5-2021

Leadership in High Achieving Blended Learning Schools

Benjamin Wyatt Alexander

UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

LEADERSHIP IN HIGH ACHIEVING BLENDED LEARNING SCHOOLS

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Benjamin Wyatt Alexander

College of Education and Behavioral Sciences
Department of Leadership, Policy, and Development:
Higher Education and P-12 Education

May 2021

This Dissertation by: Benjamin Wyatt Alexander

Entitled: *Leadership in High Achieving Blended Learning Schools*

has been approved as meeting the requirements for the Degree of Doctor of Education in College of Education and Behavioral Sciences in Department of Leadership, Policy, and Development: Higher Education and P-12 Education, Program of Educational Leadership and Policy Studies

Accepted by the Doctoral Committee:

_____
Linda Vogel, Ph.D., Co-Research Advisor

_____
Michael Cohen, Ed.D., Co-Research Advisor

_____
Matthew Farber, Ed.D., Committee Member

_____
Maria Lahman, Ph.D., Faculty Representative

Date of Dissertation Defense: April 2, 2021

Accepted by the Graduate School

_____
Jeri-Anne Lyons, Ph.D.
Dean of the Graduate School
Associate Vice President for Research

ABSTRACT

Alexander, Benjamin Wyatt. *Leadership in High Achieving Blended Learning Schools*. Published Doctor of Education dissertation, University of Northern Colorado, 2021.

The use of blended learning in kindergarten–12 (K–12) schools in the past decade has seen a dramatic increase, but the research on the effectiveness of blended learning has shown mixed results. However, some schools use blended learning that would be considered successful. The purpose of this study was to explore the lived experience of principals in high-performing schools that use blended learning. A post-intentional phenomenological methodology was used to explore the lived experience of the principals in this study. The primary source of data collection was semi-structured interviews of 12 school principals.

The principals in this study had common experiences related to (a) collaboration, (b) cultivating culture and climate, (d) development and evaluation of instruction, and (e) desk work. This study indicates that the experience of a principal in a blended school is like the experience of a principal in a school that does not use blended learning, except in the manifestation related to using data to inform development and evaluation of instruction. Additional research should be conducted on factors related to successful blended learning schools to those that are not successful. The definition of blended learning needs further examination as the definition of blended learning and hybrid learning is too broad in most research related to blended learning. Findings from this research will help future research on blended learning and help the leaders of hybrid and other schools that use blended learning.

ACKNOWLEDGMENTS

I want to thank everyone who supported and encouraged me over the past nine years; this has been a team effort. First, I want to give thanks to the love of my life, LauraElena; without you this would never have happened. To my children, Santiago, Mateo, and Rio who spent hours and days away from their papa while he read, studied, wrote, rewrote, and rewrote. To my parents who told me a long time ago that I could do anything. To my brother Adam and sister Noelle for their encouragement and support. I also want to thank my grandparents for their inspiration.

A HUGE thank you to my advisor, Dr. Michael Cohen, for his patience, support, and feedback through endless drafts and for helping me to be a better writer. To my committee co-chair, Dr. Linda Vogel, who has guided me from the beginning, from one side of the continental divide to the other, thank you! Thanks to the other members of my committee, Dr. Maria Lahman, who guided me through the world of qualitative research and Dr. Mathew Farber, whose expertise in the world of technology and instruction is second to none.

I would also like to thank Dr. Sophia Masewiz, who gave me my marching orders long ago to persevere through this dissertation. I also want to thank Dr. Dan Maas for his support and guidance and Dr. Tony Armenta who was my first advisor at UNCO. I also want to thank all my predecessors who finished their dissertations before me and encouraged me to finish. Those people include Dr. Joseph Moreno, Dr. Joseph Seaver, Dr. Robert Villareal, Dr. Teal Maxwell, Dr. Suzette Luster, Dr. J. B. Phillips, Dr. Danny Medved, Dr. Stacie Datteri, and Dr. Amie Cieminski. A big thanks to Deagan Andrews for guiding me into the world of blended learning

and to Brian Lemos for the laughs. Thanks to John Kongsvik and Evelyn Garcia for their guidance during my first years in the classroom. Thank you to my editors MarLene Nelson and Judieth Hillman. Also, thanks to my colleagues from ENGAGE Academy, Greeley-Evans School District, Mesa County Valley School District 51, and Scenic Elementary.

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CHAPTER I

INTRODUCTION

Background

For the purposes of this dissertation, it is important to start at the purpose of public schools in the United States. There are many interpretations of the purpose of public school, and there is no consensus on the primary role of public schools. In a Phi Delta Kappa poll (Starr, 2016), less than half of adult Americans believed that the main purpose of schools was to prepare students academically. Other Americans were split on the purpose of schools between preparing students for work and preparing students for citizenship. According to Starr (2016), the American public has never agreed on the purpose for public schools. Starr noted several different purposes of education,

> Thomas Jefferson, the earliest champion of American public schools and a proponent of a decentralized system of locally run schools, believed public education was essential for a democratic citizenry. Horace Mann believed in common schools that promoted social harmony; John Dewey believed education was about teaching one to think critically. (para. 3)

Those purposes include citizen formation and education, which is the production of civic consciousness and behavior (Parker, 2006; Reimers, 2006). According to Dr. Martin Luther King, the purpose of education was as follows:

> To save man from the morass of propaganda, in my opinion, is one of the chief aims of education. Education must enable one to sift and weigh evidence, to discern the true from

> the false, the real from the unreal, and the facts from the fiction. The function of education, therefore, is to teach one to think intensively and to think critically (King, 1947).

For others, the purpose of education is to create an educated workforce (Wang, 2012). Engel (2015) noted that this trend of education serving economic and workforce needs has moved up to higher education. However, this focus on workforce readiness is not new for K−12 students. At the height of the industrial revolution, some felt the purpose of education was to create a moral workforce who would show up to work on time (Tyack, 1974).

