation process—before and after.
- Stakeholder perceptions of meeting the 21st century learning needs of secondary students in a hybrid education model.
- Organizational structure dynamics and changes, including culture, faculty, and leadership.
- Strategies used to overcome challenges faced in the implementation process.

I also considered the sample size for each data collection method. Despite, having an “idea” of my sample size, it was contingent upon the emergent data collected.

**Sample Size**

Sample sizes vary depending on the research method. Mixed methods research can incorporate both quantitative and qualitative sampling strategies (Patton, 2015). Quantitative research typically aims for larger samples selected randomly, to generalize with confidence from the sample to the population that it represents. In this case study, I, as the researcher have selected the target population—Cumberland Valley School District secondary hybrid education.
stakeholders. The survey that stakeholders completed was the quantitative aspect of this study. Therefore, the sample size of stakeholders completing the survey was larger than the sample size of stakeholders completing the qualitative aspects of this case study—focus groups, interviews, and observations.

The sample size for qualitative research methods is often ambiguous (Patten, 2002). The sample size in qualitative research according to Patten (2002) is dependent on what the researcher wants to know, the purpose of the study, what will be useful, what will have credibility, and what can be completed within the available time and with the available resources. Lincoln and Guba (1985) recommend that the researcher increases their sample size until there is no new information that can be found, thus redundancy is the primary criterion for a qualitative researcher's sample size.

Sampling until the point of redundancy is ideal in qualitative research; however, this often requires unlimited time and budget. Patton (2002) suggests that the solution to determining the sample size can be found through negotiation, judgment, and a minimum sample based on expected acceptable coverage established through the purpose of the study. The most common sample size for qualitative research studies completed for PhD dissertations is 20 to 30; however, some sample sizes were as small as one and others are as large as 95 (Patton, 2015). In addition, Patton (2002) suggests that a qualitative researcher keep their sampling design flexible and emergent, as new information may be discovered that may add to or change the purpose of the study.
Due to the limited time and funding for this study, I completed four focus groups of at least one stakeholder and no more than eight at the beginning and end of the hybrid implementation process. The focus group questions aimed to receive detailed feedback from stakeholders regarding the objectives of the hybrid implementation process. I also used these to identify themes and patterns within the focus groups that were established in the stakeholder surveys. However, I had difficulty gathering stakeholders to meet for focus groups, therefore I adapted and completed interviews with available and interested stakeholders. This only happened for the administrative stakeholder group at the end of the year.

I planned on using the focus groups, interviews, and surveys to take a purposeful sample of classrooms to observe; however, only one teacher agreed to have her classroom observed. During the observations I added to and revised my thematic structure, while providing more detail to each theme. I coded all data and themes that emerged in the stakeholder surveys and focus groups, as well as the classroom observations. As the researcher, I chose to use surveys, focus groups, and observations as a way to triangulate data and provide a reflective experience as a whole. Triangulation, according to Patton (2015) strengthens a study by combining multiple methods, such as a variety of data sources. Studies that use a single method of data collection are often vulnerable to errors linked to that data collection method; however, using multiple methods of data collection—surveys, focus groups, and observations provide cross-data validity checks (Patton, 2005).
Data Collection

The data collection methods for this study included stakeholder surveys, focus groups, classroom observations, and emergent document analysis. These are methods of qualitative and quantitative data collection described by Patton (2002). All stakeholders participating in the study completed the Informed Consent Form (Appendix C) prior to their participation. The Informed Consent Form was distributed by email to all stakeholders involved in the hybrid implementation process.

Surveys

The surveys were distributed to all stakeholders who completed the Informed Consent Form via email before (Appendix D) and after (Appendix F) the implementation process. The surveys were distributed to parent and student stakeholders participating in the secondary hybrid learning program through an email providing participants with a link to an online survey. The online survey, like most online surveys, was self-administered by the secondary hybrid education stakeholders (Fink, 2009). If a stakeholder was unable to complete an online version of the survey I was prepared to provide a paper copy. However, no participants expressed that they had trouble completing the survey.

When I developed the online survey, I included an introduction explaining the purpose of the case study and survey. The first question of the survey was connected to the purpose of the study (Fink, 2009)—understanding how stakeholders perceive change in the organizational structure of the hybrid learning program. The key terms were defined throughout the survey, (Fink,
such as culture, 21st learning skills, and organizational structure. The survey consisted of Likert Scale questions. There were seven Likert scale questions aimed at gaining information related to the study objectives:

- Stakeholder perceptions throughout the hybrid implementation process—before and after.
- Organizational structure dynamics and changes, including culture and leadership.
- Strategies used to overcome challenges faced in the implementation process.

More questions were written than what were used and a list of question objectives were created to ensure that all content that was deemed important was covered (Fink, 2009). I aimed at having closed ended questions in the survey because they are more reliable and easier to score, analyze, and interpret (Fink, 2009). However, closed ended questions are more difficult to create (Fink, 2009). The survey started with objective questions, then moved to more subjective questions, and concluded with demographic questions. This format according to Fink (2009) keeps the respondent from getting bored at the end of the survey and not fully answering more complicated/subjective questions. It also eases respondents into completing the survey with objective questions at the beginning.

There are no other pre-existing surveys that are relevant to this case study’s objectives. Therefore, I as the researcher will be creating the survey. The
survey was validated by using face validity. The following are questions (Fink, 2009) I used to assess my questions before conducting my research:

- Will the survey provide needed information?
- Are questions misleading?
- Are all questions answered?
- Are procedures standardized?
- How consistent is the information obtained?
- Are questions appropriate for the stakeholders who will be surveyed?

Assessing the face validity of the survey assisted in establishing measurement validity and design validity. Measurement validity describes characteristics of the survey instrument and design validity describes the context in which the survey takes place (Fink, 2009). Measurement validity addresses if the survey results are comprehensible and meaningful, for example is there a difference between high and low scores (Fink, 2009). Design validity addresses how respondents will be selected for the survey and when the survey will be given (Fink, 2009). In this case study a target population, of stakeholders was selected. The survey was given at the start and end of the hybrid learning school year to parents and students.

There were threats to the internal and external validity of this survey. As the researcher, I want to acknowledge these threats. Threats to internal validity included history, testing and attrition. Unanticipated events that occur while the study is in progress within the school and community may have influenced the response of respondents to the survey questions (Fink, 2009). In addition,
survey respondents may recall their answers from the previous survey when they take the survey the second time influencing how they respond. This is an example of testing, a common threat to internal validity (Fink, 2009). Attrition, an internal threat to validity may also have influenced this study. Students may leave the case study or the hybrid learning program, which will have resulted in a loss of survey respondents (Fink, 2009).

As far as external validity threats, the greatest threat was interaction effects of selection biases. The intervention—secondary hybrid education and the participants are a unique mixture because the students who are part of the hybrid learning community have shown interest and volunteered to participate in the hybrid learning program. Finally, the Hawthorne Effect may be evident as respondents complete the survey. Respondents may become alert to the kind of behaviors that are expected or favored and allow this to influence how they complete the survey (Fink, 2009).

The surveys were used to identify emergent themes, structure the focus group questions, and select stakeholders to participate in the focus groups based on participation. The survey data was used to reinforce that the identified sensitizing concepts, organizational structure, organizational culture, flexibility, and technology were relevant to the study and could provide additional insight into the objectives of the study. The survey questions asked had varied responses, both negative and positive from all stakeholder groups. Therefore, I felt as the researcher, I had identified key themes that would probe stakeholders’
experiences and perceptions of the leadership, culture, organizational structure, technology, and experiences in the blended learning environment.

Due to the varied responses I felt as if I had developed themes that would provide a well-rounded representation of stakeholders’ experiences and perceptions. Focus group questions were then developed around these themes to gather additional data about the stakeholders’ experiences and perceptions in the blended learning environment. The focus group questions were created to gather data on stakeholders’ experiences and perceptions of technology, challenges, culture, and leadership.

Data collected, such as the respondent’s gender was analyzed using descriptive statistics. This provided a summary of the sample (Fink, 2009).

**Sample summary.** For the beginning of the year survey, there were seven males (46.7 percent) and eight females (53.3 percent) in the sample, giving a total of 15 respondents. It is important to take note of the number of respondents that were identified by their stakeholder group. There were six students (40.0 percent), three teachers (20.0 percent), two administrators (13.3 percent), and four parents (26.7 percent), totaling 15 respondents. A total of 14 respondents (93.3 percent) identified themselves as Caucasian and one respondent (6.7 percent) preferred not to answer. When participants were asked to participate in a focus group or interview session related to the blended learning study 12 participants (80.0 percent) responded ‘yes’ and three participants (20.0 percent) responded ‘no’.
For the end of the year survey there were four males (36.4 percent) and seven females (63.6 percent) in the sample, giving a total of 11 respondents. It is key to take note of the number of respondents identified by their stakeholder group. There were three students (23.3 percent), two teachers (18.2 percent), two administrators (18.2 percent), and four parents (36.4 percent), totaling 11 respondents. A total of 11 respondents (100.0 percent) identified themselves as Caucasian. When stakeholders were asked to participate in a focus group or interview session related to the blended learning study 11 participants (100.0 percent) responded ‘yes’ and no participants (0.0 percent) responded ‘no’.

For the entire study there were a total of 11 males (42.3 percent) and 15 females (57.7 percent) in the sample, giving a total of 26 respondents. It is important to take note that the number of respondents were identified by their stakeholder group. There were 11 students (42.3 percent), three teachers (11.5 percent), two administrators (7.7 percent), and 10 parents (38.5 percent), totaling 26 respondents. A total of 24 respondents (92.3 percent) identified themselves as Caucasian, one respondent (3.8 percent) as African American/ African/ Black/ Caribbean, and one respondent (3.8 percent) preferred not to answer. When stakeholders were asked to participate in a focus group or interview session related to the blended learning study 16 participants (61.5 percent) responded ‘yes’ and 10 participants (38.5 percent) responded ‘no’. There were only five participants that took the survey and identified themselves in the beginning of the school year and end of the school year.
As the researcher, I did run cross tabulations between stakeholder groups to see if there was a difference in answers but there was no significant difference found. Finally, I ran a t-test to compare the means of different stakeholder groups to determine the probability that there was a difference between stakeholder’s perspectives at the beginning and end of the school year. There was no significance difference found. In addition to the t-test I ran a one-way anova, homogeneity of variance, and Levene’s test of equality of variances and found no significant data to report.

**Focus Groups**

There was a total of four focus groups consisting of one to five participants each pre and post implementation of the hybrid learning environment. Each focus group consisted of one stakeholder group as suggested by Kreger and Casey (2000) to prevent a power differential. As the analyst I looked for themes across stakeholder groups, as well as over time. The stakeholder groups were selected to be small enough for everyone to participate, but large enough for diversity of experiences (Krueger & Casey, 2000). Parent and student focus group participants were selected based on participation in the online survey. This was different than what was intended, but due to a lower number of participants this is what I decided was best. It was my goal that the target audience for the focus groups was a group of stakeholders who had a variety of experiences and/or perspectives (Krueger & Casey, 2000) during the secondary education hybrid learning implementation process. I aimed for a complete target population for the teacher and administrator focus groups. This was
accomplished for the administrator group, but not the teacher stakeholder group. Three of the nine teachers contributed in the survey and focus groups.

The purpose of the focus groups was to gather a variety of experiences from stakeholder groups during the implementation of hybrid secondary education. From stakeholder’s experiences I then uncovered common themes. The purpose of the study drove the focus group questions and the analysis of the focus groups (Krueger & Casey, 2000). As a whole, focus groups are inductive, naturalistic, and yield qualitative data (Krueger & Casey, 2000). I traveled to meet the participants in a setting where they felt comfortable being interviewed. This helped to establish rapport, confidentiality, and privacy. The questions placed a focus on the experiences, opinions, values, feelings, and knowledge of the stakeholders, as described by Patton (2002). In addition, the focus group questions were predetermined and sequenced for the mediator/researcher (Krueger & Casey, 2000; Patton 2002). There was only one conflict in establishing a time and date for the focus group meetings. Due to the conflict, I conducted two separate interviews in place of the end of the year administrator focus group.

At the beginning of the focus group Krueger and Casey suggested that the researcher inform the focus group participants of their common factors (2000). Much like the survey questions the focus group questions began by asking more general questions and moved towards more specific questions at the end of the focus group (Krueger & Casey, 2000). Good focus group questions are clear, to the point, and one-dimensional (Krueger & Casey, 2000). The focus groups
were conversational and maintained an informal environment that petitioned participants to provide explanations, descriptions, and illustrations of research concepts (Krueger & Casey, 2000; Patton 2002). Finally, I used time wisely and had well-thought-out directions before beginning the focus group (Krueger & Casey, 2000).

After conducting the focus groups, I analyzed the results. The purpose of the study drove the analysis of the focus group results (Krueger & Casey 2000). Analysis consisted of “examining, categorizing, tabulating, or otherwise recombining the evidence to address the initial propositions” of the study (Krueger & Casey, 2000). The analysis of the focus groups was a continuous process, as each subsequent group was analyzed and compared to the earlier group’s analysis (Krueger & Casey, 2000). Tape based and abridged transcript analysis was used to pull out key and repeating themes. As the researcher, it was important to be aware of my personal bias and avoid selective perception (Krueger & Casey, 2000). I have a trail of evidence that assisted with this process, in addition to orally summarizing key points during each focus group (Krueger & Casey, 2000).

Observations

I completed classroom observations of both the traditional and blended environments. Observations are a traditional data collection tool for case studies (Patton, 2002). I observed the culture of the hybrid learning environment and how all stakeholders interacted in that environment. During the observations I
attempted to observe and reflect on the emerging process and analyze stakeholder interactions based on the study’s objectives.

While conducting the observations I used sensitizing concepts that emerged through the surveys and focus groups and I used the sensitizing concepts I identified at the beginning of the study—organizational structure, organizational culture, flexibility and technology. Sensitizing concepts are starting points in thinking that are used to organize the initial direction of the observations (Patton, 2002; Patton, 2015). Sensitizing concepts provide a way of breaking down the “complexities of planned human interventions into distinguishable, manageable, and observable elements” (Patton, 2015). During these observations the focus remained on the organizational culture, structure, flexibility, and technology.

I was an overt observer in the traditional aspect of the hybrid learning classrooms; however, I was a covert observer for some stakeholders in the blended learning classrooms. Overt observations are when the participants know that they are being observed and covert observations take place when the participants are unaware they are being observed (Patton, 2002). Literature suggests that covert observations capture what naturally takes place in the observed environment (Patton, 2002).

Each observation included scribed events and activities that took place. I followed the principles of qualitative research reporting and explained the setting, the activities, and the stakeholders present in each observation (Patton, 2002). I then looked for emergent themes in the scribing and transcription of my
observations. At the conclusion of the focus group meetings and observations I recorded my personal impressions of the data collected in my field notes. I did this keeping in mind that Patton (2002) states that qualitative inquiry includes the observer’s own experiences as part of the overall data collection.

Documents

Finally, I reviewed documents that surfaced in the study that supported emergent themes and objectives including: focus group transcripts, observation transcripts, committee meeting minutes, and the teacher collective bargaining agreement. These documents provided limited data related to my sensitizing concepts—organizational structure, culture, flexibility, and technology.

At the conclusion of the study I triangulated the data from the surveys, focus groups, observations, and documents to determine the credibility of the emerging themes of the study and began to analyze the data collected.

Data Analysis

Now that I have discussed the recruiting methods, sampling size, and data collection, I will discuss how that data were analyzed. The analysis of data took place throughout the entire data collection process. The data were analyzed for emerging themes and coded after each survey, focus group meeting, and observation. By the conclusion of the study the data were triangulated to establish the integrity of emerging themes.

I used content analysis, like many other case studies to reduce and make sense out of the great volume of qualitative data (Patton, 2002). Content analysis of qualitative data was an inductive process that relied heavily on
emerging themes or patterns from the data collected (Patton, 2002). This section will describe aspects of content analysis—data coding, logical analysis, and interpretive analysis.

**Data Coding**

The first step in content analysis is to develop a manageable classification or coding scheme (Patton, 2002). Coding of the data collected in the surveys, focus groups, observations, and documents helped to identify what was significant to the study (Patton, 2002). Therefore, coding includes identifying, coding, categorizing, classifying, and labeling the key patterns in the data (Patton, 2002). Reading through the parent and student surveys was aimed at acquiring the coding categories or classification system (Patton, 2002). Color-coding was initially used as I read through the data a second and third time to identify the emerging themes and patterns. I then transferred the color coding to themes and used the same themes as I continued to code all forms of data collected—surveys, focus group transcripts, observation transcripts, and documents in Nvivo. The themes that I concluded with at this point were, communication, engagement, flexibility, motivation, and technology experiences.