Industrial Model of Education

Between the beginning and end of the 20th century, the United States economy changed from an agricultural-based economy to a more industrialized economy, a shift accompanied by an increased need for semiskilled workers to work in the increasing number of factories built in the last two centuries (Rose, 2016). Before this time, schools in many urban areas began as loosely structured village schools with localized control (Church & Sedlak, 1976). The growing number of factories and increase in manufacturing corresponded with the idea of standardization and the concept of scientific management. Before the rise of industrialization and spread of scientific management, there was little need for secondary school education. “In 1900, roughly 6 percent of the American population graduated from high school. Just 2 percent graduated from college” (Rose, 2016, p. 49). At the same time, major cities saw an increase in population: “Between 1870 and 1900, the population of Chicago increased six-fold” (Rose, 2016, p. 41).

Many educational strategists at the time saw the increased need of bureaucratization of school systems as a response to the sheer number and chaotic conditions of village schools as they transitioned to large cities. According to Tyack (1974), many school leaders borrowed

organizational schemes from the factory, army, and railroads. Guided by principles of scientific management and standardization created for factories, educational reformers decreed “the new mission of education should be to prepare mass numbers of students to work in the newly Taylorized economy” (Rose, 2016, p. 50).

In scientific management, the system is the essential element in an organization, and individuals are expected to comply with the standard operating procedures of their position (Rose, 2016). University of Washington President, Henry Suzzallo, described the educational system as “iron machinery” and the teaching of children as being “unindividual” (Suzzallo, 1911, as cited in Thorndike, 1911, p. v). He described this industrial model of education as being most problematic in urban areas “where the mere bigness of the situation obscured both the individual teacher and the individual child” (Suzzallo, 1911, as cited in Thorndike, 1911, p. vi).

School reformers such as Horace Mann pushed for more uniformity, standards, and state control of schools (Church & Sedlak, 1976). Schools were thought to boost economic growth: “Education would foster industrialization by teaching future workers to respect property, to work hard, and to accept their lot, if not happily, at least submissively” (Church & Sedlak, 1976, p. 68). Schools were seen as places where students would learn industriousness, punctuality, and frugality. Also, schools were places where social virtue would be transmitted: “Mann and the factory managers depended on schools to serve as the key agent for teaching morality” (Church & Sedlak, 1976, p. 69).

The term “Taylorized economy” came from Frederick Taylor (1911) who wrote *The Principles of Scientific Management*. Education reformers began to reorganize school districts around one of the major pillars of scientific management which was to standardize everything around the average. Schools began to divide students by age, and these students rotated to

different classes that lasted a standard amount of time. Thus “school bells were introduced to emulate factory bells and to mentally prepare children for their future careers” (Rose, 2016, p. 51). By 1920, a majority of American school systems were designed around this factory-based model, wherein each student received a standardized education (Evans, 2012; Rose, 2016). This standardized and bureaucratized education was in response to the increasing number of students (Tyack, 1974).

In 1924, journalist H. L. Mencken stated, “The aim of public education is not to spread enlightenment at all: it is simply to reduce as many individuals to the same safe level, to breed and train a standardized citizenry, to put down dissent and originality” (Hendon, 2010, p. 1). This factory model system is still the norm in secondary schools across the United States (Ross, 2010). Students in most secondary schools are still organized by age and rotate through the school day based on a standard amount of time. Currently, students take standardized tests, and their results are compared to other school averages. The principles of scientific management and standardization continue to have an impact on secondary schools today (Rose, 2016; Stoller, 2015). According to Vogel (2010), institutions change slowly even with the many educational reforms since the 1950s. Vogel (2010) used the example of a student’s grandparents who visited a modern classroom and recognized the organization of time and instructional methods from when they were in school.

Even as schools and districts were transitioning from villages into large cities, small schools and heterogeneous groupings of students were seen as ideal. According to Tyack (1974), Albert Marble, the superintendent of schools in Worcester, Massachusetts, stated, “Ideal education would be a small class of children in the charge of a thoroughly cultivated man or woman through a series of years” (p. 39). This ideal, described as student-centered

progressivism, has always been an undercurrent to mainstream education in the United States (Labaree, 2012). It was advocated by John Dewey and other student-centered progressives who focused on pedagogical methods in the classroom such as the project method, activity curriculum, and other ways to meet students' needs. Another group of progressives, called administrative progressives, were philosophically opposed to the student-centered progressives (Labaree, 2012). The administrative progressives were focused on social efficiency and aligning schools to economic goals (Labaree, 2012). The success of administrative progressivism can still be seen in the structure and systems in modern schools and school districts (Fesmire, 2016; Labaree, 2012; Leland & Kasten, 2002). Labaree (2012) discussed that one of the main reasons that student-centered progressivism never became popular was that it did not have a specific audience of stakeholders. The administrative progressives created an audience of school and district administrators.

Another reason that student-centered progressives never became popular had to do with the administrative progressives' focus on curriculum. For administrative progressives, the control of the curriculum was important to have an impact on social efficiency and a level of control of learning in the classroom. The rigidity of the curriculum ran counter to the philosophy of the student-centered progressives who believed in a more naturalistic learning experience where students had more autonomy about what they learned (Labaree, 2012).

Problems of the Industrial Model

Cuban et al. (2001) traced the inability of secondary schools to innovate and adopt reform to the schedule, cellular organization, and departmental boundaries of these schools. They traced these structures to the earliest high schools in the early decades of the 20th century. Issues also raised by Cuban et al. included several problems with the industrial model of education.