**Logical Analysis**

Logical analysis is an inductive analysis of the coded data used to recognize patterns from which significant themes can emerge (Patton, 2002). During logical analysis the researcher cross-classifies different dimensions and themes in order to generate new insights about how the data can be organized (Patton, 2002). Creating cross-classification matrixes can yield new patterns and
themes that may have not been immediately obvious during the initial coding (Patton, 2002). Finally, the logical process involved creating potential categories by crossing dimensions then working back and forth between the data and the researcher’s logical constructions to create the key themes and patterns for the study (Patton, 2002).

This process took place as I coded data in Nvivo and worked through the emerging themes with my dissertation chair. I then printed out existing themes and color coded them on the floor. The five themes that we worked my initial coding down to were; technology experiences, engagement, communication, motivation, and flexibility. I then examined the data collected and added a sixth theme, disempowerment. Disempowerment emerged through the theme, communication, and proved to impact the engagement of teachers.

I then was able to create sub-categories such as, flexibility in structure, student anonymity, laptop experiences, learning management system experiences, student experiences, student engagement, engagement dependency on teachers, vision, leadership, extrinsic motivation, and progressive learning. Using this information, I was able to create a fluid concept map of the themes. This would become the outline of the findings chapter.

**Interpretive Analysis**

Patton (2002) explains that data of a qualitative nature, like analysis from focus groups and observations does not make the study have qualitative characteristics. However, the interpretation of the focus groups and observation data, as well as the stakeholder’s beliefs and behaviors make the study have
qualitative characteristics. As the researcher, I studied the surveys, focus group transcripts, observation transcripts, and documents collected and asked, what does this mean? What does this tell me about the implementation of hybrid education? Interpretation of the descriptive data goes beyond the coding and logical analysis and attaches significance to what was found in the descriptive data—assigning meaning, offering explanations, and drawing conclusions (Patton, 2002). Both the evidence and the researcher's perspective need to be interpreted in the argument when searching for and making meaning of the collected data (Patton, 2002). My positionality and quality control was a key piece of the interpretation of all data.

**Data Quality Assurance**

The methods used in this study were intended to guarantee the quality of data collected and merit for the findings. The quality of qualitative data is contingent on the methodological skill, sensitivity, and integrity of the researcher (Patton, 2002). Lincoln and Guba’s (1985) criteria used to assure validity in qualitative data collection include credibility, transferability, dependability, conformability, and authenticity. The quality of quantitative data is contingent on careful instrument creation to guarantee that the instrument measures what it is supposed to measure (Patton, 2015). The instrument must then be administered appropriately and in a standardized manner (Patton, 2015). I used face validity for the surveys, member checks, an audit trail, progressive subjectivity, and an ethical checklist to ensure data quality and provide credibility, transferability, dependability, conformability, and authenticity to the study.
**Face Validity**

Face validity is considered to be a superficial measure of validity because face validity is not showing what the measurement procedure actually measures. Face validity ensured that the parent and student surveys were measuring what they appear to measure (Patton, 2015). In this study, I tested the face validity of the survey that was given to both parents and students. My purpose was to examine if the survey questions provide an accurate representation of the construct that was being measured (Patton, 2015). If the questions had face validity, they remained, but if the questions did not, then they were rewritten and re-examined for face validity.

**Member Checks**

Member checks were included to provide another approach to analytical triangulation of data collected (Patton, 2002). I conducted member checks after the focus groups by restating what the stakeholder said, providing the stakeholder with an opportunity to confirm, provide more detail, or correct my understanding of their response. In addition, I asked stakeholders in the focus groups to review the focus group summary and provide comments on the document’s accuracy. I also sent a summary member check document of my observations to the lead teacher for review and comment of accuracy. My final member check was completed once my findings were written. I sent a copy of my findings to key stakeholders including, but not limited to the school superintendent, teachers, students, and/or school administrators. Patton (2002) explains that member checks can not only provide another form of data
triangulation, but they can also provide an opportunity for the researcher to learn about the accuracy, completeness, and perceived validity of their analyzed data.

**Audit Trail**

An audit trail was kept and included field notes and all other records of what I did, saw, heard, and thought throughout the study. The audit trail was used as described by Patton (2002, 2015) to verify the rigor of the fieldwork and conformability of the data collected. My ultimate goals as the researcher was to reduce bias, increase accuracy, and report impartially (Patton, 2002; Patton, 2015). In the audit trail I emphasize empirical findings that included solid description and analysis that were not reflective of my personal perspective or voice; however, I acknowledge that some subjectivity and judgment may be present (Patton 2002; Patton, 2015).

**Progressive Subjectivity**

As the researcher I am responsible for revealing my biases throughout the study in my focus group summaries, observation summaries, document summaries, and audit trail. Progressive subjectivity checks included archiving my changing expectations for the study, including prior and emerging constructions and interpretations of what I was learning. Guba and Lincoln (1989) explain that it is not possible to engage in inquiry without biases and a reason or motivation for the study. However, it is vital that my interpretations were not given privilege over that of any other individual. As the researcher, I have made my biases known in the section of this chapter titled, “Researcher Positionality.” I communicated my biases to the study participants and readers.
and used member checks to ensure that my findings were reflective of the data collected and not my own predispositions.

**Ethical Considerations**

There were several ethical issues to consider in this study. First, this study used aspects of qualitative inquiry, which is highly personal and interpersonal (Patton, 2002). As the researcher, I engaged with stakeholders in their world, which can be more intrusive than quantitative approaches to research. In order to address the ethical issues involved with the design, data collection, and analysis I went through the ethical issue checklist presented by Patton (2002, p. 408-409).

1. **Explaining purpose:** I explained the purpose of the study to the stakeholders in a way that was developmentally appropriate for each stakeholder. The inquiry letters, (Appendix A) surveys, (Appendix D; Appendix F) and focus group questions (Appendix E) were written at a secondary reading level. I explained the significance and purpose of the study in the letter of interest (Appendix A).

2. **Promises and reciprocity:** As I made promises to the stakeholders throughout the study, I was sure to keep those promises. Thus, when I promised to provide the stakeholders with a member check at a certain time I did so. In addition, I explained the purpose and the significance of this study in the letter of interest (Appendix A), thus explaining that understanding the implementation process of secondary hybrid education would provide insight into future program implementations.
3. Risk assessment: I assessed the personal risk of stakeholders who were completing the study. My hope was that confidentiality would decrease the risk of stakeholders providing inaccurate insight into the study’s objectives.

4. Confidentiality: Confidentiality was maintained throughout and after the entire study. Stakeholder names—parents, students, teachers, and administrators were not shared throughout the study. Data was stored at the researcher’s personal home and maintained for the length of the study. When writing the findings and discussion of the report the pronouns he/him and she/her will be intermixed despite the gender of the participant.

5. Informed consent: All stakeholders completed an informed consent form (Appendix C). The researcher cleared all needed information and data collection methods through IRB before conducting the study.

6. Data access and ownership: I have access and own the data collected throughout the study. The school district maintains the right to review the case study at the conclusion of the study.

7. Researcher mental health: There was not a need for the researcher to discuss what was heard, seen, or learned throughout the study, but if the need were to present itself the researcher would have used peer debriefing.

8. Advice: The researcher accessed their dissertation committee when there was a matter of ethics that the researcher did not anticipate in advance.
9. Data collection boundaries: When collecting data through surveys and focus groups I asked for compliance or more detail on one occasion before I stopped pushing the study participants. For example, I sent out reminder emails to the stakeholders after a week of not responding to the survey sent out, but after that point I no longer pushed the stakeholders. I accepted their silence as feedback that they did not want to participate in the study.

10. Ethical versus legal: When completing this study, I did not only abide by ethical standards, but I abided by the standards presented to me by the school district where I have completed the study.

Summary

This chapter presents the study’s methodology and research paradigm employed to examine the implementation process of secondary hybrid education at Cumberland Valley High School. Demographic details, as well as the initial set up and environment proposed for the hybrid learning community and Cumberland Valley High School is illustrated. This chapter also depicts the researcher’s positionality and recruiting methods, followed by details about the collection of quantitative and qualitative data by using surveys, focus groups, observations, and emergent documents. Finally, the chapter explains how the mixed methods data was analyzed and reviews procedures used for assuring data quality. The findings of this process will be discussed in the next chapters.
CHAPTER 4

FINDINGS

The purpose of this case study was to examine the experiences and perceptions of stakeholders in one high school during the paradigm transition from traditional to hybrid education. This chapter will describe the school district and participant motivations for participating in the blended learning program and the challenges faced in regards to the flexibility of the blended learning program. Finally, the chapter will conclude with how the blended learning program impacted students positively despite the obstacles faced by teachers.

Summary of Findings

Table 2

Table of Findings

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The above table represents a summary of the findings that I found while completing the case study on implementation of blended learning at Cumberland Valley High School. Three main themes were identified after analyzing the data selected: (a) implementation motivations, (b) challenges faced, and (c) program successes. In each theme there were subthemes that were identified as significant. Extrinsic motivators, progressive learning, use of technology, and
flexibility in structure were all identified as key motivators for implementing blended learning. The unique approach to teaching in a blended learning environment, communication throughout the implementation process, teacher disempowerment, and the selected learning management system all proved to be challenges to stakeholders involved in the blended learning community. Despite challenges, stakeholders, especially students experienced successes related to student engagement and online discussions, technology, flexibility in learning, and engaging projects.

The following sections will provide details on the above findings.

**Motivations**

Despite falling short of winning a grant, the desire for progressive learning proved to be a key motivator for Cumberland Valley School District and other key stakeholders to follow through with the implementation of blended learning. Participants’ motivation in this study comes from flexibility in structure, progressive learning, and teaching motivated stakeholders to implement blended learning. The following section describes these motivations.

**Extrinsic Motivators**

Cumberland Valley School District was initially motivated to implement blended learning because funding was offered to Cumberland Valley High School to pilot and investigate this new type of learning. The Cumberland Area Intermediate Unit opened a grant opportunity for local schools and school districts which would result in one school district being rewarded the funding to implement blended learning. The Intermediate Unit selected Cumberland Valley
School District, the case study district, as one of the top three schools for the grant. The school districts created a budget, implementation plan, and presentation for the Intermediate Unit. Unfortunately, Cumberland Valley did not win the grant money. Despite this, the school district decided to fund the implementation of a blended learning environment on their own.

**Progressive Learning**

While the school district did not win the grant, their desire to be a progressive school district and provide their students with a progressive type of learning proved to be the key motivator for the implementation of blended learning. Most stakeholders were interested in being a part of something “new” and intuitive that other school districts were not implementing.

Cumberland Valley School District and its stakeholders pride themselves on being an elite school district and possessing forward thinking. One of the administrators explained that this was one of the main reasons he took a position at Cumberland Valley School District: “I actually took a position with Cumberland Valley knowing that they were a progressive district and was seeing the potential in this,” he said. Administrators perceived that teachers were eager to be a part of something dynamic and see the opportunities that blended learning would bring. One administrator shared, “I think the teachers want to be part of something dynamic and they also really want to be supported and feel like they have the resources they need to be successful.”

This pride was echoed by the teachers. For example, at the initial focus groups, one teacher expressed that she was “excited because it seemed like a
new way to do school.” Another shared, “I like the potential of allowing students to work more independently, work at their own pace. I like the potential idea of having more time or having more time to work one on one with students.” Another teacher stated, “And we could like help kids foster—those skills [21st century skills—innovation, communication, collaboration, problem solving] that people assume that they have, but they don’t have.”

Parents also shared positive initial thoughts while reflecting on their students’ experiences because they had seen the success of blended learning implementation at a local community college. One parent explained in the initial focus group, “I actually had positive initial thoughts. Because, as well as being involved in preschool I also teach—have taught some classes at Harrisburg Area Community College and they have started to incorporate blended learning so I had a little bit of familiarity with it. And it has been very positive being implemented at HAAC.”

Most stakeholders expressed in the focus groups that blended learning was a progressive or new type of learning that provides students with skills that are not taught in the traditional classroom. Many stakeholders shared that they felt blended learning encouraged skills such as, student independence, responsibility, and critical thinking. The perception was shared that these skills would translate well into post-secondary education. One parent shared in the initial focus group, “these skills will be able to translate into post high school better.” In addition, one teacher expressed that they were excited to “help foster these skills that people assume students have, but don’t have.” Student
independence, responsibility, and critical thinking were some of the skills the
teacher was referencing.

**Technology**

In their daily lives today’s students are learning via technologies that are
very much like the technologies used in a blended learning classroom, for
example, by watching videos or Googling information on the internet. “To
continue to use the same strategies that maybe we used when we were in the
classroom or even when we were teaching in the classroom doesn’t speak to the
audience as well as some of the new technologies that are—that are a little more
blended learning,” explained one administrator. The goal of this administrator is
to use new technologies in the classroom to reach this generation of students.

Technologies that are currently being used in the classroom are not
speaking to today’s student. In order to meet the needs of today’s students,
Cumberland Valley administrators felt that they should be progressive in the
teaching strategies and technologies used in the classroom and introduce
blended learning.

Many stakeholders also expressed that they thought a progressive
learning environment like blended learning prepares students for college and
teaches independence and responsibility. A student said, “I thought it was going
to be fun because it was more like a college feel.” Similarly, a teacher explained
why she thought blended learning would be good for students: “I thought it was a
good thing for kids because the idea of blended learning or hybrid learning is to
put more ownership on the kids and for them to take more ownership of work and
have more responsibility in the classroom. And for us (as teachers) to be more of facilitators.”

Building student responsibility and preparing high school students with the skill set that they would possibly need for post-secondary education were all motivators for the school district to implement blended learning. However, the biggest motivator for Cumberland Valley was that they wanted to be one of the first to implement this progressive form of learning for students; therefore, they decided to move onward with the implementation process despite the lack of outside funding. In addition, implementing blended learning was also a way to create flexibility in structure, learning, and teaching for the district, as described below.

**Flexibility in Structure**

In addition to blended learning being progressive and intuitive in nature, the flexibility that it offered the school district and stakeholders motivated the district to implement blended learning at the high school. School districts were interested in implementing blended learning because it provided a possible answer to the rising student enrollments. In addition, a blended learning environment would allow for more flexibility in the physical structure of classrooms. Classrooms would no longer need to be physically located at the school. Encountering future issues related to physical space may be prevented with of blended learning, Cumberland Valley administrators explained.

Blended learning provides flexibility in the classroom environment and teaching strategies for students and teachers. One teacher explained the
flexibility of student learning in the end of the year focus group: “I like the potential of allowing students to work more independently. Work at their own pace. I like the potential idea of having more time or having more time to work one on one with students.” Similarly, an administrator explained that blended learning could provide flexibility in scheduling in the following ways. “I think that a way we can use blended is have teachers teach their students every other day. And then provide that extra time for collaboration, office hours, remediation, for planning. I mean creating this stuff, even if you have a shell, even if you have existing content—to create. I mean it is very very time consuming.” Another administrator shared his perspective, “I don’t think suddenly teachers are going to be able to teach 14 sections of students a day by meeting with some classes days 1, 3, and 5 and some 2, 4, and 6. But I think that the teachers have in their head that the district office and school board has that motivation.”

Over time, the flexibility of lesson delivery in blended learning provides the school district the opportunity to serve students in a different way and/or open up more classrooms, as students are not always in a traditional brick and mortar classroom. One administrator shared the following thoughts related to the increased enrollment at Cumberland Valley:

We have a lot, there has been a lot of talk recently about changing the high school in a more dynamic way because of the increase in enrollment. But also because of the way the needs of students are changing. You know we are preparing them now for this amorphous and frightening future that no one really understands what it is. But what we do
understand is having them sit in rows and give them Algebra II because that has been what everyone has done for the last 100 years is not what’s best for the kids. So, umm, we are trying to change that dynamic in general. So, blended learning is one way and we are also really trying to ramp up internships, co-ops, dual enrollment programs, and specialized programs.

Administrators indicated that there had been recent talk about changing the high school in a dynamic way because of the increased student enrollment and the way that student needs were changing. Administrators conveyed that students need to be prepared to enter a future that is amorphous and unknown. They felt blended learning was one way to create change while also creating internships, co-ops, dual enrollment programs, and specializations for students.