The first problem with the industrial model is the inequity it creates by "reproducing social stratification based on race and class" (Sleeter, 2015, p. 112). Evidence of this inequity is found in the concept known as the achievement gap which occurs "when one group of students outperforms another group, and the difference in average scores for the two groups is statistically significant" (National Center for Education Statistics, 2013, p. 210). A large body of evidence is seen in an achievement gap (Ferguson, 2007). Research on the causation of that gap is inconclusive (Miksic, 2014). According to research based on the National Assessment of Educational Progress exam for the years 2005 through 2013, White 12th-grade students were three to four times more proficient in math and reading compared to students from non-White groups (Means & Anderson, 2013; Pitre, 2014; Snyder et al., 2016). These trends have been noted and studied for decades, and even though there have been numerous reforms, they continue to persist (Medved, 2016). Since *A Nation at Risk* was published in the 1980s (U.S. Department of Education, 1983), many reform efforts have improved the quality of education in schools; however, the achievement gap persists between students from different racial and socio-economic backgrounds in the United States (Baker et al., 2016).

While the achievement gap may not be caused solely by the factory model system, Sleeter (2015) argued the factory model was created to continue a deeply racist and hierarchal structure that was not designed to benefit everyone. In a 1909 address to a group of New York City High School Teachers, Woodrow Wilson stated,

> We want one class of persons to have a liberal education, and we want another class of persons, a very much larger class, of necessity, in every society, to forego the privileges of a liberal education and fit themselves to perform specific difficult manual tasks. (Wilson, 1909, p. 19)

The factory model of schooling is the status quo in most public school districts, and its design is seen from the time a student enters kindergarten to when they graduate high school. However, the factory model is most apparent in comprehensive high schools. According to Labaree (2012), the comprehensive high school model was designed to create inequitable outcomes for students.

Darling-Hammond (2006) stated, "of all the ways in which urban school children are being left behind, their experiences in large, factory-model high schools are, arguably, the most egregious" (p. 642). These schools "are structured as huge warehouses, often housing 3,000 or more students in an organization focused more on the control of behavior than the development of community" (Darling-Hammond, 2006, p. 642). When these schools fail to graduate a large percentage of students, they are labeled as dropout factories (Balfanz & Legters, 2004). These schools tend to be "heavily stratified within, and substantially dehumanized throughout; most students experience such high schools as non-caring or even adversarial environments" (Darling-Hammond, 2006, p. 643).

This achievement gap is magnified in many conventional high schools that are not designed to produce equitable outcomes for all students (Siskin, 2004). According to Siskin (2004), after 1959 high schools were designed, "to serve democratic purposes, and accommodate diverse student populations by creating a wide range of programs and a differentiated curriculum" (p. 170). This was different than before 1959 when high schools were created to prepare students for college. This design has created groups of students who were exposed to varying levels of academic rigor. Most students take general courses, and a few students are offered more rigorous courses such as Advanced Placement courses (Siskin, 2004). According to Darling-Hammond (2006), these large high schools have been critiqued for over 40 years for their "impersonal structures; their fragmented curricula; their segregated and unequal program

options; and their inability to respond effectively to different student needs" (p. 2). Darling-Hammond recommended smaller learning communities, personalization through teams of teachers sharing groups of students, well qualified teachers, a common core curriculum organized around performance-based assessment and supports for struggling students.

A second problem with the industrial model of education is it hinders student motivation. Since the mid-1980s, the achievement goal theory has been one of the most notable theories of motivation in education (Senko et al., 2011). Researchers distinguished between mastery goals and performance goals. Mastery goals are based on a belief that effort will lead to mastery which is based on standards referenced by students. The standards and levels of mastery are transparent to students, and they work toward mastery by developing new skills and understandings (Ames, 1992). Performance goals are based on one's ability, sense of self-worth, and evidenced by surpassing normative-based standards by doing better than others. Success is based on comparing one's performance to others.

In the factory model of education, grades are norm-referenced models of evaluation. Most schools in the United States still use grades to evaluate students. The factory model is conducive to performance goals that have an adverse effect on student motivation.

> As children progress through school, evaluation becomes more formal and more closely tied to performance criteria than to simple assignment completion. When an evaluation is normative, emphasizes social comparison, is highly differentiated, and is perceived as threatening to one's sense of control, it contributes to a negative motivational climate. (Ames, 1992, p. 265)

While grades and performance goals are the norm in many schools in the United States, they are not the only way to measure a student's learning.

Mastery goals are aligned to a mastery-based or competency-based system. A competency-based system is a model where, “students advance and move ahead on their lessons based on demonstration of mastery. In order for students to progress at a meaningful pace, schools and teachers provide differentiated instruction and support” (Patrick et al., 2013, p. 22).

> The findings for mastery goals have been consistent and mostly favorable. Students who pursue mastery goals, compared to those who do not, often find their classes interesting, persist when facing difficulty, value cooperativeness, seek help when confused, self-regulate effectively, use deep learning strategies (i.e., elaborating the material, connecting it to other concepts), navigate decisional conflict well, experience positive emotion, and perceive tasks as valuable. (Senko et al., 2011, p. 27)

However, “There are substantive structural barriers to achieving mastery outcomes in the existing age-cohort system” (Van Duzer, 2006, p. 4). A competency-based system is radically different from the factory-based system, because a student advances through courses based on demonstrated competency instead of the amount of time the student has been in the course (Patrick et al., 2013).

Another aspect of student motivation Ames (1992) explored was the locus of responsibility in the classroom. Ames noted numerous studies have found a positive relationship between the intrinsic motivation of students and the autonomy orientation of the classroom (DeCharms, 1976; Deci et al., 1981; Grolnick & Ryan, 1987; Hughes et al., 1986; Ryan & Grolnick, 1986). When teachers allows students choice in the pace and method of learning and establishing priorities in task completion, they are imparting responsibility to the student (Ames, 1992). This changes the perception of control from the teacher to the student,

> appears to be a significant factor affecting children's engagement in learning and quality of learning. When teachers are seen as emphasizing independent thinking in addition to content mastery, students are more likely to place value on using effective learning strategies. (Ames, 1992, p. 266)

However, in most classrooms in the United States, "students have few opportunities to control the selection of tasks, materials, the method of learning, product, or pace in most classrooms" (Ames, 1992, p. 266).

A few studies have found motivation—or a lack thereof—is one of the contributing factors for students dropping out of high school (Bridgeland et al., 2006; Luster, 2015; Vallerand et al., 1997). Bridgeland et al. (2006) conducted a series of focus groups where participants reported boredom, lack of academic challenges, a disconnection from school, and a lack of motivation as reasons why they dropped out. Luster (2015) found disengagement was a strong core reason for why students dropped out and attributed this in part to structure and culture of secondary schools: "Predominantly, the traditional educational system, which includes a 'sit and get' approach in the classroom, is not as effective for disengaged students, just as the 'one-size-fits-all' approach does not meet the diverse learning needs of all students" (p. 106). Luster recommended schools move to a student-centered learning model that uses blended learning involving collaboration and project-based learning as a way of keeping students engaged in their learning. Blended learning is a,

> formal education program in which a student learns part online, with some element of control over the time, place, path or pace of their learning, and part in a brick-and mortar location away from home. The modalities along a student's learning path are connected to provide an integrated learning experience. (Horn & Staker, 2015, p. 31)

A third problem with the industrialized education model is the utilization of time. This model relies on the standardization of time (Rose, 2016). A majority of students are given the same amount of time for learning. Some students in special education programs might have extended school years, but the vast majority of students attend school for the same amount of time both daily and yearly. Students start their first year of school based on the date they were born, and all are expected to have all the skills and knowledge to graduate high school around the same time 13 years later (Robinson, 2010; Rose, 2016).

In addition to standardization of time, the industrial model uses time as a quantifier of learning. This measurement is called the Carnegie unit which uses credit-hours to track attainment of student learning. Carnegie units were created to ensure college readiness by standardizing the amount of time students were in the classroom for specific content areas (Silva et al., 2015). An unintended consequence of the Carnegie unit is students are promoted through school without having to demonstrate competence in the subject matter (Farrington & Small, 2008). A student might be promoted through school with a 60% or a "D" letter grade even though he or she could be missing 40% of the content in a course (Bailey et al., 2013; Patrick et al., 2013). The issues with the structure and results of public schools bring about the need to discuss the purpose of public schools.

Changes in Technology and Society

Starting in the 1950s, the United States began transitioning from a manufacturing-based economy, where there were a large number of semi-skilled industrial jobs, to a service economy requiring a highly-skilled workforce (Buera & Kaboski, 2012; Williams et al., 2014). This economy is global, interconnected, and technology-driven (Public Impact, 2013). This new knowledge-based economy of the 21st century requires new skills and competencies different

from those needed in an industrial-based economy (Koenen et al., 2015). The current educational system is built for an economy and society that no longer exists (Glowa & Goodell, 2016; Sturgis, 2016; Williams et al., 2014). Many students who graduate from the United States education system are not equipped for the current, competitive, constantly changing economy. "This world of the 21st century requires something new" (Maine Department of Education, 2012, p. 3).

Another change in technology and society occurred on April 30, 1993—the day the World Wide Web was released for public use (European Organization for Nuclear Research, 2017). Owston (1997) commented, "Nothing before has captured the imagination and interest of educators simultaneously around the globe more than the World Wide Web" (p. 27). In his article, he claimed that the Web could free learning and teaching from the time constraints of class schedules and the physical boundaries of the classroom. Also, the Web was "causing educators from preschool to graduate school to rethink the very nature of teaching, learning, and schooling" (Owston, 1997, p. 27). In 1998, the United States Congress created the Web-Based Education Commission (2000). The Commission was created under the reauthorization of the Higher Education Act as a part of Title VII. Its goal was to discover how the Internet can be used to enhance the learning opportunities for all learners and guarantee all students had equal and full access to the World Wide Web (Web-Based Education Commission, 2000).

The potential for using the Internet to improve student learning was brought to the mainstream when the Web-Based Education Commission (2000) published their report, *The Power of the Internet for Learning: Moving from Promise to Practice*, which found the Internet holds "extraordinary promise" (p. 3). The report stated that using the Internet had the potential "to center learning around the student instead of the classroom. To focus on the strengths and

needs of individual learners. To make lifelong learning a practical reality" (Web-Based Education Commission, 2000, p. 3). This use of the Internet to improve learning has had mixed results (Boninger et al., 2017; Public Impact, 2013).

While some schools have embraced innovative ways to use technology, progress has been slow (McLeod & Richardson, 2014). Also, many schools do not have access to or do not use technology in ways to improve student learning (U.S. Department of Education, Office of Educational Technology, 2016). According to results of a National Center for Education Statistics (2013) survey, 82% of the teachers who participated thought that a lack of time to prepare for their classes and lack of release time was the most significant factor that prevented them from using computers for instruction. Cuban et al. (2001) found time and professional development were two reasons why teachers infrequently used computers in the classroom. Also, Cuban et al. believed the structures and organizations of secondary schools "made it difficult for teachers trained in separate disciplines to adopt innovations and engage in school reforms" (p. 827). Cuban et al. found innovative teaching, including computer-enhanced instruction, was in classrooms where teachers co-planned, shared ideas, and observed each other teach.

Change in Students

The widespread use of devices connected to the World Wide Web has led to children and adolescents socializing in ways that are very different from previous generations (Prensky & Berry, 2001). Prensky and Berry (2001) highlighted this phenomenon with labeling individuals born after 1980 as digital natives and those born before 1980 as digital immigrants. Digital natives are individuals who have grown up surrounded by technology including cell phones, computers, instant messaging, and video games. Prensky and Berry concluded that the widespread use of technology has impacted the social lives of children and adolescence.

According to Loh and Kanai (2016), studies involving neuroimaging, "have suggested associations between these Internet-related cognitive impacts and structural changes in the brain" (p. 1). This is due to the neuroplasticity of the brain. Neuroplasticity is where the functions of memory and learning can activate the growth of new synaptic connections and neurons in these frequently used areas of the brain. This is also known as map expansion, which is an expansion of an area devoted to a cognitive function (Loh & Kanai, 2016).