The ultimate hope expressed by most stakeholders, and one of the key motivators for implementing blended learning, was that teachers would have more flexibility regarding time for collaboration, office hours, remediation, and planning with a blended learning schedule. This would possibly be created with teachers teaching different sets of students every other day. One administrator shared how she feels that students and teachers will receive these flexibilities in time with blended learning: “I think that a way that we can use blended is have teachers teach their students every other day. And then provide that extra time for collaboration, office hours, remediation, for planning.”

However, teachers expressed that they felt that the motivations of the school district lie in the flexibility of scheduling, in addition to the flexibility of
teacher and student collaboration. One teacher shared her feelings about why they felt the school district had additional flexibility motivations in the end of the year focus group:

I think that there are students out there that value that [blended learning and flexibility of learning]. Unfortunately, those students are not being placed into those classes because of the way we are doing it. I think for the district they see especially at the high school level with this bubble of students coming up. The flexibility of moving students in and out of the building more freely. And freeing up teachers and classrooms for students who need more one on one in a traditional sense.

The conflict between teachers’ perceptions and school district motivations to implement blended learning was shared by one administrator during the end of year focus group:

I don’t think suddenly teachers are going to be able to teach 14 sections of students a day by meeting with some classes days 1, 3, and 5 and some 2, 4, and 6. But I think that the teachers have their head that the district office and school board has that motivation.

Most stakeholders expressed that the flexibility of location motivated them to participate in the blended learning environment. The flexibility to leave school early on Thursdays proved to be a key motivator for students. Some blended learning classrooms were provided the opportunity to learn from the comfort of their home or location of choice on Thursday afternoons. On these days, teachers provided students with an assignment that they could complete at their
leisure in the location of their choice. During a classroom observation, it was evident that some students took the opportunity to go home and some students chose to stay and meet in the classroom.

For example, the following were some of the observations from the blended learning class observation. When the class started, there were only seven students in the classroom out of 25 students enrolled in the class. Students were dispersed around the room. Two students picked up the assignment in the classroom and left. The teacher told them, “You can hand write or type the assignment,” as the students walked out the door.

Interestingly, many students did report to the classroom at the beginning of the period to get a paper copy of the assignment. The teacher expressed that students did not like having to look the assignment up online; therefore, they reported at the beginning of class to get a paper copy. In addition, the teacher shared that she resorted to more traditional methods of teaching because he felt students did not like the blended learning format:

Because my students didn’t like the blended format. Like, it was just clunky for them. They didn’t sign up for it. They weren’t expected to be in a blended classroom. It wasn’t working. It wasn’t meeting their learning needs. So, I had to revert back to a traditional classroom technique.

Some parents expressed that they felt that the flexibility and opportunity to go home early and complete work independently provided students with independence and responsibility:
I think it teaches responsibility. Umm good skills for going to post high school education. And then they are learning how to manage—I need to be in the class or I need to go on my own and finish this activity or lesson or whatever the assignment is on their own. Which is a nice skill going into college.

Another parent shared the difference in flexibility in the blended and traditional learning environments: “So, I think the difference really is the independence or expectation that you complete that assignment on your own.”

The coffee shop set-up of the blended learning commons that only students and teachers who enrolled and taught in the blended learning environment used served as another key motivator. The learning commons provided flexible seating, such as high-top tables, moveable chairs, round tables, couches, and small group areas. This area is available for teachers and students to use if the teacher signed it out or for students during their daily free time, such as study halls, lunch, or early release. Students expressed that this environment was “just more comfortable” and that some of their peers expressed that they learn better in this environment. One student shared:

I think part of the deal with being in the blended learning class was that you can pretty much go down there whenever you wanted to work. I don’t know if I ever took advantage of that, but I think that was one of the perks of being in a blended class is that you are able to go down and use that. It is like a different environment. So, I think that helped some people. Another student described the blended learning commons:
Well, there is all different types of seating. So, there’s like couches. Then there’s like high top tables. Chairs with little desktops. It’s just like—everything is more comfier in there. There is also a smart board in there that the teachers will use and white boards.

Flexibility in learning and teaching proved to be key motivators for Cumberland Valley School District to implement blended learning. In addition, flexibility in structure, scheduling, and environment proved to motivate stakeholders to participate in the blended learning pilot. Despite motivations for a successful implementation, the school district faced several challenges during the second-year implementation, as described below.

**Challenges Faced**

Motivations for a successful implementation of blended learning led Cumberland Valley to move forward with the second-year pilot of blended learning. However, there were several challenges faced, especially by the teachers. Teachers admittedly struggled with the flexibility of the blended learning structure and lack of a communicated vision, mission, and leadership from the administration and school district. While teachers struggled with feelings of disempowerment and a learning management system that did not meet the needs of the students, they resorted back to a more traditional style of teaching.

**Teaching Approach**

Sticking to a blended learning format posed the biggest challenge for teachers. As the school year progressed teachers and administrators noted little
differences between teaching and learning in the blended learning environment and the traditional learning environment. When asked the question, “Do you think this past year teaching and learning is different in the hybrid or blended learning classroom compared to the traditional classroom?” One administrator responded, “I don’t think so.” A teacher responded:

I would say no. Because my students didn’t like the blended format, like it was just clunky for them. They didn’t sign up for it. They weren’t expected to be in a blended classroom. I wasn’t working. It wasn’t meeting their learning needs. So, I had to revert back to traditional classroom techniques.

One administrator expressed that he did not see a cultural change in the school structure with the limited number of students enrolled:

I don’t think that it has changed at all…Simply because of the scale that we have attempted. Last year (year 2 of the pilot) I think we had 265 seats in blended and 235 individual students. So still you are only talking about. That is under 10% of the student body…This year (year 3 of the pilot) with 700 seats we at we are starting to get closer to a quarter of the high school.

During year three of the pilot, the district hopes to use more blended learning and see a dynamic cultural shift in teaching and learning amongst students enrolled in these classes. Furthermore, administration hopes to see learning that is identified by stakeholders as different then in the traditional learning environment.
Stakeholders noted that teachers started the school year using blended learning, but as the school year continued they faded in its use. One student shared, “Our teacher knew about blended learning. She kind of started out using it, but as then, as the year went on it really faded a lot.” The student expressed, “Maybe try to continue it (blended learning) the full year.”

Some teachers did try to create an online community where students would participate in online discussion boards, but other teachers found themselves printing off worksheets and handing out papers to students to complete work. As noted above, this was observed during the blended observation.

**Improved 21st century learning skills.** Improving 21st century skills was one of the motivators for implementing blended learning. At the beginning of the school year, administrators noted that students were experiencing 21st century learning skills like, collaboration, innovation, critical thinking, and problem solving in both the traditional and blended learning classes. The goal was to better engage students and increase creativity, innovation, critical thinking, and problem solving in the blended learning classes throughout the school year. When most teachers and administrators were asked if this happened they quickly responded, “No.”

However, students noted that they thought they were given a greater opportunity to be creative and innovative in the blended learning classes compared to the traditional classes. One student explained, “So, like the creative stuff, I think they are actually doing better at. So, for our projects, our
presentations, he wanted to see creative slides, creative advertisements for our businesses, and things.” Students also expressed that in the blended learning classroom they were provided the opportunity to do more problem based and group projects. A student shared, “We did have a lot of project-based stuff. I would say 90% of the projects we were working with one or more people. So, I think that it allowed us to work together and bounce ideas off each other.”

Other stakeholders explained that students and teachers in the blended learning environment had access to more innovative technology that they used in their projects compared to students in the traditional classroom. For example, one student explained, “We do a lot of group projects. And we have to think of innovative things in our marketing pitches. I think it helps too in the learning commons like the less traditional set up with the rows of seats.” Stakeholders also noted that students in the blended learning environment had access to the learning commons and more innovative tools like smart boards and laptops compared to students in the traditional classroom.

Administrators and teachers resorted to explaining that they strongly feel that 21st century learning skills could be increased in a blended learning classroom, but they did not believe it was happening in the current set up of blended learning at Cumberland Valley. One administrator was asked if she thought students in the blended learning program received access to more 21st century learning skills compared to students enrolled in traditional learning. The administrator responded, “The way it is being implemented now, absolutely not. The way it could be implemented in the future, absolutely.”
Stakeholders are motivated by the hope that in the third year of the blended learning pilot 21st century learning skills will increase in the blended learning environment.

**Communication**

All stakeholders expressed that communication proved to be a challenging area during the implementation process that needed some of the greatest improvements. Communication relates to the definition of blended learning and enrollment in the program caused the greatest barriers for stakeholders. In addition, stakeholders, especially teachers identified that there was a lack of leadership and vision for the blended learning program.

This was echoed by parents when they explained that they were completely unaware what a blended learning class was, and that their students were enrolled in a blended learning class until the beginning of the school year or until back to school night (open house). One parent shared the following when asked about if they knew their student was going to be in a blended learning class: “And I didn’t know—we didn’t know until after school year started.”

Another parent responded:

Yes, that was what I was going to say. My daughter is in sports and entertainment marketing class—that’s a blended class. So, it was sort of the same thing. She didn’t know—I didn’t know until she signed up for the class and came home.

Teachers even expressed that parents most likely did not know that their child was in a blended learning class. One teacher stated in the initial focus
group, “Cause right now, what you will probably here from parents too is—we don’t even know our kid was in blended learning.”

Despite this, one parent was aware and explained that they were contacted at the end of the school year about enrolling his child in more than one blended learning class. The parent explained, “And they said hey, I think he [the student] would be a pretty good candidate to have all three [blended learning classes]. So, I agreed then.”

When encouraged to think about when they first realized their child was in a blended learning class, many parents did remember a letter coming home that they had to sign so their student could have a computer. The following conversation took place at the initial focus group amongst the parents. One parent stated, “There were one or two letters.” Another parent responded, “Yes. I think there were.” A third parent added, “And I think at back to school night. I did go to back to school night. Did she (the teacher) speak about it?” A fourth parent responded, “She did at back to school night.” The third parent continued, “And that it wasn’t approved. Well that is she said at back to school night. It hasn’t been approved for early release. I remember her talking about early release.”

As evident in the above conversation at this point parents did not know the definition of blended learning. Most stakeholders expressed that they were unaware of the definition of blended learning as well. One student expressed, “I didn’t even know what it meant.” A teacher echoed the student by sharing in the initial focus group:
And I think when I said I didn’t know what blended learning was—I still don’t know what it is. Because I was told it is whatever you want it to be. You make it your own. Well, I don’t know what that means.

Another student shared, “I thought it was going to be a dumbed down class. Like a level 3 or something.”

Again, as the above statements from focus groups show the majority of stakeholders were unaware of the definition of a blended learning class. During the end of the year focus group parents responded to the question, “If your child would be in a blended learning class in the future, what would you do differently.” One parent responded, “I think I would try to get a little bit more information about, about you know how the blended learning was going to affect that particular class. And how it would make it different maybe then the traditional class.”

Communication about the definition and enrollment of blended learning proved to be a challenge for most stakeholders. Teachers also identified communication about student enrollment as a challenge. Teachers expressed that enrollment during the second-year pilot was different than the first year. Teachers overwhelmingly preferred how they selected students the first year compared to the second year.

One teacher described the difference in communication about student enrollment:

This year my kids were just plopped in those classes (blended learning classes). They had no idea it was a blended class. I didn’t get to talk to
their teachers, and its—there’s a huge difference because they don’t necessarily want it. They aren’t ready for this.”

The previous year, teachers spoke with students’ other content teachers and counselors and met with students before the beginning of the school year to explain the differences between blended and traditional learning.

One administrator described their perspective of how stakeholders feel about blended learning: “Hopefully, a little more towards the indifferent. I think a lot of people just don’t know what it is. And frankly, we don’t necessarily know what it’s going to look like.” One parent also described how they perceive stakeholders’ feelings about blended learning similarly: “I would say it is probably indifferent because I think overall, I don’t think people or parents know much about it so I think they are indifferent.”

Lack of communication about the definition of blended learning left most stakeholders feeling indifferent about its implementation. However, poor communication about student enrollment left most stakeholders confused and teachers unsure about student placement. Just as communication proved to be a challenge during the implementation of blended learning, the lack of leadership also created barriers during the implementation, as described below.

**Leadership.** Leadership has proven to be one of the biggest challenges for stakeholders during the implementation of blended learning. Administration, teachers, and parents have all identified in interviews and focus groups that the program lacked a clear leader during the second year of implementation of the
blended learning program. Most stakeholders felt this led to feelings of confusion, disempowerment, and negativity.

One administrator identified that the program lacked a clear established leader in the implementation process. In addition, most stakeholders struggled with the lack of communication. During the beginning and end of the year focus group the administrative staff described leadership as “chaotic.” Not until halfway through the second year of the implementation of blended learning did one person step up to be the administrative lead in the blended learning program.

One administrator interviewed explained that the blended learning pilot began without a single point of leadership:

I think it has been chaotic because there hasn’t been a single point of leadership for this. We started off with really no leadership in the building that was specially aligned with it to having an assistant principal who was aligned with it.

Due to the fact that there was not a leader identified, teachers became frustrated and felt as if they were not receiving support from the district. One administrator explained his perception of how the teachers felt:

And even if there’s not a district vision, make sure there is a perception of a district vision. One of the things the teachers really seemed to struggle with was the fact that they didn’t feel that everyone in the district knew what the vision was. That everyone in the district was supporting them. Another administrator shared:
So you had all these different people who had, you know, relative degrees of interest in the program who all—all wanted it to succeed. But there was not one clear—one person who was in charge…So, that was very frustrating for the teachers.

This left teachers with more questions of how to implement the program, as they expressed in the focus groups:

I think just reiterating the point that there needs to be a leader that is making the logistical and the financial like decisions. Cause we (teachers) can only do so much. This cannot be a grass roots from the ground up, shared a teacher.

Another teacher echoed:

In August, I came in for a two-hour training on D2L (the selected learning management system) and what questions—I was asked what questions I had. I didn’t even know where to begin. So, I felt like I was dropped into it completely blind. Like, no idea where to begin. So, feeling like for two years everything I have heard from them (other teachers piloting blended learning)—they had all this time to collaborate, to throw ideas off of each other, work together, and then this year. There is none of that. So, I am wondering if it is something the district isn’t focusing on anymore. Or maybe they have given up on. Or if maybe they feel like everyone else in the blended group knows what is going on?

Noting the lack of building level leadership and frustration among teachers, one administrator opted to take on the role as the administrative leader
of the blended learning program. During the beginning of the school year the administrator experienced meetings with staff where they felt completely overwhelmed and frustrated with the lack of direction and leadership from the school district.

The administrator who took on the role as administrative leader explained her goals and purpose in the initial focus group:

I’m kind of trying to be in the middle and connect the teachers and also get some answers. You know because if the vision is we are going to continue grow things this well, then we need to plan on how and what that is going to look like. If the vision is this was a nice idea and now we are going to kind of absorb this back into the schedule. Then that is something else. It is interesting in a district this size that it often times is very difficult to get an answer.

Teachers’ feelings of frustration and disempowerment were evident in the beginning and end of the school year focus groups. Teachers explained that they had minimal training on the learning management system (LMS) and were entering the school year completely blind.

One teacher expressed as the others nodded in agreement that he felt like he had no idea where to begin. This teacher was joining the blended learning pilot for the second year and she expressed that those who participated during the first year told her that they had time to collaborate together, throw ideas off of each other, and discuss how to implement blended learning content in their
classrooms. However, year two of the pilot, the teachers did not have these things and they did not have a leader.

One teacher explained her experience from the first year of the pilot: “We had opportunities to meet the prior years. We had the ability to be more innovative. We had more access to more resources. And this year we just didn’t for, you know, multiple reasons.” Another teacher shared, “But this year was particularly frustrating. I think with the limited resources and time that we had.”

One administrator identified the frustration experienced by the teachers and felt that she may be able to assist as the building level leader and act as the liaison between the school district and teachers. The administrator did explain that she felt that this helped teachers feel more power and direction as they moved into the second half of the school year. The administrator shared the following as her goals as the building level leader. “Umm. One of the things I tried to do was to be the one to be the conduit of information. So, teachers would report to me then I would go get the answers for people.”

Teachers expressed that it was helpful to be able to meet with the administrator for guidance with the blended learning program; however, they still felt that they did not have much leadership when it came to the implementation of blended learning.

The school district was trying to make the blended learning program a grass roots, ground up program using the teachers initially, but there were too many questions and ideas from varying teachers and leaders. One administrator explained this in the beginning of the school year interview:
So, you had all these different people who had you know relative degrees of interest in the program. Who all—all wanted it to succeed. But there was not one clear—one person who was in charge…So, that was very frustrating for the teachers.”

Vision. The vision of the school district created tension and questions for most stakeholders, especially the teachers. A lack of vision coupled with multiple school leaders providing their ideas left teachers wondering if blended learning was something that the district was planning on continuing with, if the district knew what they wanted blended learning to look like, or if they were just going to move on from the concept of blended learning all together. Due to the fact that there was no identified vision for the teachers they began reverting to their old, traditional ways of teaching.

What is blended learning? When asked this question both at the beginning and end of the school year, stakeholders did not have a clear answer. When a student was asked at the beginning of the year what they thought blended learning was going to be, their response was, “I thought it was going to be a dumbed down class.” Another student admitted that they didn’t even know what blended learning meant. A teacher echoed this response during the beginning of the school year focus group.

Teachers felt confused, frustrated and overwhelmed. One teacher explained during the end of the school year focus group that it was not just the teachers and students who did not know what blended learning was, but he
believed it was the *school district* that did not know what blended learning was and therefore, neither did the stakeholders.

Teachers explained that every teacher has a different vision of what blended learning is and should be in their classroom, and therefore every classroom is a bit different. This was evident when I observed a classroom at the beginning and end of the school year. Both times the students were in a different environment and had different expectations. For example, during the first observation, students were learning in a more traditional environment. Students completed group work and the teacher led discussion at the end of the class. However, in the second observation, only a portion of the students made their own decision to remain in class and work independently. Seven students remained in class and the other 18 students made the decision to pick up the assignment and go home or get their assignment online and complete it at home. Some teachers asked and received permission for their blended learning classes to have early release or leave school early once a week, while other blended learning classes did not have this opportunity.

Despite the flexibility given to teachers to create their own vision of blended learning, teachers have shared their frustration with the lack of a vision with school leaders. In the end of the school year focus group teachers explained that due to a lack of vision during the second-year pilot, it was not what they expected. Teachers questioned whether the district even had a vision moving forward for the blended learning program. One teacher explained:
The whole purpose of this being implemented hasn’t hit the fan yet. So, we still have time. So, it is kind of like not that they don’t care, but it is on the back burner—it is something we have. It is a cool idea. It sounds cool in the media. But it is really on the back burner.”

Parents in the focus groups explained that they did not know initially that their children were enrolled in a blended learning class and that they were not sure exactly what blended learning was. One parent stated at the initial focus group when I asked about their student’s enrollment in the blended learning class, “And I didn’t know—we didn’t know. I didn’t know until after the school year started.”

The one thing they did know was that their students who were enrolled in the blended learning class were going to be given a lap top computer to use and bring home. In addition, they did share that they were told that some blended learning classes would allow students to leave school early and be able to do work at home. Beyond this knowledge that was provided to the parents during the first month of school, parents were not able to verbally explain what blended learning was during the focus group. One parent explained, “There were one or two letters.”

During the end of the school year interview an administrator explained that the lack of a vision impacted how stakeholders perceive blended learning. Currently, the administrator was addressing parent concerns related to their students being placed in a blended learning class for the following year. The
administrator was asked how he perceived other stakeholders’ opinions about blended learning:

Ah, this is a tough time to ask me that this question because I just funneled the communication roll out of it [blended learning for the next school year]. I would say in between negative and what was the middle one?

The interviewer stated, “Indifferent.” The interviewer then asked why the administrator felt that parents were indifferent when it came to their opinions or thoughts on blended learning. He responded, “I think a lot of people just don’t know what it is. And frankly, we don’t necessary know what it is going to look like.”

During the focus group, administrators commented that maybe it was intentional that there was no vision for teachers, leaders, students, and parents. Maybe a stakeholder vision is the ultimate goal for blended learning? If that is the goal of the district, to make the blended learning program a grass roots, ground up program, that may need to be explained to the teachers explained administrators. “And even if there’s not a district vision, make sure there is a perception of a district vision,” explained one administrator at the end of the school year interview. One of the biggest struggles for teachers was that they felt like everyone in the district did not know what the district vision was and because of this they were not receiving support.

If the lack of a district vision was intentional, then who identifies the school district vision? Administrators expressed that they feel that the fact that the
English teacher and the geometry teacher might have completely different visions of blended learning and teaching in the blended learning format is a huge advantage. One administrator explained:

How do you communicate about something that no one really understands, including the people involved with it? I think that is something that is actually a huge advantage. Is that the English teacher’s perception of what blended learning is in her classroom is going to be different to what the geometry teacher’s perception is.

However, teachers have continuously expressed that they want more direction from the district. Students have even shared during the focus group meetings that it is evident that teachers feel lost and are unsure of what they are doing when it comes to teaching in a blended learning environment: “She kind of started using it, but as then as the year went on it faded a lot,” expressed a student in the end of the year focus group.

The lack of vision has been identified as a problem throughout the implementation process; however, the question raised was whether the lack of vision was created intentionally. Are district leaders hoping that that through piloting the blended learning program that teachers, students, and other stakeholders will help to create a district vision for the program? Or is the district’s vision to implement a cutting-edge type of learning experience because it sounds good in the media, as one teacher described? Either way, it is evident in the focus groups and classroom observations that a vision that is clear for teachers is needed for teachers to fully embrace the implementation process.
Or as one administrator stated, “And even if there’s not a district vision, make sure there is a perception of a district vision.”

**Teacher Disempowerment**

Evidence from teacher and administrator focus groups and interviews identified that teachers felt as if power had been taken away from them during the second-year pilot of blended learning compared to the first-year pilot. Teacher disempowerment was identified by administrators and teachers as a result of limited resources and time, lack of student screening into the blended learning program, and a clunky learning management system. This resulted in decreased student engagement and teachers returning to traditional methods of teaching.

Teachers identified three main differences between the first-year and second-year blended learning pilot—time, resources, and the mentality of the students who were enrolled in the blended learning classes. During the first year of the blended learning pilot, teachers were given additional and common time to meet with other teachers who were teaching blended learning classes. “We had opportunities to meet the prior years, we had the ability to be more innovative, we had more access to more resources. And this year we just didn’t for you know multiple reasons.” Explained one teacher as the others nodded. During this time teachers were able to discuss what was and what was not working in their classes and share ways to improve student learning.

In addition to the lack of time, teachers also lost the ability to use resources that they had become familiar with during the first-year pilot. Teachers
described the new learning management system as “clunky and difficult to use” not only for teachers, but for the students. One administrator explained, “And the content that they (teachers) were supposed to be using for Edgenuity wasn’t really meshing really well. And it just blew their (teachers) whole world up of how they thought the work flow was going to look.”

One teacher described her lack of resources and time during the end of the year focus group:

It is a little bit frustrating cause it is kind of like we are navigating territory that is completely unknown to your school district. So, it is a lot of trial and error and with the demands of schedules and conflicting schedules and limited resources it was really challenging to really implement it [blended learning] the way we envisioned it be implemented.

The final challenge for teachers was that students did not choose to be in blended learning classes, instead students were placed in blended learning classes because the classes fit the student’s schedule. This was an administrative decision the administrators explained in the beginning of the year focus group:

We built lots of safety nets the first year for kids who were not ready for it. I think one kid moved. We didn’t have any safety nets the second year. And now that, it seems like it is a big issue for the teachers.

Teachers explained in the focus group that before the first-year pilot of blended learning they were able to meet with counselors, talk to student’s teachers and for the most part, select students who, based on these
conversations, would be successful in a blended learning format. However, before year two of the blended learning pilot, teachers did not get the opportunity to do these things and instead the situation was described by teachers in their focus group in the following way:

This year my kids were just plopped in those classes (blended learning classes). They had no idea it was a blended class. I didn’t get to talk to their teachers. And it’s, there is a huge difference because they don’t necessarily want it (blended learning classes). They aren’t ready for this (blended learning).

Despite that teachers felt some of the students in their classes were not ready to be in a blended learning class and take on the challenges that they faced as a student in a blended learning class, teachers did feel confident that they could identify characteristics of a successful blended learning student. Teachers described the type of student, as a student, “that has the persona or the mentality or the open minded, growth mind set if you will.”

This description was given as the type of students that were involved in the blended learning program during the first year of the pilot, but not the second year. One teacher stated the following at the end of the year focus group, “I think that there are students out there that value that (blended learning and flexibility in learning). Unfortunately, those students are not being placed into those classes because of the way we are doing it.”

During classroom observations, it was evident that not all of the students were embracing the blended learning format. For example, students were not
submitting work electronically or checking the learning management system being used by the teacher. Instead, students checked into class on days that they were able to leave school early to get a paper copy of the day’s assignment. Students were not checking in because this was the only way to get the assignment, instead students were checking in to get the paper assignment because they preferred to have a paper copy of the assignment over the electronic copy. In addition, students who decided to work on the assignment in class instead of going home were not all using their school issued laptops. Many of the students were recording their answers down on paper and using their cell phones to gather data and information.

The learning management system that was selected for the second-year pilot was described by administrators as “not meshing well with the content that teachers were using.”

In addition, teachers were instructed by administration that they were not allowed to use an online system that many teachers had transitioned to during the first year of the blended learning study. This was also a format that students had basic understanding of how it worked from other traditional classes. Both teachers and students pushed back against the learning management that was selected. One administrator explained in the initial focus group:

Yes, my personal opinion is that Google Classroom (the online system teachers were using) was great because they were implementing it instantly—right then and there. But then again when you think long term, district wide, umm you think about resources being expended.
Due to the fact that neither students nor teachers were thrilled with the learning management system used, many teachers transitioned back to traditional forms of teaching by the end of the school year. Stakeholders all mentioned this in their end of the school year focus groups. One teacher explained:

My students didn’t like the blended learning format, like it was just clunky for them, they didn’t sign up for it, they weren’t expected to be in a blended classroom, it wasn’t working, it wasn’t meeting their learning needs. So, I had to revert back to traditional classroom techniques.

The learning management system posed such a challenge that the school district selected a new learning management system moving forward described an administrator at the end of the school year interview.

I think the LMS was definitely a big part in, what do we call it the unsuccess of the blended classroom because it was really clunky, it was not ascetically pleasing, it was not user friendly. So….And Schoology (New LMS) also allows for the app like you know so I think there are going to be a couple different ways in which they can access the courses content and course work. So, I think that is going to be a big deal, explained the administrator.

During classroom observations, it was evident that students and teachers were not using the learning management system. During the more traditional observation students were given handouts by the teacher. Students then stood at the front of the class and presented from a PowerPoint. At the end of the
class the teacher had students come to the front of the room and enter their email if they wanted a copy of the power point. Neither the teacher, nor students mentioned using the learning management system to gather information or share information.

During the nontraditional classroom observation, the majority of students reported to the classroom to gather paper copies of the assignment instead of going on the learning management system to access the assignment. In addition, the teacher told the students when she was asked that the assignment was due in class the next day, and it did not have to be turned in on the learning management system, it could be emailed. This evidence shows that teachers and students both have made the decision not to put a lot of effort into using the learning management system as a tool to create more fluid learning.

Due to lack of time and resources, the ability to hand select students to be in the blended learning program, and a “clunky” learning management system, teachers resorted back to traditional teaching methods. The majority of stakeholders expressed that resorting back to the traditional teaching methods and implementing blended learning in the way that Cumberland Valley did during the second-year pilot decreased student engagement from the previous year’s pilot. One teacher admittedly explained that he had resorted back to a traditional classroom teaching style by the end of the year focus group because in his mind the students who were enrolled in her blended learning class were not prepared to be in a blended learning environment. He described his experience:
Students didn’t like the blended format. Like, it was clunky for them. They didn’t sign up for it. They weren’t expecting to be in a blended learning classroom. It wasn’t working. It wasn’t meeting their learning needs, so I had to revert back to a traditional classroom technique.

Despite challenges faced in the blended learning program, one student suggested moving forward during the end of the school year focus group. “Our teacher knew about blended learning. She kind of started out using it, but as then the year went on it really faded a lot…So, maybe try to continue it [blended learning] for the full year.”

This statement by the student in the focus group does show that teachers did pull back on using blended learning as the school year progressed. Administrators also noted that teachers were not using blended learning teaching techniques as much at the conclusion of the school year in their end of year interviews. The following quotes by both administrators speak to the fact that they foresee blended learning providing a different and unique type of learning to students, but as it was implemented during the second-year pilot, students were not receiving a different education then a student in a traditional classroom.

The question was asked by the interviewer, “Do you think that students are experiencing 21st century learning skills like, collaboration, innovation, critical thinking, and problem solving in the blended learning environment?” One administrator stated at the beginning of the year focus group, “Yes, but I think it is not anything different than what they are getting in most of their classes.” At the end of the year the same administrator answered, “I don’t think so.”
When an administrator was asked to reflect on teaching and learning in the blended and traditional classrooms and to compare the two, the administrator said that she does not think that teaching and learning differed during the second-year pilot of blended learning between the traditional and blended learning environments.

Parents also chimed in when comparing the traditional classroom with the blended learning classroom during the end of the school year focus group. One parent described this comparison in the following way:

In my daughter’s case, she also has some other AP (Advanced Placement courses) and some other classes where I really feel like that even in a traditional setting she is experiencing a lot of the technology and creativity and things like that. But you know definitely you know she has experienced that as well in that blended learning class.

Evidence from the focus groups shows that students are using technology and some 21st century learning skills in both the traditional and blended learning environment. Current feedback from the focus groups did not show evidence that learning and teaching were significantly different between the two environments as the blended learning courses are currently being implemented.

Classroom observations supported these findings as well. Students were collaborating during both the traditional and blended learning classroom observations. Despite that, not all students were present during the blended learning observation because students were free to leave; the students who did stay in the classroom collaborated and communicated with each other. In
addition, the teacher challenged students who were in the classroom to problem solve to find answers to their questions. She did not give students answers immediately.

During the traditional classroom environment observation, students were placed in groups and were assigned an example SAT question. Together the students had to collaborate, problem solve, and think critically to answer the question. The students devised a response to the question and explained how they answered the question to the class. Students then stood together in front of the class and communicated their answers to their peers. The teacher assisted and scaffolded for individual students during this time.

This evidence does show that 21st century learning skills such as thinking critically, communicating with others, problem solving, and collaboration were used in both the traditional and blended learning environment. With that being said, student engagement did not change based on the classroom observations and student focus groups in regards to increased 21st century learning skills.

One student described student engagement as more dependent on the teacher, not the learning environment in the following way:

So, I think it still kind of has to do with the teacher more….So, I don’t think it is like oh yes blended! Or oh no blended! I think it is more the teacher then the actual deliverance of the curriculum.

Keeping in mind that student engagement may be dependent on the teacher, the blended learning teachers were feeling disempowered, which led to frustration during the second year of the blended learning pilot. Teachers were
feeling this way because of the lack of time and resources, the ability to screen students before they were placed into the blended learning program like years past, and a clunky learning management system.

**Learning Management System**

The learning management system was identified by teachers and administrators as negatively impacting the implementation of the second-year pilot of blended learning. The learning management system selected to be used at the beginning of the school year was Desire to Learn (D2L). The negative experiences expressed by teachers and administrators led the teachers to abandon the learning management system quickly. Teachers began to use an online system called Google Classroom that provided more flexibility and proved to be easier for students and teachers to learn. One administrator described Google Classroom as, “great because they [students and teachers] were implanting it instantly—right then and there.”

However, the administration was not pleased that teachers abandoned the district-selected learning management system and tried to encourage teachers to use it once again. One of the main reasons administrators wanted teachers to use the selected learning management system was because the district was thinking about how it could be implemented long term, not just in the moment. One administrator described this in the beginning of the year focus group by saying, “When you think long term, district wide, you think about resources being expended.” The administrator continued to highlight the reasons that the school
district selected the learning management system they did and why the district was asking teachers not to use Google Classroom.

Despite district and administrator pleas teachers were seeking a learning management system or technology that could be implemented quickly and in the moment. One teacher explained her experience with the new learning management system. “The first thing they tell you when you use a learning management system is you have—you can’t assume kids know how to use it, you have to teach them.”