There is a growing body of evidence over the past two decades that Internet usage is having an impact on cognitive brain structure and behaviors by the "functional enlargement of an area devoted to a particular cognitive operation" (Choudhury & McKinney, 2013, p. 198). Studies are demonstrating that "We are shifting toward a shallow mode of learning characterized by quick scanning, reduced contemplation, and memory consolidation" (Choudhury & McKinney, 2013. p. 11). This shift is due to an increase in hypertext environments and the ease of which information can be retrieved from online resources. This allows the brain to free up cognitive resources for other operations. However, there is a fear that this shift will decrease a brain's ability to develop deep reading skills (Choudhury & McKinney, 2013).

Studies have also found that Internet use facilitates multitasking behaviors. These behaviors have been induced by Internet usage and have been linked with reduced learning in the classroom and increased distractibility according to Choudhury and McKinney (2013). They stated that, "Increased media-multitasking was associated with a breadth-biased form of attention control that generally resulted in better integration of multiple sources of information but poorer inhibition of distractors" (p. 11). In one study (Small et al., 2009), researchers compared brain scans of elderly participants with and without Internet searching experience during a reading task and a simulated Internet search task. Participants with Internet search experience showed

increased activity in their prefrontal cortex during the simulated Internet search task compared to the reading task. The participants without Internet searching experience had little difference in brain activity between the reading task and the Internet search task. After the scans, the participants without Internet search experience participated in five days of Internet search practice. After five days, they repeated the reading and Internet search activities while having their brains scanned. This second scanning showed increased activity in the prefrontal cortex similar to the original participants who had previous Internet search experience. This study suggested that Internet searching experience can alter the neural processes involved in processing information. However, according to Choudhury and McKinney (2013), the significance of these findings is controversial, and more research is needed.

These behavioral and cognitive impacts have created a debate between policymakers, educators, and parents on the use and misuse of digital technologies (Choudhury & McKinney**,** 2013). This debate is focused on the neuroplasticity of the brain and fears that children and adolescents who have high digital media use will become intellectually shallow, unempathetic, passive, desensitized, and depressed (Choudhury & McKinney**,** 2013). However, Selwyn (2009) in his article "The Digital Native—Myth and Reality" cautioned scholars, librarians, and educators to be critical of research concerning young people and technology. Most of his paper focused on social science research regarding young people and technology and did not incorporate as much neurological research. Selwyn (2009) acknowledged that technology has brought significant changes in the lives of young people and adults. He stated that, "there are few ways in which the current 'digital native' generation can be said to constitute a total disjuncture and discontinuity from previous generations" (p. 375). He was also concerned with the ideological and political agendas that underlie the discourse on digital natives. These

concerns were based on the concept of the "plight of child," which was explored in the work of Jenkins (1998). The "plight of the child" is a metaphor used by political groups to promote various causes. For example, political parties have used images of a dead child to push for tougher sentences for criminals (Jenkins, 1998). While Selwyn (2009) did not identify political agendas in his work, he did caution readers about the use of "digital natives" as a metaphor similar to Jenkins' (1998) "plight of the child." Selwyn (2009) stated that, "there is a clear need for all parties concerned with young people and technology to maintain a balanced and objective perspective on what can appear at first glance as a substantial transformation of social relations" (Selwyn, 2009, p. 376). Also, Choudhury and McKinney (2013) noted that fears related to new technology or adolescence was not a not a new phenomenon, because "since the early 1900s with G. Stanley Hall's now legendary description of adolescence (Hall, 1904), Western society has viewed teenagers as both vulnerable and dangerous" (Choudhury & McKinney, 2013).

Personalized Learning

The concept of personalized learning is not a new concept. Since the time of Socrates in ancient Greece, formal Western education has been based on the practice of tutorage and apprenticeships. These practices are similar to one-on-one tutoring, which is an effective teaching and learning strategy (Corbett, 2001). The effect of this style of learning is illustrated in Benjamin Bloom's 1984 study. He found students who learned in a personalized one-on-one setting learned at two standard deviations above students in a conventional classroom (Bloom, 1984). The efficacy of one-on-one teaching is due to the teacher's ability to customize, scaffold, and adapt his/her instruction in the moment to the needs of the student (Bloom, 1984). In the past, educational reformers have advocated for schools to have a similar focus on the needs of the individual student (Leland & Kasten, 2002). The educational field has discussed this

approach for over a century, describing it with phrases such as “child-centered” or “personalization.” John Dewey (1900/2013) discussed concepts of personalization in his book, *The School and Society and the Child and the Curriculum*. Progressive education reformers have continued to advocate these concepts in the early 21st century (Redding, 2013). However, the practice of educating students in public schools utilizing one-on-one tutors is unrealistic.

Actual personalization at scale has been a difficult feat for educators. In the past several decades, a small number of school districts and schools have begun to implement various practices such as blended learning and competency-based learning models. These models are described as personalized learning and are more student-centered; the concept of personalized learning has been brought to scale in a small number of schools with the utilization of blended learning (Williams et al., 2014).

Exponential Growth

There has been considerable growth in schools that use blended learning school-wide. In 2009, fewer than 5,000 students were enrolled in schools that used blended learning (Miron & Gulosino, 2016). In 2014, over 25,000 students were enrolled in schools that used blended learning. Of those students enrolled in blended schools, 37.1% of those students were enrolled in one of the three prominent education management organizations that operate blended learning charter schools. The three prominent education management organizations were Rocketship Education, K12 Inc., and Nexus Academy (Miron & Gulosino, 2016).

Another education management organization, the Summit School Network (Summit Learning, 2018), started as a small collection of charter schools that strove to provide students a blended, competency-based education. In the 2014-2015 school year, there were nine Summit charter schools with approximately 2,000 students (Summit Learning, 2018). In the 2015-2016

school year, the Summit Basecamp Network was created with funding from the Chan Zuckerberg Foundation. It partnered with 19 public schools and became a part of the Summit Basecamp Network with 2,300 students (Summit Learning, 2018). The partnership included providing partnering public schools with free professional development, curriculum, and computers. In 2016-2017, 100 schools became Summit Basecamp schools with a total of 20,000 students across 27 states (Summit Learning, 2018). In this one nation-wide school network, there has been a doubling of the number of students every year.