However, time was a challenge for teachers. Teachers had limited time to learn the new learning management system themselves, let alone teach students how to use it in addition to the classroom content. One teacher explained her feelings about the learning management system, “We just don’t like D2L, it’s really clunky—we don’t like it. We like Google Classroom. We want to use that.” In response the administrator simply said, “We are going to use D2L because we are going to have a learning management system not just Google Classroom.”

Despite this, teachers resisted and returned to a traditional form of teaching. One administrator explained why teachers were struggling with the learning management system. “Its (content) didn’t integrate with the LMS as easily as the teachers would have wanted. Many of the teachers ended up using Google Classroom which they found a lot more straight forward and flexible.”

The learning management system was selected because it was supposed to connect seamlessly with content selected from Edgenuity. Despite the fact that teachers selected the content provider and learning management system
using a rubric that they created they still were not happy. The content was not connecting, and teachers continued to resort to more traditional methods of teaching. Administrators described teachers’ experiences: “The content that they (teachers) were supposed to be using for Edgenuity wasn’t really meshing really well. And it blew their (teachers) whole world up of how they thought the work flow was going to look.”

This was just the beginning of the negative experiences with the learning management system as described by participants. For instance, an administrator described his perception of how teachers were feeling during the implementation process: “I think if anything they are learning to be frustrated with technology which is really a shame.”

One teacher acknowledged that the selected learning management system was not working for teachers and the blended learning community. Below is what the teacher had to say in the end of the school year focus group regarding the learning management system used during that school year and the new learning management system selected for the upcoming school year:

I think the LMS was definitely a big part in, what do we call it the un-success of the blended classroom because it was really clunky. It was not ascetically pleasing. It was not user friendly. So, and Schoology [the learning management system selected for the upcoming school year] also allows the app so I think there are going to be a couple different ways in which they [students/parents/teachers] can access the course content and course work. So, I think that is going to be a big deal.
Teachers and administrators alike expressed excitement over the new learning management system selected for the 2017-18 school year. Despite trouble and challenges expressed by both stakeholder groups, everyone involved did explain that they thought a new learning management system would assist in the implementation of the blended learning program.

When asked what would be needed for a successful year of implementation, one administrator responded:

I think the technology that teachers have which is the new LMS, which is Schoology coupled with I think some laptops of moderate quality. I think the technology will meet the needs of the teachers. I don’t think there will be a barrier like it has been in the past.

Students did not have much knowledge about the current or new learning management system. When students were asked about the learning management system D2L, one student responded, “I don’t think that we use D2L too much.” Another student, when asked about their use with the learning management system, responded, “So at the beginning of the year we kind of—with the CV blended learning website—we kind of worked with that, but other than that I don’t think so.”

Despite the challenges that administrators and teachers expressed with the learning management system, students did not express any challenges. Instead, students had limited knowledge of the learning management system that teachers were instructed to use by administrators. During both the traditional and blended learning classroom observation students were not using the learning
management system, D2L. Instead teachers instructed students to access assignments on Google Classroom. In addition, the teacher had students email her responses and shared information with students through email.

All in all, teachers and administrators faced several challenges with the selected learning management system for the current school year. Despite challenges faced by teachers and administrators, students did not express any challenges with the learning management system; however, not all students were aware that the learning management system existed. Administrators and teachers conveyed excitement and promise that the learning management system selected for the following year would be easier to blend with selected content and more flexible and easier for students and teachers to learn and use.

**Program Successes**

Despite challenges faced by teachers in regards to the learning management system, communication, and leadership stakeholders did have some positive experiences. The most notable difference in learning was experienced by students who are traditionally identified as shy. In addition, students and parents alike experienced and identified several successes and positives about the blended learning pilot. Students explained that the blended learning classroom was different from the traditional classroom because they had 24/7 access to laptops, flexible seating and schedules, more online projects, and the ability to be more creative. Parents conveyed that they were satisfied with the flexibility, independence, and responsibility that the blended learning environment provided for their students. In addition, teachers did see additional
engagement in the online setting from a select group of students compared to the traditional classroom.

**Student Engagement**

The most notable difference administration noticed between the traditional education classroom and the blended learning classroom was that students who are considered shy developed a voice in the blended learning classroom. Traditionally shy students do not interact or engage in classroom discussion with their teacher or their peers. This ultimately inhibits these students from experiencing 21st century learning skills such as, innovation, collaboration, problem solving, and communication.

However, providing a platform where students who are traditionally shy with the opportunity to communicate, collaborate, and problem solve with their peers via a learning management system or discussion board appeared to be one of the biggest differences between the two learning environments identified by the administration.

One administrator explained that the blended learning environment encourages and promotes students and teachers to use 21st century learning skills such as problem solving, communication, and collaboration: “That is truly blended forces teachers and students to use soft skills that everyone is trying to teach their students. Collaboration online and in person. Problem solving online and in person. Projects online and in person.”

However, the biggest feat in the blended learning environment was identified by both administrators when interviewed. The blended learning
environment may promote 21st century learning skills for all students, but most importantly the two administrators interviewed mentioned that the ability to give the shy student in the classroom a voice was one of the biggest advantages for teachers and students. One administrator said, “My shy students are all of the sudden having a voice in the conversation. I think they see some potential when they start doing it without initial fear.”

Another administrator described the advantage of the blended learning environment for the shy student in the following way:

But if I could have a discussion that I am doing through an online community and that really shy kid in the corner that is never going to raise their hand all the sudden feels empowered to have a voice in the conversation. And that is something that one of the teachers over the summer noted. And for me it was this great organic growth in the process where okay here’s a teacher who saw how this technology is not just different but it is better in this language arts class.

Administration, despite the challenges, have found a stakeholder group, shy students, who could really benefit from the blended learning community. These students have been noted to explore 21st century learning skills such as critical thinking, problem solving, collaboration, and communication that they do not experience in a traditional learning environment due to possible fears.

**Technology**

When students were asked about the technology that they were using in the blended learning classroom, their faces lit up with excitement. All students in
the beginning of the year and end of the year focus group were ready to express their gratitude and thankfulness for having a laptop all year long. Students were assigned a laptop at the beginning of the school year and had the ability to carry it around school, using it for multiple blended and traditional classes and take it home to complete work at home on it. One teacher explained how the school district distributed the laptops:

- It is—the way that laptops have been distributed is the same as it was last year as it is this year. So, every student that is in a blended learning class is issued a laptop to borrow for the entire—for the duration of the course.

Overall, students expressed how much they benefitted from access to the laptops in their blended learning classes and traditional learning classes. One student said, “Our class has talked about what you liked most about it (blended learning) and everyone has agreed that the laptop.” Another student explained, “The laptops were the biggest, the most positive thing about it (blended learning), because we were allowed to use them in any class at any time.” Another student echoed, “I think it has been good. Like, I liked using the laptops. I’ve gotten used to doing other school work on those. So, once I had that I used it a lot.” A fourth student expressed when asked what was the most beneficial aspect about the blended learning environment:

- The laptops. They are so nice to have. And other students, my friends have borrowed my laptop because they are so convenient. They [friends not in a blended learning class] are like are you done with that? I wish I had one of those.
In addition, a fifth student conveyed, “Laptops work really great because you can type up papers a lot easier then you can with like tablets. So, I think that is the best option as far as technology that you can take with you.”

During the blended learning classroom observation, students were independently working on their laptops or in a small group of two students. The teacher made rounds around the room to students who were working and addressed questions with students using their work on the laptop. In addition, students were accessing information via their cell phones. It appeared during the observation that students were using both their laptops and personal devices to complete the classroom assignment.

During the focus groups both students and teachers mentioned that they liked the use of laptops over another device like a tablet and/or Chromebook. One student explained during the focus group that her class did try using tablets, but it was not as well received as the laptops: “They tried tablets with us because I think the school—I don’t know how recently they got a class set of tables and I think the laptops are definitely best.”

Two teachers also expressed their preference for the laptops in the end of the year focus group. One teacher said:

I like the computers we have. I think the computer is the right way to go. We looked at Ipads, we looked at Chromebooks, we looked at all these different things. I think at the high—secondary level, the laptop is definitely the way to go.
A second teacher said, “The laptop is definitely the way to go. Um, it’s been very versatile for my students. We’ve been able to use it a lot of different ways.”

However, a third teacher mentioned, “the kids don’t want to carry around computers. At least I’m finding with some of my kids.” This was the only comment of this nature about the laptops. Parents also shared their observations about their students having laptops and being able to bring them home to complete work: “I think that the technology that they are using is good. And especially we mentioned the laptop. My daughter is very happy to have the laptop for class.”

With parents, students, and most teachers happy with the distribution and student access to the laptops one administrator hesitantly explains the biggest change to come in blended learning—the elimination of one to one laptop access: “I think they really liked having the laptops and the one to one. With that going away it will be interesting to see how that changes.”

Despite that the implementation of blended learning and one to one access to laptops for students will be eliminated, one administrator is adamant that in order for blended learning to be successful, students will need to have one to one access to computers. He explained:

I think if it [blended learning] is going to be successful we need to have a one to one system. Where every student has their own computer that they can take class to class. And they are already logged in. And they are taking responsibility for their hardware. Trying to do blended learning
in school with laptop carts and maybe I can sign it out, maybe I can’t, maybe I will take them [students] to the computer lab, maybe I will have them try it on their phones. There are just way too many questions out there and there is way too much trouble shooting on the teacher end.

Despite that in the future the school district is planning on eliminating one-to-one computer access for students, during the case study year, students in the blended learning program had one-to-one access to laptops. Access to laptops often comes with technology, hardware, and software problems.

However, stakeholders had nothing but positive experiences with the technology department when it came to troubleshooting problems and issues. For example, one parent explained, “I think she [the student] felt comfortable. Cause I do think that one time she had an issue with it [student laptop] and she had some kind of support or help that she knew she could contact for that.” In addition, a teacher simply put, “The tech department is awesome.”

During the classroom observations, the researcher did not observe any technology issues. Students who were using their laptops appeared to know how to manipulate them and access materials without question. The researcher did not observe any students who were frustrated or unhappy while they were using their laptops.

All in all, stakeholders, especially students, expressed that they were happy with their one to one access to school issued laptops. Teachers and students both identified the laptop as the best device to use in a blended learning environment when compared to iPads, tablets, and Chromebooks. However, as
the blended learning pilot expands students will not be issued one to one access to laptops. One administrator expressed that he was unsure how that would affect the blended learning program.

**Flexibility**

The blended learning environment had many flaws during the second-year implementation in the eyes of the teachers; however, the flexibility of the environment and learning were key positives for students and parents. Students expressed that they enjoyed the flexibility in learning and classroom environment. While parents conveyed during the focus groups that they felt that the blended learning environment taught their students independence and prepared them for their future post-secondary education careers.

Several students during the focus group described the classroom environment in the learning commons area. The blended learning classrooms provided an environment for flexible student learning:

I think it [the learning commons] is also positive because we had our own room. And when we would go down there—like, the chairs, the layout of the room was all different. So, we were all more comfortable in it then in a regular classroom.

Another student explained her perception of the learning commons:

“Thats nice, too [when talking about the learning commons]. I think part of the deal with being in the blended learning class was that you can pretty much go down there whenever you wanted to work. I don't know if I ever took advantage of that but I think that was one of the perks of being in a
blended class is that you were able to go down and use that—it is like a different environment they have like—it’s like some people learn better in that type of environment. So, I think that helped some people.

And yet, another student expressed, “I think the computers in the learning commons were more of an asset that we could have available to us.”

During the student focus group one student acknowledge the flexibility of the classroom set up and environment in the learning commons:

Well, there is all different types of seating. So, there’s like couches, then there’s like high top tables. Chairs with little desktops. It’s just like, everything is more comfier in there. There is also a smart board in there that the teachers will use and white boards.

During classroom observations, neither of the teachers was in the learning commons, but students were seated all over the classroom. The students did not all sit in their desk chairs; some students were standing and some were sitting on the desks. The teacher also moved around the room and sat on desks when conversing with the students. The flexible arrangement of desks and the ability that students had to sit wherever they wanted appeared to be the norm in the classes observed.

Students not only had flexibility in the seating and learning that took place inside the blended learning classrooms, but they also had some flexibility in regards to time and location. The students expressed in the focus groups that not all blended learning classrooms received the same flexibility, but some students were allowed to leave school early once a week and complete their
work in an environment of their choosing. Not all students left school, but some did, and all students expressed liking this responsibility and flexibility of time and location.

Students were eager to share about the flexibility of time and location the blended learning environment provided them. One student said;

I know my friend was in a blended learning class and she has it [early release] every Thursday or something for that class. But my class never got it. So, I think some did go through. She definitely did, but mine didn’t.

Another student explained, “Like, right now, Thursdays I don’t have to meet anymore. So, I get to come in late.” This student received not early release, but what the school calls late arrival. Some students who have their blended learning class as the first class of the day were granted “late arrival.” The students did not have to come to school until their second class of the day.

When parents were asked about their perceptions of the blended learning program, those who were interviewed during the focus group overwhelmingly expressed that the blended learning program was a positive learning environment for their students.

Two parents responded to a question about their experiences with their students leaving school early because of early release and their child’s enrollment in the blended learning program; “Yes, they do,” responded a parent when asked if their child takes advantage of leaving school early. The same parent continued explaining:
He [the student] has it [blended learning class] last period so he leaves early. I’m fine. He has a car so he is able to leave. He usually comes home. It is what he does. I don’t think he has stayed back too many times.

Another parent followed by talking about his son: “He just stays there [at school] and does work.” The interviewer asked, “In the learning commons area?” The parent responded, “Yeah, there or in the class if he is allowed to be in the classroom that day. I don’t really ask.”

When observing the blended learning classroom, it was evident that some students remained in the classroom and completed their course work for the day in that environment, but the majority of students took advantage of going to another environment to complete their work. For example, the researcher observed seven students in the classroom out of 25 students in the class. Students were dispersed around the room. Three students were on their phones working. One student was hand-writing and three students were on their computers. Two students had headphones in.

Such flexibility and independence were identified by the parents in the focus group as important contributors to preparing their students for post-secondary education. One parent explained:

I think it [the blended learning environment] teaches responsibility. Umm, for students going to post high school education. And then they [students] are learning how to manage—I need to be in the class for class or I need
to go on my own and finish this activity or lesson or whatever the assignment is on their own. Which is a nice skill going into college.

Another parent agreed with the above comment and explained that one of the biggest advantages to the blended learning classroom is the independence that is expected and created: “So, I think the difference really is the independence or expectation that you complete the assignment on your own.”

In addition to parents and students expressing the flexibility of learning, the environment, and independence as being positives to the blended learning environment, one administrator stated that she believed that students were benefiting and appreciated the flexibility of the classroom environment and learning. The administrator stated:

I would say students, I think on the surface value the concept of having a little bit more anonymity. I think they like the idea of—although, they wouldn’t use the term asynchronistic. They like the idea of being able to do things at their own pace and in their own way.

Despite that the blended learning environment had many flaws during the second-year implementation in the eyes of the teachers, the flexibility of the environment and learning were key positives for students, parents, and administrators. Students expressed that they enjoyed the flexibility in learning and classroom environment. Also, parents conveyed during the focus groups that the blended learning environment taught their students independence and prepared them for their future post-secondary education careers.
Engaging Projects

Challenges and disappointments were expressed by teachers and administrators when asked if the blended learning environment was different than the traditional education environment. However, despite both teachers and administrators saying that they do not see a difference in the two learning environments, students have identified and expressed that as students in the blended learning environment they are completing more engaging and creative projects and assignments.

Administrators identified that finding teachers who were engaging and willing to go above and beyond what is naturally required of a teacher are characteristics that they took into account when selecting teachers to teach in the blended learning environment. One administrator described the teacher selection process:

It was very much like this science kit of we’ve got some teachers that we know are very engaging for students. We are going to give them all the right resources. You know so anything that they want to try is at least technologically possible. We are going to give them content so they are not bogged down in that. We are going to give them a LMS that ahhh students have a vested interest in knowing because it is the LMS that the whole state university system is using.

Another administrator expressed how important the selection of a good “kid-centered” teacher is in creating engagement in the blended learning classroom:
The teachers who are in the program are so umm kid-centered and umm attract kids in general. I am hoping the power of personality coupled with Schoology [the new learning management system] and hopefully some really engaging and different activities will excite the students.

Students also addressed that the teacher who is teaching the course makes a difference when it comes to student engagement and learning. One student expressed the following in the focus group:

So, I think it still kind of has to do with the teacher more [the teacher more than the learning environment]. Cause if you like the teacher, I know I usually have a better experience in the class if I like the teacher. So, I don't know if people are like oh yes blended or no blended. I think it is more the teacher than the actual deliverance of the curriculum.

Students have expressed that despite that teachers and administrators do not see a major difference between traditional education classes at Cumberland Valley and blended learning courses that they have experienced a difference. Students expressed that they were given the opportunity to be creative, innovative, think critically, communicate with others, problem solve, and collaborate more in the blended learning than the traditional classroom.

When students were asked if they believe that they had more of these experiences in the blended learning classroom the responded in the following ways. One student said

I think for us, yes [experienced more creative, innovative, critical thinking, communication, collaboration, and problem solving]. Cause a lot it is
problem based. We do a lot of group projects. And we have to think of innovative things in our marketing pitches. I think it helps too in the learning commons. Like, the less traditional set up with row seats. It just feels more relaxed than a regular class.

Another student shared that, “we did have a lot of project-based stuff. I would say 90% of the projects were working with one or more people. So, I think that it allowed us to work together and bounce ideas off each other.” A third student went as far as saying, “So, the creative stuff. I think they [teachers] are doing better at. So, for our projects, our presentations he wanted to see creative slides, creative advertisements for our businesses and things.”

The conversations from students during the focus groups speaks to the point that students have expressed that their learning in the blended learning environment does encourage more 21st century learning. Twenty-first century learning skills are those that create the opportunity for students to be creative, innovative, think critically, collaborate, problem solve, and communicate with their peers and others.

Despite challenges faced by teachers in regards to the learning management system, communication, and leadership, stakeholders did have some positive experiences. Parents conveyed that they were satisfied with the flexibility, independence, and responsibility that the blended learning environment provided for their students. In addition, students explained that the blended learning classroom was different from the traditional classroom because they had 24/7 access to laptops, flexible seating and schedules, more online projects, and
the ability to be more creative. The most notable, however, was identified by the two administrators interviewed. The administrators noted that students traditionally identified as shy were given a voice in the blended learning environment.

Conclusion

The purpose of this case study was to examine the experiences and perceptions of stakeholders in one high school during the paradigm transition from traditional to hybrid education. This chapter presented findings from focus groups, interviews, and observations conducted at the beginning and end of one academic school year. The focus groups and interviews allowed stakeholders (parents, teachers, students, and administrators) to share their experiences during the second year of blended learning implementation, as well as their motivations, challenges, and successes.

This chapter described the school district and participant motivations for participating in the blended learning program and the challenges faced in regards to the flexibility of the blended learning program. Finally, the chapter concluded with how the blended learning program impacted students positively despite the obstacles faced by teachers.

The next chapter will discuss findings related to existing literature on the implementation of blended learning and my own thoughts on notable aspects of this study. In addition, I will discuss the strengths of the study and limitations. The chapter will then conclude with recommendations for future research.
CHAPTER 5
DISCUSSION

The purpose of this study is to understand the implementation process of a hybrid education model at the secondary education level. This research study used a mixed method case study approach to observe and gather data from stakeholders. Data was gathered related to stakeholder (parents, teacher, administrator, and student) perspectives and experiences during the paradigm switch from a traditional learning environment to a blended or hybrid learning environment.

In this chapter, I summarize and explain the results of the research question: “How do stakeholders experience and perceive changes in organizational structure and culture during the transition from a traditional educational paradigm to the new hybrid system being implemented in secondary schools?”

This chapter will explore the following themes: (a) implementation motivations, (b) challenges faced, and (c) program successes that emerged during data collection in the section entitled “Findings Summary”. I will then explain the connection between these themes and concepts from the conceptual framework. This chapter concludes with study limitations, suggestions for future research and recommendations for school districts implementing secondary hybrid or blended learning.
Findings Summary

Through the course of the case study, I discovered that stakeholders (parents, teachers, students, and administrators) experienced and perceived the implementation of blended learning differently. Through focus groups, interviews, and observations, I was able to identify three main themes: (a) implementation motivations, (b) challenges faced, and (c) program successes. This section will summarize the themes and identify varying stakeholders’ experiences and perceptions during the blended learning implementation.

Implementation Motivations

Extrinsic and intrinsic motivations played a key role in the implementation of blended learning at Cumberland Valley School District, the case study site. This was discussed in detail in Chapter 4. This section will provide a brief summary of how extrinsic motivators, values of progressive learning, and program flexibility motivated stakeholders to participate in the blended learning program.

Extrinsic motivators. The school district was initially motivated to implement blended learning because funding was offered to the case study site to pilot and investigate this new type of learning. Cumberland Valley High School made it to the final round of schools vying for the funding. Cumberland Valley did not win the grant. Despite falling short of winning the grant, the school district decided to fund the implementation of blended learning on their own. The district had already completed site visits, created a budget, and implementation plan for
the grant proposal. The case study site used this information to move forward in implementing blended learning.

**Progressive learning.** While the school district did not win the grant, their desire to be a progressive school district and provide their students with a progressive type of learning proved to be the key motivator for the implementation of blended learning. Focus groups and interviews found that most stakeholders prided themselves on being part of something new and intuitive. One administrator explained that he took a position at Cumberland Valley School District because the district prided itself on being a forward-thinking district.

**Program flexibility.** Stakeholders identified that they perceived blended learning as a form of learning that taught students skills that could not be taught in a traditional classroom due to the flexibility of teaching and structure. Stakeholders shared that they felt blended learning encouraged skills such as student independence, problem solving, and communication. The perception that these skills would translate well into post-secondary education motivated many stakeholders to participate in the blended learning program. In the initial focus group, one teacher expressed why they were excited to be part of the blended learning program:

> I thought it was a good thing for kids because the idea of blended learning or hybrid learning is to put more ownership on the kids and for them to take more ownership of work and have more responsibility in the classroom. And for us [as teachers] to be more of facilitators.
In addition, one parent shared, “These skills will be able to translate into post high school better.” A student agreed with the parent and explained, “I thought it was going to be fun because it was more like a college feel.”

These statements help to identify student responsibility and preparedness for future studies due to the flexibility of the blended learning program as another motivator for stakeholders. During the case study interviews and focus groups, it was evident that available funding, flexibility of learning, and participating in a new and progressive type of learning motivated the school district and its stakeholders to be a part of the blended learning program.

The next section will discuss challenges faced by stakeholders during the implementation of blended learning during the second-year pilot.

Challenges Faced

The implementation of blended learning posed three main challenges for stakeholders identified in the focus groups and interviews. The three challenges were (a) teacher disempowerment, (b) lack of communication, and (c) technology.

**Teacher disempowerment.** Evidence gathered from teacher and administrator focus groups and interviews identified that teachers felt as if power had been taken away from them during the second-year pilot of blended learning compared to the first-year pilot. Teacher collaborative time, resources, and inability to identify students to be in the blended learning classes prior to the school year proved to be the main differences from year one to year two. These challenges coupled with lack of communication and a learning management
system that proved to be ineffective forced the majority of teachers to return to teaching in a traditional manner by the conclusion of the school year.

**Lack of communication.** All stakeholders expressed concerns about the communication related to the definition of blended learning, enrollment into the blended learning program, and a district vision. Many parents were completely unaware that their students were enrolled in a blended learning course until back to school night. Furthermore, teachers, students, and parents were unable to define blended learning or describe how a blended learning course was different than a traditional course. In addition, teachers struggled with the lack of leadership. One administrator did notice that teachers were struggling with the lack of leadership, so she stepped up and attempted to fill this gap. Teachers were still dissatisfied.

**Technology.** The learning management system (LMS) was identified by teachers and administrators as negatively impacting the implementation of blended learning during the second-year pilot. Teachers began the year attempting to use the selected learning management system with limited success. Teachers found a different online system that was flexible, and students could quickly learn. However, administration directed teachers to return to using the selected LMS. By the conclusion of the school year, administrators agreed that the LMS selected was not working and selected a different LMS for the following year.
Despite challenges faced by stakeholders, there were several successes identified during the second year of implementing blended learning. The following section will discuss the successes identified by stakeholders.

**Program Successes**

Despite challenges faced by stakeholders, namely teachers, programs successes were identified during the focus groups and interviews. Student engagement, student empowerment, and the use of laptops were the three main successes identified by most stakeholders during the second-year pilot of blended learning.

**Student engagement.** Administration noted the importance of selecting teachers who are “kid-centered” and willing to challenge themselves and their students. Despite this, teachers and administrators did not perceive a big difference in learning between the traditional and blended classrooms, but students did. Students expressed that they participated in more group projects, innovative projects, and were given the opportunity to collaborate more in their blended classes than their traditional classes. In addition, administrators shared that shy students were given a voice and an opportunity to participate in classroom discussion more in the blended learning environment.

**Student empowerment.** The implementation of blended learning empowered students by providing them the opportunity to collaborate, demonstrate autonomy, prepare for post-secondary education, and the flexibility of where to learn. Students were able to make decisions about their learning and location of learning because they were in the blended learning program.
Students shared that they were able to participate in more collaborative work and were provided the autonomy from their blended learning instructors to select unique projects and drive online discussion. Parents also stated that the flexibility and autonomy of the blended learning program, in their opinion prepare their students for post-secondary education.

**Technology.** Students enrolled in the blended learning program were given a laptop at the beginning of the school year that they had for the duration of the year. This was the biggest success in the minds of students. Students expressed that they used their laptops for their blended and traditional classes and completed work at home on it. Despite that access to laptops 24/7 was an advantage for students, administrators explained that in the following year students would not have access to a laptop all the time.

**Discussion**

After reviewing study findings and analyzing how this study relates to my original conceptual framework, organizational structure, culture and motivation, technology and structure contingency factors, flexibility, pragmatic learning theory, and connectivism, I now provide my thoughts of the notable aspects of this research, namely (a) motivations, (b) challenges faced, and (c) successes related to notable aspects of this research, which are summarized below.

**Motivations**

**Intrinsic and extrinsic motivations.** Intrinsic and extrinsic motivations are necessary while developing and implementing blended learning stated Garrison and Vaughan (2013) and Graham, Woodfield, and Harrison (2012).
Focus group discussions and interviews demonstrated that Cumberland Valley School District was initially motivated to implement blended learning due to the extrinsic motivator of available funding. When that motivation was eliminated, the majority of stakeholders participated in the blended learning program because they were motivated by the concept and idea of being a part of something new and intuitive. The concept of blended learning being a progressive type of learning acted as an intrinsic motivator for the majority of stakeholders. Garrison and Vaughan (2013) and Graham, Woodfield, and Harrison’s (2012) theory that identifying stakeholder motivations when establishing a new program, such as blended learning was supported in the data collection of this case study.

**Progressive learning.** Progressive learning acted as a key motivator for the school district and stakeholders. Stakeholders shared that they wanted to be a part of something new and be one of the first secondary schools to implement blended learning. The concept of progressive learning was ingrained in the culture and values of Cumberland Valley School District and its stakeholders. The culture, as defined as shared values and beliefs that connect members of an organization, created an environment of stakeholders who value a challenge and pride themselves in being intuitive and the first (Bohle Carbonell, Dailey-Hebert, & Gijselaers, 2013; Tompkins, 2005).

Lin (2008) and Yudko, Hirokawa, & Chi (2008) identify that culture and values have the ability to drive implementation. Despite that stakeholders did not identify specifically that the school district culture and values motivated the
implementation of blended learning, the data collected during focus groups and interviews suggests that stakeholders were intrinsically motivated by the school district’s values and culture to participate in the implementation of blended learning. Parents and students expressed that teaching skills of independence and preparing students for college are key motivators for implementing blended learning. These concepts define the values of the Cumberland Valley School District.

Stakeholders identified that blended learning was progressive in nature, promoting critical thinking, independence, and skills necessary for post-secondary school. These skills acted as motivators for implementation and stakeholder participation in the courses. These are also characteristics described by Pugh (2011) of pragmatic learning theory. John Dewey’s pragmatic learning theory suggests that students should be provided with a learning environment that is meaningful and authentic (Pugh, 2011). A learning environment that promotes application of knowledge in real-world situations, critical thinking, and collaboration are not only characteristics of Dewey’s pragmatic learning theory (Pugh, 2011), but they were identified by stakeholders as some of the initial motivators for implementing blended learning.

The characteristics of pragmatic learning theory are evident in the data collected during focus groups and interviews with stakeholders. For example, one student shared her experience in the blended learning program when asked if she felt that students were given the opportunity to be creative, innovative,
think critically, communicate with others, problem solve, and collaborate with their peers:

I think for us, yes. Cause a lot of it is problem based. We do a lot of group projects. And we have to think of innovative things in our marketing pitches. I think it helps too in the learning commons like the less traditional set up with rows of seats. It just feels more relaxed than a regular class.

Teachers and administrators further expressed that they did not believe that characteristics of pragmatic learning theory were achieved in the second-year pilot of blended learning any more than in the traditional learning environment. However, one administrator did state that they believed that blended learning in the future could enrich the skills described in pragmatic learning theory. There is not enough data to suggest that pragmatic learning theory is evident in a blended learning classroom. However, there is enough data to suggest that characteristics of pragmatic learning theory, such as critical thinking, real-world problems, and collaboration are key motivators for experimenting with blended learning implementation.

Data gathered related to extrinsic and intrinsic motivators for implementing blended learning at the case study site does suggest that motivations ingrained in an organization's values and culture are enough to experiment with the implementation of blended learning at the post-secondary education level. The next section will discuss how established literature influences the challenges that
the case study site experienced during the second-year blended learning implementation.

**Challenges Faced**

During the second year of implementation of blended learning, there were several challenges faced by stakeholders. The majority of the challenges that Cumberland Valley High School faced were addressed in some form in the literature. This section will look at how literature on creating a clear vision and goals, hierarchical structure, and technology and contingency factors supports events and experiences in Cumberland Valley’s blended learning implementation. In addition, this section will address how these challenges are connected to a lack of leadership and program evaluation. Finally, I will discuss how the role of resources may provide challenges at the post-secondary level of education.

**Vision and goals.** A clear vision and goals for the implementation of blended learning was not established. This proved to be one of the most significant challenges for teachers. Graham, Woodfield, and Harrison (2012) and Bohle Carbonell, Dailey-Hebert, and Gijselaers (2013) stress that a clear vision and goals allow an institution to transition easier and respond to shortcomings. Cumberland Valley School District did not have a clear vision and goals, and it was evident in focus groups that teachers in particular struggled to respond to challenges because there was not a clear vision. Teachers ended up resorting back to a traditional form of teaching by the end of the school year because they
were frustrated and unsure of where the district was going with the blended learning program.

I cannot state that a clear vision and goals would help the school district overcome the challenges that they had in implementing blended learning based on the data gathered in focus groups. However, I can state that the district did not have a clear vision throughout the implementation process and teachers did not overcome challenges with students, technology, and time well enough to continue to teach their blended learning classes in a blended learning format.

**Hierarchical structure.** Most literature surrounding blended learning suggests a bottom-up approach to leadership. Cumberland Valley School District attempted this route, but this became one of the biggest challenges for stakeholders. A bottom-up approach suggests that employees provide input and assist in adapting the current mission and vision (Bohle Carbonell, Dailey-Hevert, & Gijselaers, 2013; Patrick, Kennedy, & Powell, 2013). Based on focus group conversations with teachers, teachers were given a voice and helped to select the learning management system and students during the first year of the blended learning pilot. However, during the second year of the blended learning pilot, teachers did not have the same role in selecting students and they quickly became disempowered.

One teacher explained their experience:

And this year I feel like we regressed. We went from having—we met probably two to three times a week as a team, we had extra planning time, we were meeting with DO [District Office], people would stop by and get
feedback. And this year we have had no communication with the DO, little communication with the administrator in charge. Ummm no time to meet as a blended learning team, and umm things were kind of haphazard this year.

This experience and the lack of a district vision led teachers to seek a more top-down approach to leadership. Due to the fact that teachers were no longer given a say in the implementation during the second year of blended learning, they began looking for a vision from administrators and their superiors. A more traditional approach of leadership is described by Jaffee (2008) and Tompkins (2005) where superior-subordinate relationships are depicted and developed within an organization.