The exponential growth of schools using the Summit model was predicted in the book, *Disrupting Class* (Christensen et al., 2010). Because of this exponential growth, it is imperative studies be conducted not only on the results and impacts of these schools but additionally on how these schools operate and what school leadership looks like in these schools that use a different type of pedagogy compared with more traditional schools.

Statement of the Problem and Study Significance

Schools that are transitioning to blended learning are growing at an exponential rate. The reasons for this transition are based on the disadvantages of the industrial model of education. Schools moving to a blended learning are doing so to create a more student-centered, and personalized environment. Currently, scant research exists on leadership in these schools. This is problematic as the research, development, training, support, and evaluation of secondary school leaders are based on a different school model. As schools and school systems move toward using blended and competency-based practices, they will need to know how to support, select, and evaluate leaders in these new school models. The findings of this study will help guide other schools that are considering transitioning to this model and school leadership preparation

programs in identifying what skills are necessary for leaders in schools that utilize personalized learning.

Purpose of the Study

The purpose of this study was to explore the phenomenon of leadership in high achieving schools that utilize school-wide blended learning.

Research Question

Q1 What is the lived experience of leaders in high performing schools that use blended learning in a competency-based system?

Defining the Terms

Blended learning. A formal education program in which a student learns at least in part through online learning, with some element of student control over time, place, path, or pace; and at least in part in a supervised brick-and-mortar location away from home.

Competency-based education. Students advance upon demonstrated mastery; competencies include explicit, measurable, transferable learning objectives; assessment is a learning experience for students; students receive timely, differentiated support based on their individual needs; and learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of essential skills and dispositions.

Hybrid learning. A blended learning model where students from a particular school divide their time between learning in a brick-and-mortar campus and learning remotely using online delivery of content and instruction. Often, these students will only attend campus a few days a week (Patrick et al., 2013).

Personalized learning. This is tailoring learning for each student's strengths, needs, and interests—including enabling student voice and choice in what, how, when, and where

they learn—to provide flexibility and supports to ensure mastery of the highest standards possible (Patrick et al., 2013).

Conclusion

The concept of personalized learning is not new to education. However, schools in the United States were based on a model created during the industrial revolution and became steeped in ideas of scientific management (Ross, 2010). This created an industrialized model of education that has many problems including the utilization of time, lack of differentiation, lack of student motivation, and reproducing social stratification based on race and class (Sleeter, 2015). Batalden (2010) stated, “Every system is perfectly designed to get the results it gets” (p. 1). If the current model of education in the United States is producing inequitable results, it is not due to a lack of effort. The Maine Department of Education (2012) stated, “our schools are not struggling due to a lack of effort. Educators in Maine and across the nation are working harder than ever. . . . [O]ur schools are . . . simply obsolete” (p. 3).

While many schools maintain structures and systems that remain unchanged for decades, there has been a dramatic change in technology and society in the past several decades. Currently, there are a growing number of schools that are implementing personalized learning models that could potentially decrease the achievement gap (Darling-Hammond, Friedlaender, et al., 2014). These schools use a combination of different pedagogies such as competency-based education and blended learning to create a more student-centered or personalized learning experience for students.

CHAPTER II

A REVIEW OF THE LITERATURE

Characteristics of personalized learning have been around since the early 1900s (Patrick & Sturgis, 2015). Some elements of personalized learning, such as blended learning, have only been around since the mid-1990s. The goal of competency-based education and blended learning is the same—to systematically personalize each student's learning to increase knowledge acquisition (Patrick & Sturgis, 2015). There is overlap between certain elements of personalized learning such as blended learning, competency-based learning, and personalized learning plans. Some schools have used various combinations of elements to differing degrees. This literature review focuses on two types of personalization most commonly used by some schools: competency-based education and blended learning. In addition to exploring characteristics of personalized learning, this literature review explores research on the best practices of school leadership in general, because the purpose of this study was to explore the phenomenon of leadership in schools that utilize blended learning and competency-based education.

Competency-Based Education

Competency education came into being in the late 1960s and was based on the work of Benjamin Bloom and Robert F. Mager (as cited in King & Evans, 1991; Steele et al., 2014). It was a "response to the changing job market" of the 1960s (King & Evans, 1991, p. 74). The job market was changing due to a variety of factors, including the increasing amount of technology and automation. There was also rapid population growth and migration of people from rural areas to cities (U.S. National Commission on Technology, Automation, and Economic Progress,

1966). At the time, there was a discussion regarding whether the prevailing standards, school curricula, and practices would assure that high school graduates could be economically and socially independent after graduation. Some states, such as Oregon, passed minimum high school graduation requirements in 1972 after several years of public hearings (Spady, 1977). According to Sturgis (2012), competencies are broad skills students should demonstrate mastery of before graduating from high school. At a 2011 conference on competency education, 100 educators who had used competency education created a five-part working definition as follows:

> Students advance upon demonstrated mastery; competencies include explicit, measurable, transferable learning objectives that empower students; assessment is meaningful, and a positive learning experience for students; students receive timely, differentiated support based on their individual needs; learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of essential skills and dispositions. (Patrick & Sturgis, 2015, pp. 14−15)

Schools and school districts have used different forms of competency education for many years (Patrick & Sturgis, 2015). Competency-based learning has its roots going back to the writings of Horace Mann and Henery Barnard (Ornstein & Hunkins, 1993). These roots eventually developed into the mastery learning movement and then into competency-based education which emerged in the 1970s (Vogel, 2014).