Data gathered from focus groups and interviews suggest that the school district’s original approach of using a bottom-up approach to blended learning implementation supports contemporary literature frameworks established to implement blended learning in a post-secondary educational system. However, in the case study site, the bottom-up approach was eliminated during the second year of implementation and teachers sought direction from their superiors. I cannot say that a bottom-up approach is the approach to take when implementing blended learning in a secondary education setting. However, I can state that based on the findings that it is clear that teachers felt more empowered during the first year of implementation than the second year for several reasons. Findings did show that not having a clear bottom-up or top-down approach to leadership impacted the experiences negatively for teachers.
Technology and contingency factors. Technology was a key component of most frameworks created for implementation of blended and distance learning programs in post-secondary education (Donorfio & Healy, 2008; Edgenuity, n.d.; Rice, 2009). The use of technology was described by Edgenuity (n.d.) as a combination of hardware, software, and physical space. The software component, in particular, the learning management system selected by the case study site proved the most challenging for the majority of stakeholders. Not only did most stakeholders acknowledge that they did not know how to properly use the selected learning management system, most stakeholders could not name the learning management system selected.

One teacher acknowledged that the selected learning management system negatively impacted the second-year pilot of blended learning: “I think the LMS was definitely a big part in, what do we call it the unsuccess of the blended classroom because it was really clunky. It was not ascetically pleasing. It was not user friendly.”

Data collected from focus groups and interviews support previous studies completed stating that technology is a key component of implementing blended learning. Despite the difference in educational settings between the literature and case study site, technology is still a key component in secondary blended learning education implementation.

Leadership. It is evident that the lack of communication, hierarchical structure, and lack of teacher choice in the LMS created teacher disempowerment. However, these challenges that were faced during the
second-year implementation were significant and due to the lack of a defined leader for the blended learning program. Despite that literature suggests a bottom-up approach to leadership when implementing blended learning, there still needs to be an identified leader. The leader of the program would be the point person for distributing communication related to the program, gather information and synthesizing it from stakeholders, and creating a framework or plan for implementation.

In this case study stakeholders needed a leader who was empowered. A leader who was empowered with the knowledge about blended learning, who could be a mediator between outside stakeholders and stakeholders within the blended learning program, and someone who could funnel information. In this case study there was no identified leader. The lack of leadership led to teacher disempowerment, a “clunky” learning management system that teachers did not use, lack of communication to all stakeholders about what blended learning was, how to best implement it, and a district vision and goals.

In addition, the lack of leadership led to no program evaluation during the first or second year of the implementation of blended learning.

**Program evaluation.** An identified leader would have assisted in the process of gathering data related to the first two years of the blended learning pilot. Data gathered during both years of implementation would have provided the school district an opportunity to learn from what they are doing and inform decision-making to improve the performance of the blended learning program.
It became evident during the case study while discussing implementation challenges and successes with stakeholders that there was not an individual who completed formative evaluations throughout the first-year pilot or the second-year pilot. In addition, it became evident that the school district did not gather data or feedback from the stakeholders at the conclusion of the year, despite deciding to add students to the blended learning program.

While completing focus groups with teachers and administrators it became apparent that teacher disempowerment may have been able to be eliminated by collecting feedback after the first-year pilot of blended learning. For example, teachers shared that during the first year of the pilot they were able to select students who were going to be enrolled in the blended learning program, they were given extra planning time, additional collaborative time with teachers who taught in the blended learning format, and were provided the opportunity to visit distance education schools. All of these things were eliminated during the second year of the blended learning pilot. Teachers who were involved in both years of the pilot continued to bring up that during the second year they did not have the resources and support that they did the first year. However, it did not appear during the case study that this information was collected and used to adapt what was taking place during the second-year blended learning pilot or inform decisions made for the third year of implementation.

In addition, one of the major successes for students was identified as having 24-hour access to a laptop because they were enrolled in the blended learning program. During the focus groups students shared that they were able
to use the laptops not only for their blended learning classes, but for their traditional courses. Finally, students shared that having a laptop was valuable because they no longer had to share a computer at home with other siblings and family members. This provided a resource for students that they valued. However, without data collection the school district made the decision to move forward with blended learning, but eliminated 24-hour access to technology for students. In the third-year implementation of blended learning students are no longer going to receive a laptop to use. This was due to the fact that enrollment in the blended learning program was once again increased and there was not enough funding to provide one-to-one technology for students.

**Diminished teacher training and student one-to-one access to technology are all elements that lead me to believe that funding is no longer the same as the first year of implementation.**

**Limited resources.** When reflecting on the implementation of blended learning and the resources that were provided for stakeholders during the first and second years of implementation it is evident that funding support has declined. In addition, it became evident that resources for stakeholders involved in the blended learning program and funding would continue to be cut moving into the third year of implementation.

The decline in funding from year one to year two most drastically impacted teachers. Resources such as training and collaborative time were cut during the second year of implementation. Teachers who had been involved in the program for the first and second year did not receive additional training during the second
year of implementation and new blended learning teachers received limited training during one day over the summer. This impacted how teachers were able to learn and adapt to the new LMS. Most teachers struggled to learn the new LMS and stopped using it all together by the end of the school year because they were struggling to adapt and learn the basics.

The decrease in funding per student enrolled in the blended learning program has also impacted resources that are going to be provided to students during year three of blended learning implementation. Most student stakeholders shared that 24-hour access to a laptop was one of the greatest successes of the blended learning program. However, students enrolled in blended learning during year three will not have this access. It has yet to be determined how this will impact the blended learning program and stakeholders’ experiences.

As I reflect on the dwindling resources of a school district that is considered to be affluent, I am curious how school districts who do not have the initial resources and funding like the case study site can implement blended learning. My response would be that they cannot implement blended learning due to the inequality and lack of resources. The case study site has decreased resources over three years, despite the strong culture and motivators present within stakeholders of the district. School districts that do not have this culture, motivations, or resources in my opinion will not be able to implement blended learning. Therefore, this study is not transferable to school districts that do not have adequate funding and resources to implement blended learning.
In addition, as students from varying secondary education communities enter post-secondary education there is going to be a critical gap in learning due to the vast differences in economic resources in secondary education. This gap will provide the most challenges for post-secondary educators in regards to use of technology, student autonomy, and overall learning. Literature and data collected in this case study provided evidence that students who are learning in a blended learning community are provided with a greater opportunity to succeed when they enter post-secondary education. Students in the blended learning environment are entering post-secondary education with knowledge of LMSs, how to manage flexibility in work environments, and how to work collaboratively online and in a classroom. As long as some students are provided with these skills in secondary education and others are not the gap that post-secondary educators will observe and experience will continue to grow.

Despite challenges faced by stakeholders in regards to a lack of vision and goals, hierarchical structure, technology and contingency factors, leadership, and limited funding stakeholders did have some positive experiences.

**Successes**

Challenges were expressed in the focus groups and interviews about the learning management system selected by most stakeholders. Despite this, stakeholders still acknowledged that aspects of pragmatic learning theory and connectivism were observed or possible with a better learning management system. In addition, students were empowered throughout the process of
implementing blended learning which may have positive impacts of their post-secondary education.

**Pragmatic learning theory.** Pragmatic learning theory extends back to the early 1900s and John Dewey’s action-oriented philosophy of science (Taatila & Raih, 2012). One of the more contemporary explanations of pragmatic learning theory is the focus on social competence, collaboration, and real-world problem solving (Bennet & Oliver, 2011; Marks, 2013). Characteristics of pragmatic learning theory are identified in literature as key characteristics of 21st century learning and characteristics that should be developed when students are in a blended learning environment. When stakeholders were asked if these characteristics were evident in the blended learning classroom, the majority of stakeholders responded that they were not any more evident in the blended learning classroom than the traditional classroom. Despite this, teachers and administrators stated that if blended learning was implemented more successfully characteristics of pragmatic learning would be more evident in the blended learning environment.

One administrator, asked about skills that are observed in a blended learning environment, responded: “The way it [blended learning] is being implemented now, absolutely not. The way it could be implemented in the future, absolutely.”

There is not enough evidence collected from this case study to support that blended learning can successfully increase 21st century learning skills and characteristics of pragmatic learning theory in a secondary educational setting.
Administrators and teachers do suggest that these skills could be increased in a blended learning environment if implemented more successfully than at the case study site.

**Connectivism.** Connectivism learning theory is new, but described by contemporary literature as a learning theory to describe learning that takes place in a digital age (Alkella, 2012; Bell, 2011; Kop & Hill, 2008). Connectivism as described by Akella (2012) and Bell (2011) reaches beyond the habits of a traditional classroom aiming to increase collaboration and interactive learning through technology. The ability students have to learn, acquire information, and communicate with each other through the use of technology was described as one of the key successes in the blended learning implementation at Cumberland Valley High School.

Here, an administrator described how a shy student joined a discussion through technology that they would not have joined in a traditional classroom:

But if I could have a discussion that I am doing through an online community and that really shy kid in the corner that is never going to raise their hand all the sudden feels empowered to have a voice in the conversation.

This experience described by the administrator supports the idea that a different type of learning can take place in a classroom that uses technology differently than the traditional classroom. Connectivism is a new learning theory that encompasses evolving forms of education. Findings in this study, support
that a new, evolving, and modern learning theory such as connectivism has the ability to inform learning that takes place in a blended learning classroom.

**Student empowerment.** There is significant evidence that blended learning promoted student empowerment. Through blended learning students were given the autonomy to drive their own learning through collaborative projects and online discussions. No longer, are the days of the teacher standing in front of the classroom leading a classroom discussion. In the blended learning environment students were provided the opportunity to drive classroom discussion online. The shy student who didn’t have the confidence to ask a question or provide input in a class discussion was recognized not only by the teacher, but by their peers for adding to the online discussion. Students were the “drivers” of the course discussion and instruction.

In addition, parents and students expressed in the focus groups that the blended learning community not only provided autonomy for students, but it provided flexibility for learning that was similar to post-secondary education. This was identified as a characteristic of blended learning that was important to stakeholders at the case study site. Furthermore, this empowered students to make decisions that most students would not be able to make until they were in a post-secondary setting, but with partial guidance from teachers and parents. Flexibility of classroom setting, project selection, and peer groups were additional ways students were empowered and given an opportunity to learn in a setting that would be similar to post-secondary education.
Progressive Subjectivity

Throughout the data collection and analysis process, I used progressive subjectivity to guarantee the quality of my findings. Guba and Lincoln (1989) explain that it is not possible to engage in inquiry without biases and a reason or motivation for the study. However, it is vital that my interpretations are not given privilege over that of any other individual. The credibility of the study will suffer if I discover only what I expect to find and do not make my biases known (Guba & Lincoln, 1989). I developed six expectations for findings prior to collecting data. Each expectation is outlined below, including a description of how the expectation was different or similar to what I actually discovered.

First, I established that I personally am fearful that distance education may not be the best model of education for secondary education children because I believe students still need socialization, motivation, and communication skills that can be provided best in a traditional learning environment. However, I did expect that the blend of traditional and online education might be the best solution for secondary education students. In this study, not all students experienced learning outside of the traditional classroom. Despite this, administrators did identify that shy students who did not usually participate in group discussion in the traditional learning environment were participating in online group discussions. Therefore, an online learning environment may help students with socialization and communication instead of hindering it. This proved to be true in the study for shy students.
Second, I had expected that participant perceptions of blended learning would become more positive as the school year continued and they engaged in the blended learning model. Students’ and parents’ perceptions of blended learning proved to be positive throughout most of the blended learning experience. Parent perceptions may have become slightly more positive throughout the school year. This was most likely due to the fact that the majority of parents were unaware of their child’s enrollment in the blended learning program. Administrators’ and teachers’ perceptions proved to become more negative as the school year continued. Teachers, in particularly did not respond well to challenges during the second-year implementation process.

Third, I expected parents to be hesitant about enrolling their students in the blended learning program. I learned that the parents of the students who were enrolled in the blended learning program were not all aware that their student was enrolled in a blended learning course until the school year had already started. Due to this and what appeared to be student success in the program, neither parents nor students seemed hesitant about their enrollment in the program at the beginning-of year interviews. However, one administrator did explain that parents of students enrolled in the blended learning third-year pilot were not all satisfied or happy about their students’ enrollment in the blended learning program.

Fourth, I expected that stakeholder perspectives of blended learning would be negative around technology difficulties. This proved to be true especially for teachers and administrators. However, what I expected to cause
negativity related to technology was different. I expected difficulties with hardware, not necessarily the software or learning management system. Most of the negative perspectives from teachers and administrators were due to a learning management system that was described as, “clunky” and difficult to use. This difficulty was not resolved during the second-year implementation. Therefore, teachers’ perceptions of blended learning continued to be more negative than positive.

Fifth, I expected Cumberland Valley to overcome technology challenges throughout the second year of implementation. This proved not to be the case. The biggest technology complaint was the learning management system. Despite teachers’ complaints, the school district was not able to create or find a more effective learning management system. The school district did select a different learning management system for the third year of blended learning implementation. Teachers and administrators expressed positivity about the new learning management system and how it will more effectively serve Cumberland Valley blended learning students.

Finally, I had expected that the culture and organizational structure would change throughout the second year of implementation. This did not happen. One administrator explained;

I don’t think that it has changed at all…Simply because of the scale that we have attempted. Last year [year two of implementation] we had 265 seats in blended and 235 individual students. So still you are only talking about. That is under 10% of the student body.
When asked, parents and students did not describe a change in culture or organizational structure either. It appears that if blended learning were to grow to include more students the school may see a shift in organizational culture or structure, but stakeholders did not experience this during the second year of implementation.

**Limitations of Study**

There are six primary limitations to this study. First, participants were all selected from the same case study site in central Pennsylvania. It is possible that secondary schools implementing blended learning in different regions of the United States may have different experiences. It is possible that differences in culture around the United States may shape stakeholder perceptions and experiences differently. Cultural differences could affect how stakeholders perceive and experience blended learning.

Second, the study was performed on a school district and high school that is considered to serve an affluent population. The population of the case study site has access to resources within the school and outside the school that other high schools may not have. The resources that the school district has available for stakeholders could impact the implementation of blended learning differently. With more or less resources, stakeholders could experience different implementation success and challenges. In addition, if school districts do not have access to resources like the case study site they will not be able to complete a similar implementation.
Third, this study included limited participants from the teacher, parent, and student stakeholder groups. I received feedback from all stakeholder groups; however, the participation in focus groups was drawn from a small portion of participants who completed the online survey. There were only 26 participants who completed the online survey out of the 235 students enrolled in the blended learning program. At the beginning of the year there were 11 stakeholders who completed the online survey and 15 at the end of the year. Despite this, I found that participants in all stakeholder groups faced similar and different challenges and successes throughout the second-year blended learning implementation process.

Fourth, participation in the survey, interviews, and focus groups were voluntary. Stakeholders who participated were willing to discuss their experiences in the blended learning environment. It is possible that some stakeholders did not respond to the invitation to participate because they may have felt uncomfortable in sharing their experiences. Parents who did not participate may not have known that their child was enrolled and participating in a blended learning course.

Fifth, the case study site did not have a framework of implementation. There was not a plan of how to implement blended learning during the second year of implementation. Without an identified framework of how the school district implemented blended learning it will be difficult to duplicate the implementation process the case study site used. Having no framework also
makes it difficult to identify why, when, and how stakeholders experienced challenges and successes.

Lastly, this case study gathered data from the traditional school year’s blended learning program. During the study, it became apparent that blended learning was also implemented during the third semester or summer school program. Stakeholders who participated in the third semester of blended learning may have different experiences and perceptions of the implementation of blended learning than stakeholders who participated in the first and second traditional school year semesters.

**Suggestions for Future Research**

Future qualitative research pursuing the same research question and objectives should be conducted using a design that would address the limitations discussed above. Completing a study with varying case study locations around the United States may provide different stakeholder experiences and perspectives based on varying cultures and values. In addition, including schools and school districts that consist of varying socio-economic classes may provide insight into different or similar challenges and successes among stakeholders involved in the blended learning program.

Furthermore, additional efforts to reach out to stakeholders who do not respond to the email invitations to participate in the study should be made. For example, follow up phone calls can be made to participants who do not respond to an emailed invitation, or the researcher could arrange to visit blended learning classes and personally invite students and teachers to participate in the study.
This could serve to make personal contact with stakeholders and to encourage their participation.

Future studies could also place an effort on evaluating all blended learning semesters. At the case study site, it was made clear during the study that the school district implemented blended learning during their third semester, or summer school. The experiences and perceptions of blended learning and its challenges and successes may be different or similar in this setting, but future research would shed light on both similarities and differences.

Future studies could also be conducted using a population of identified shy student stakeholders. Shy student stakeholders’ ability to participate in group online discussions and engage in a blended learning environment was identified as one of the biggest successes in the implementation of blended learning at Cumberland Valley high school. This sub-population of student stakeholders’ experiences and perceptions of blended learning could be compared to other student stakeholders’ experiences and perceptions to determine both similarities and differences.

Additionally, an evaluation of student learning in both the blended and traditional learning environments could be conducted. This could provide quantitative and qualitative data about the actual learning that is taking place in the two different learning environments. Furthermore, researchers could use this data to identify differences and similarities in learning what is taking place in the two learning environments.
Recommendations

From this study, it is clear that there are some advantages and challenges associated with implementing blended learning in secondary education. Despite the challenges that were experienced and presented in this case study, I believe that there are enough advantages of blended learning compared to traditional learning to claim that secondary school districts should continue to experiment with the implementation of blended learning. Therefore, I will focus my concluding thoughts on six specific recommendations for secondary education schools and districts who want to implement blended learning.

1. *Develop a framework for implementing blended learning.* Despite the fact that there is no clear identified framework for implementing blended learning, the need for one is clear. A framework of how to implement blended learning is needed, but if school districts continue to unsystematically implement blended learning one will not be established for future implementation. Creating a framework will provide an outline for your district and school, as well as, assist in creating a framework for future districts' implementations. In the case study there was not an established framework during the second year of implementation. During the study it became evident that the school district had a more distinct plan for implementation the first year of the pilot. However, characteristics of that framework such as teacher empowerment and teacher resources were eliminated during the year of the case study.
2. *Technology.* Technology should be included in the school’s framework for implementing blended learning. Technology, especially the learning management system selected in this case study, impacted the overall success and experiences of stakeholders. I recommend that the school district spend considerable time researching available learning management systems. Stakeholders also need to experience the learning management system before the district purchases it. Research suggests that the learning management system should provide the framework for teaching and learning.

3. *One to one technology.* The majority of students and parents in this study reported that student access to their own laptop was one of the biggest advantages of the blended learning program. I recommend that school districts implementing blended learning provide students participating in the blended learning environment with an individual device for the duration of the course. This provides for ease of access to the learning management system and communication with peers and instructors from any location.

4. *Empower and provide teachers with resources.* Teacher empowerment and professional development could be included in a district’s implementation framework. Not only does literature recommend a bottom-up approach to blended learning implementation, but teachers in this case study perceived implementation more positively when they felt empowered. In this study, teacher empowerment and resources
such as planning time, professional development, and student selection were eliminated during the second year of implementation and negatively impacted their perception of blended learning.

5. **Clear district vision and goals.** Participants in this study expressed that there was not a clear district vision and goals. This created frustration, especially among teachers. One administrator shared that even if the district did not have a vision or goal, that the district needs to provide the perception that they do have a district vision for stakeholders. A clear vision and goals provides direction for stakeholders and motivations to continue to move forward with the implementation process.

6. **Communication.** Finally, participants in this study shared that there was a lack of communication throughout the entire implementation process. For school districts implementing blended learning, I encourage continuous communication with all stakeholders, parents, teachers, students, and administrators. Communication should begin in the planning process, student placement, throughout the school year, and at the conclusion of the year. Not only should the district vision and goals be shared with stakeholders, but also how blended learning may differ from learning in the traditional classroom. Most importantly, communication about blended learning must take place for implementation to be successful.
Conclusion

As we have seen, stakeholders (parents, teachers, students, and administrators) in this study experienced and perceived the implementation of blended learning differently. Implementation motivations, both extrinsic and intrinsic, motivated the case study’s school district to implement blended learning, and teachers and administrators to participate in the program. Students and parents also perceived blended learning to be a new progressive and positive form of learning from the beginning.

As implementation took place, stakeholders experienced both challenges and successes. Teachers and administrators expressed the most significant challenges as a learning management system that was “clunky” and difficult to use and lack of a communicated district vision and goals. In addition, teachers experienced disempowerment of resources, such as time and professional development during the second-year implementation of blended learning. Despite these challenges, students and administrators expressed that a different type of learning was taking place in the blended learning classroom than the traditional classroom. Collaboration, problem solving, and critical thinking were experienced by students in the blended learning classroom differently than the traditional classroom, especially for students who were identified as being shy.

In conclusion, Cumberland Valley School District is one of the first secondary education schools to implement blended learning. Navigating an implementation process that is unknown provided challenges for the district. Despite challenges faced, the district and its stakeholders experienced some
notable successes. Because of these successes, I suggest that future districts use the recommendations for implementation of this study to pilot implementing blended learning in their own district.
References


Edgenuity. (n.d.). *Online and blended learning planning workbook*.


Doi:10.1080/09523980903387522

Romero, A.A. (2012). One laptop per college student? Exploring the links between access to IT hardware and academic performance in higher education e-learning programs. *The Journal of Distance Education, 26*(1).


Appendix A

Invitation to Participate in Study

Dear (Name),

Greetings! My name is Gabrielle Hoffman and I am a PhD Candidate in the Administration and Leadership Studies program at Indiana University of Pennsylvania. My dissertation research is to examine the implementation process of blended learning in a secondary education setting. I am inviting you to participate in this research case study as you are a stakeholder in the blended learning program at Cumberland Valley High School.

The following information is provided in order to help you make an informed decision whether or not to participate. If you have any questions please do not hesitate to ask.

Participation in this study will involve completing two surveys taking approximately 10 minutes in length. Questions will be related to your experiences and perceptions in the blended learning program at the beginning and conclusion of the school year. You may also be asked to participate in 1 or 2 focus groups that will last approximately 45 minutes length. Information from the focus groups will be used to help understand the organizational structure and culture of the blended learning environment, as well as, provide insight into challenges in implementing blended learning at the secondary education level. It is hoped that insights gleaned from this study can prove helpful to understanding the organizational structure, culture, and challenges associated with implementing blended learning in secondary education.

Let me assure you of the following:

1. Your participation in the study is voluntary. You are free to decide not to participate in this study or to withdraw at any time without consequence. If you choose to participate, you may withdraw at any time by notifying me. Upon your request to withdraw, all information pertaining to you will be destroyed. If you choose to participate, all information will be held in strict confidence.

I will be in touch with you via email within the next few weeks to discuss this research project with you further. For more information or to participate in this project, please contact me, Gabrielle Hoffman, Project Director at g.r.hoffman@iup.edu or 814-XXX-XXXX.

Sincerely,

Project Director
Ms. Gabrielle R. Hoffman, PhD Candidate
Administration & Leadership Studies Program
Dixon University Center, Richards Hall
Phone: 814-XXX-XXXX

g.r.hoffman@iup.edu
Hello (Name),

My name is Gabrielle Hoffman, and I am a PhD Candidate at Indiana University of Pennsylvania. For my dissertation, I am studying the implementation process of blended learning in a secondary education setting. Recently I emailed you a letter inviting you to participate in my study.

Would you be willing to participate? All that is required is the completion of two approximately 10 minute surveys at the beginning and end of the school year and 1-2 possible 45 minute focus group sessions (only a small select group of study participants will be involved in the focus groups). Your participation will be a valuable addition to my research.

The attached letter contains pertinent details about my study. If you choose to participate, I will provide you with a copy of the final report when it is complete.

I would be happy to answer any questions you may have about this project. To participate in this study or to get answers to any questions you may have, please contact me at g.r.hoffman@iup.edu or 814-XXX-XXXX.

Thank you and have a great day!

Ms. Gabrielle R. Hoffman, PhD Candidate
Administration & Leadership Studies Program
Dixon University Center, Richards Hall
Phone: 814-XXX-XXXX

g.r.hoffman@iup.edu
Appendix C

Informed Consent Form

Working Title: “A Case Studying Examining How Stakeholders Experience and Perceive Changes in Organizational Structure and Culture Throughout the Paradigm Switch from Traditional to Hybrid Secondary Education”

VOLUNTARY CONSENT FORM:

I have read and understand the information on the form and consent to volunteer to be a subject in this study. I understand that my responses are completely confidential and that I have the right to withdraw at any time. I have received an unsigned copy of this informed consent form to keep in my possession.

Name (please print):

_____________________________________________________

Signature:

____________________________________ Date:_____________

Legal Guardian Name (please print):

(If Under 18 years old)

____________________________________

Signature:_________________________________________ Date:____________________

Email or Phone where you can be reached to schedule a focus group meeting:

________________________________________________________________________

Best days and times to reach you: ________________________________

I certify that I have explained to the above individual the nature and purpose, the potential benefits, and possible risks associated with participating in this research study, and have answered any questions that have been raised.

Date:_____________ Investigator’s Signature:_____________________

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Appendix D

Beginning of the Year Survey

Beginning Survey

This survey was designed to gather data related to how school stakeholders—parents, teachers, students, administrators, and school board members perceive and experience the transition from traditional education to hybrid/blended learning. This survey is part of a case study on the implementation of hybrid learning at Cumberland Valley High School.

1. How do you perceive hybrid/blended learning (blend of traditional and digital methods of instruction) in secondary education?
   - Definitely Positive
   - Positive
   - Neither Positive or Negative
   - Negative
   - Definitely Negative

2. How do you perceive the transition process of moving from traditional education to hybrid/blended learning (blend of traditional and digital methods of instruction)?
   - Definitely Positive
   - Positive
   - Neither Positive or Negative
   - Negative
   - Definitely Negative

3. Do you believe that 21st century learning needs (the use of technology and teaching critical thinking, communication, problem solving, creativity, collaboration, and innovation) are being met in the traditional classroom?
   - Almost Always
   - Sometimes
   - Rarely
   - Never
   - I am Not Sure

4. Do you believe that 21st century learning needs (the use of technology and teaching critical thinking, communication, problem solving, creativity, collaboration, and innovation) will be met in a hybrid/blended learning classroom?
   - Almost Always
   - Sometimes
   - Rarely
   - Never
   - I am Not Sure
5. Have you experienced or perceived changes to take place in the culture (shared beliefs and characteristics that organization’s members have in common) of Cumberland Valley High School due to the implementation of hybrid/blended learning?
   - Very Much
   - Somewhat
   - Undecided
   - Not Really
   - Not at All

6. Have you experienced or do you perceive changes related to the role the teacher will have in “teaching” in the hybrid/blended learning environment compared to the traditional learning environment?
   - Very Much
   - Somewhat
   - Undecided
   - Not Really
   - Not at All

7. Do you believe that Cumberland Valley is prepared to overcome challenges associated with the implementation of hybrid/blended learning?
   - Very Much
   - Somewhat
   - Undecided
   - Not Really
   - Not at All

8. What is your gender?
   - Male
   - Female

9. What stakeholder group do you most identify with?
   - Student
   - Teacher
   - Administrator
   - Parent
   - School Board Member

10. Would you be willing to be contacted to participate in a focus group or interview session related to this topic?
    - Yes
    - No

11. If you answered yes to #10 please provide your contact information.
    - Name:_____________________________________________
    - Phone Number: ______________________________________
    - Email Address: ______________________________________
    - Mailing Address: _____________________
Appendix E

Focus Group Guide

**Focus Group Questions**

**Opening Question:**
1. Tell us who you are, what blended learning class you are taking, and what you enjoy doing most in your free time. (For students.)
1. Tell us who you are, what blended learning class your child is in, and what you enjoy doing most in your free time. (For parents.)
1. Tell us who you are, what role you have in the blended learning program, and what you enjoy doing most in your free time. (For administration and teachers.)
1. Tell us who you are, what role in education you have, and what you enjoy doing most in your free time. (For school board members.)

*Purpose:* Establish a common ground between participants—hybrid/blended learning and that they are all human beings with interests, hobbies, and families. In addition, participants feel comfortable.

**Introductory Question:**
2. Think back to when you first heard that Cumberland Valley High School was going to implement hybrid/blended learning (blend of traditional and digital methods of instruction). What were your first thoughts?

*Purpose:* Initial perceptions of the implementation of hybrid/blended learning.

**Transition Question:**
3. What has the initial implementation process been like for you?


**Key Questions:**
4. What role have you had in creating policies, guidelines, vision, and curriculum in the hybrid/blended learning classroom?

*Purpose:* Gain an understanding about organizational structure—hierarchical structure or bottom up. Division of labor. Flexibility/ adaptability. Pragmatic learning theory. Connectivism.

5. What is the culture (shared beliefs and characteristics that organization members have in common) of the school now that hybrid/blended learning has been implemented?
a. Is this different or the same as the culture of Cumberland Valley High School before hybrid/blended learning was implemented?

b. Values (values of the organization that members claim to be committed to uphold such as, respect, integrity, social responsibility, etc.)?

c. Basic Assumptions? Do members of the Cumberland Valley High School blended/hybrid learning program perceive its implementation as positive or negative? Explain.

Purpose: Gain an understanding about the current culture of Cumberland Valley High School.

6. How do you feel about the technology being used in the hybrid/blended learning classroom?
   a. Is there support or a lack of support with the operation of technology?
   b. Is the right technology being used—device, internet connectivity, classroom set up?
   c. What would you do differently?

Purpose: Gain an understanding about the technology being used in the hybrid/blended learning classroom. Challenges, limitations, and strengths related to technology use.

7. Is teaching and student learning any different in the hybrid/blended learning classroom compared to the traditional classroom?


8. Have you experienced or do you believe that students are experiencing 21st century learning (the use of technology and teaching critical thinking, communication, problem solving, creativity, collaboration, and innovation) in the blended/hybrid environment? Explain.


Ending Question:

9. I wanted you to provide your perceptions and experiences thus far related to the blended/hybrid learning environment. The purpose of this case study is to gather data related to how you have been experiencing and have perceived the transition Cumberland Valley High School has made from traditional education to hybrid/blended education. The focus of this case study is on 21st century learning, school culture and leadership, and challenges experienced and strategies used to overcome them. Is there
anything that we should have talked about but didn’t? Is there anything that you wanted to share that you did not get a chance to share related to the implementation of hybrid/blended learning?

*Purpose: Ensure that critical aspects of the blended/hybrid learning implementation have not been overlooked.*
Appendix F

Conclusion Survey

This survey was designed to gather data related to how school stakeholders—parents, teachers, students, administrators, and school board members perceive and experience the transition from traditional education to hybrid/blended learning. This survey is part of a case study on the implementation of hybrid learning at Cumberland Valley High School.

12. How do you perceive hybrid/blended learning (blend of traditional and digital methods of instruction) in secondary education?
   - Definitely Positive
   - Positive
   - Neither Positive or Negative
   - Negative
   - Definitely Negative

13. How do you perceive the transition process of moving from traditional education to hybrid/blended learning (blend of traditional and digital methods of instruction)?
   - Definitely Positive
   - Positive
   - Neither Positive or Negative
   - Negative
   - Definitely Negative

14. Do you believe that 21st century learning needs (the use of technology and teaching critical thinking, communication, problem solving, creativity, collaboration, and innovation) are being met in the traditional classroom?
   - Almost Always
   - Sometimes
   - Rarely
   - Never
   - I am Not Sure

15. Do you believe that 21st century learning needs (the use of technology and teaching critical thinking, communication, problem solving, creativity, collaboration, and innovation) will be met in a hybrid/blended learning classroom?
   - Almost Always
   - Sometimes
   - Rarely
   - Never
   - I am Not Sure
16. Have you experienced or perceived changes to take place in the culture (shared beliefs and characteristics that organization’s members have in common) of Cumberland Valley High School due to the implementation of hybrid/blended learning?
   - Very Much
   - Somewhat
   - Undecided
   - Not Really
   - Not at All

17. Have you experienced or do you perceive changes related to the role the teacher will have in “teaching” in the hybrid/blended learning environment compared to the traditional learning environment?
   - Very Much
   - Somewhat
   - Undecided
   - Not Really
   - Not at All

18. Do you believe that Cumberland Valley is prepared to overcome challenges associated with the implementation of hybrid/blended learning?
   - Very Much
   - Somewhat
   - Undecided
   - Not Really
   - Not at All

19. What is your gender?
   - Male
   - Female

20. What stakeholder group do you most identify with?
   - Student
   - Teacher
   - Administrator
   - Parent
   - School Board Member

21. Would you be willing to be contacted to participate in a focus group or interview session related to this topic?
   - Yes
   - No

22. If you answered yes to #10 please provide your contact information.
   - Name: ____________________________________________
   - Phone Number: _________________________________
   - Email Address: _________________________________
   - Mailing Address: ____________________________________________