Some current competency-based systems can trace their roots to the Chugach School District in Alaska, wherein administrators began to reorganize their district into a competency-based system (Delorenzo & Battino, 2009; Vogel, 2010; Worthen & Pace, 2014). The rise of competency-based education in the 1970s overlapped with the creation of standards, which were created in response to the 1983 *Nation at Risk* report. Along with these standards were the

development of standardized tests to measure students' learning of the standards (Delorenzo & Battino, 2009; Hamilton et al., 2009; Sturgis & Patrick, 2010). However, standardized tests are not the only method to assess student learning of the standards. Some advocates of competency-based learning prefer portfolio-based assessments. These advocates prefer the authenticity and their cognitive difficulty compared to the reliability and efficiency of standardized assessments (Priest et al., 2012; Sturgis, 2012).

Competency-based education is also referred to as performance-based or mastery-based and is a structural reform that helps schools move from the traditional time-based system (Patrick & Sturgis, 2015). This time system is based on the Carnegie Unit. This unit consists of 120 hours of contact with a teacher, which equates to approximately one hour of being in a classroom per subject, per day, for 24 weeks a year. A majority of public high schools in the United States award credit according to this 120-hour model (Silva et al., 2015). While the Carnegie Unit is the norm for most high schools in the United States, mastery- or competency-based learning is practiced in a minority of K−12 public schools in the United States (Marzano, 2013; Sturgis, 2010). By 2015, the competency-based philosophy had gained more momentum; according to Patrick and Sturgis (2015), competency education was taking root across the United States and "nearly 90 percent of states have created some room for competency-based innovations" (p. 5).

In the past decade, some schools and districts somewhat inaccurately considered themselves to be using competency-based learning, because they utilized a standards-based or competency-based report card. As Patrick and Sturgis (2015) noted, "however, in standard-referenced grading, students are still passed on and advanced to the next lesson or subject even if they did not demonstrate mastery of the core standards in the course or grade" (p. 19). Truly competency-based institutions are radically different from traditional schooling as reflected in

the institution's student-centered use of time rather than a fixed amount of classroom time. For example, in a competency-based school, students have varying amounts of flexible time in their day to work on subjects that they need to spend more time on. In a traditional system, time is tightly regulated, and each subject is allocated equal amounts time based on a master schedule.

Competency-based systems allow teachers to spend time with students who need more time on specific skills and topics and allow students who can show competency on particular skills and topics to move to other areas as soon as they have shown mastery. An efficient competency-based system is dependent on the ability of the teacher to accurately assess each student's competency using a variety of evidence (Brodersen & Randel, 2017). Students are expected to meet the same standards but may need different ways to learn and show mastery (Patrick & Sturgis, 2015). One reason many schools and districts do not use competency-based education is it entails a long and complex change process (Vogel, 2010). Everyone must commit to deconstructing the old system with all its complexities while simultaneously building up new structures and language. It takes time, anywhere from five to 10 years, to thoroughly implement new practices and policies and eliminate the old. It also takes time to learn how to fully integrate each piece of the personalization puzzle: student agency, blended instruction, competency-based structures, deeper learning, and performance assessment (Patrick & Sturgis, 2015).

Empirical research on the effects of competency-based education has been dependent on the number of schools and districts that have made the transition from a traditional learning system to a competency-based system. The Chugach School District in Alaska was the first school district in the United States to adopt a competency-based system. After the first five years as a competency-based system, the Chugach School District went from the bottom quartile to the 72nd percentile on the California Achievement Test (Delorenzo & Battino, 2009). The results

from Chugach encouraged other school districts to consider transitioning to a competency-based system.

One school district that made the transition to a competency-based district is the Westminster School District in Colorado. The district adopted the Re-Inventing Schools Coalition framework for competency-based education (Medved, 2016). Students in the district are grouped according to their performance levels rather than traditional grade levels (Brodersen & Randel, 2017).

In 2017, the Mid-Central Regional Educational Laboratory was asked by Westminster Public Schools to examine how long it took district students to progress through the district's performance levels. These performance levels are based on a set of learning targets aligned to the Colorado Academic Standards. Students are promoted to the next level after they have demonstrated proficiency based upon a review of a body of evidence including written assignments, informal assessments, district benchmark assessments, and classroom discussions (Brodersen & Randel, 2017).

The Westminster district was interested in the time it took for students who were below their traditional grade level to catch up to their grade level performance expectations in math and reading (Brodersen & Randel, 2017). Researchers used data from the district's learning management system for elementary and middle school students. The study examined the relationship between the students' learning target scores from the learning management system and the students' scores from the Transitional Colorado Assessment Program. The study found a majority of enrolled students attained their grade level performance levels in reading and math grade level in one year. The performance levels were created around a series of district-defined learning targets that were aligned to the Colorado Academic Standards. In the study, 43 to 47%

of those who were behind in their grade performance level reached their grade level performance level in less time than their peers who were in a traditional grade level system (Brodersen & Randel, 2017).

In order to manage the many skills and student performance levels, large scale competency-based systems require robust technology platforms that are student-centered. These platforms help with the organization of student learning, provide opportunities to practice the skills needed to master competencies, and create a transformation of instructional design toward a blended learning model where students and teachers can use technology to personalize student learning (Patrick et al., 2013). According to Medved (2016), blended learning can occur from the utilization of technology platforms used in a competency-based system. Since blended learning utizilizes competency-based learning, for the purposes of this study, I incorporated competency-based learning into my definition of blended learning instead of listing them as separate phrases.

Blended Learning

The definition of blended learning used for this study was the following: An education program in which a student learns at least in part through online learning with some element of student control over time, place, path, or pace and at least in part in a supervised brick-and-mortar location away from home. In addition, for the purpose of this study, the education program would have been intentionally developed for blended learning prior to the corona virus disease 2019 (COVID-19) pandemic. This definition is based on the definition created by Staker and Horn (2012) and the Clayton Christensen Institute (2018).

Also, this definition incorporated language from the International Association for K−12 Online Learning (2015) and the Evergreen Education group's definition of online learning and was created for the K−12 context and from the student's perspective (Staker & Horn, 2012). In

addition, the definition is distinguished from technology-rich instruction and other forms of learning that are easily confused with blended learning (Staker & Horn, 2012). This confusion is because "certain education practices—such as traditional instruction, technology-rich instruction, informal online learning, and full-time virtual learning—share some features of blended learning but differ in key ways that exclude them from fitting precisely in the category" (Staker & Horn, 2012, p. 5).

As computers slowly were introduced into K−12 schools during the 1980s, there were hopes the computers would transform instruction in the classrooms. However, these expectations were not met until after the creation of the World Wide Web in 1992 (Public Impact, 2013). In 2010, the Innosight Institute (Horn & Staker, 2015), with funding from the Charter School Growth Fund, began to survey educators in over 150 blended learning programs to create a definition of blended learning that was neither too narrow nor too broad. Horn and Staker (2015) wanted a precise definition for blended learning to differentiate it from the easily confused trend of the technology-rich classroom and the "bottomless category of the use of edtech in schools" (p. 34). Technology-rich instruction shares the structure of traditional instruction with digital enhancements such as interactive whiteboards, document cameras, Internet tools, and online lesson plans; however, in technology-rich instruction the Internet does not deliver instruction, and the student lacks control over time, place, path, and pace (Staker & Horn, 2012).

Utilization of Blended Learning

Christensen et al. (2008) brought the concept of blended learning to the attention of many. Before the publication of their book, *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns,* in 2008, blended learning was occurring in small numbers in a variety of different schools and classrooms. When carefully designed and thoughtfully applied,

technology can accelerate, amplify, and expand the impact of effective teaching practices (U.S. Department of Education, Office of Educational Technology, 2016). However, for this implementation to be transformative, educators need to have the knowledge and skills to take full advantage of technology-rich learning environments (U.S. Department of Education, Office of Educational Technology, 2016). Also, technology allows the creation of new experiences of "transformative learning" where students become co-learners with their teachers, which creates a more in-depth knowledge of the content (U.S. Department of Education, Office of Educational Technology, 2016, p. 39).

Patrick et al. (2013) used the metaphor of a global positioning system to describe blended learning. Before the widespread use of smartphones enabled with global positioning systems, paper maps were the most common tool people used to navigate. Maps are static tools and do not change depending on the location of the person using them. A global positioning system or smartphone changes depending on the location of the person using the device. Similarly, blended learning facilitates personalized learning for students by utilizing web-based programs to create differentiated, customized learning paths for each student. Some software used for blended learning adapts to the learning needs of the student through the use of algorithms that analyze patterns in student responses. Other software allows teachers to curate individualized playlists of lessons for students.

Also, blended learning models allow for the creation of structural and operational changes including nonconventional utilization of time and facilities because the computer becomes a partner in teaching content (Staker & Horn, 2012). For example, schools using a lab rotation model might utilize a paraprofessional to monitor students in a computer lab while they learn a particular subject (Jacob, 2011). This allows the school to reallocate funds to increase

teacher salaries, professional development, or increase student-support services such as social workers or school counselors (Battaglino et al., 2012; Simburg, & Roza, 2012).

At the Bronx Arena Academy, which is an alternative high school in New York City, most of the teachers are generalist teachers who meet with content teachers and a computer programmer on a bi-weekly basis to adjust the school's curriculum (Bertrand et al., 2013). The students stay with the same generalist teacher until they graduate. The students do not rotate between classrooms and spend the day with the same generalist teacher, which helps the students develop strong relationships with that one teacher. A few content teachers rotate through the school to support students in specific content areas. The content area teachers also plan weekly with the generalist teachers and a computer programmer hired by the school to help create or adjust the digital content that students are assigned (Bertrand et al., 2013).

One of the primary ways blended learning can personalize student learning is by a teacher's consistent utilization of student learning data. This learning data is a part of what is called learning analytics. According to Bienkowski et al. (2012),

> Learning analytics draws on a broader array of academic disciplines than educational data mining, incorporating concepts and techniques from information science and sociology, in addition to computer science, statistics, psychology, and the learning sciences. Unlike educational data mining, learning analytics generally does not emphasize reducing learning into components but instead seeks to understand entire systems and to support human decision making. (p. 13)

This ability to utilize learning analytics is based on teachers' ability to access more data than they would in a conventional classroom. This access to data requires additional support so

teachers can interpret the data and adjust their student support (U.S. Department of Education, Office of Educational Technology, 2016).

The type of data available to a teacher in a blended classroom is very different from the data available to a teacher in a more conventional classroom. The learning platforms can provide teachers more detailed and individualized data. For example, some learning platforms can provide teachers the number of minutes students spent on a particular question or problem. They can also provide the teacher suggestions for how to group students based on readiness levels for certain topics (Biancarosa & Griffiths, 2012; Maseleno et al., 2018). Teachers in a blended classroom can use learning analytics "to recommend what the next learning activity for a particular student should be, but also to predict how that student will perform with future learning content" (Bienkowski et al., 2012, p. 3). Learning analytics can also be used to provide the learner with actionable feedback to improve learning.

According to Patrick et al. (2013), "It is not about the tech, it is about the instructional model change. Blended learning is not about whether you are just giving a kid a computer" (p. 9). One of the biggest misconceptions about blended learning is in the way it uses technology. At Bronx Arena High School, Assistant Principal Samantha Sherwood argued,

> Simply adding online computer games or videos to a student's day or homework time does not count as blended learning. Neither does rolling a laptop cart into a school. Nor does it mean that students are isolated at their keyboards with no social interaction. (Patrick et al., 2013, p. 11)

As Sherwood pointed out, there is a misconception among some educators about blended learning. It is not about adding technology to instruction but how the technology is used to personalize a student's learning. For example, students in a blended middle school mathematics

class can work at their own pace, because the curriculum is online and can adjust to the needs of the student. Some online math programs use algorithms to personalize a student's path through the grade level content based on the particular student's ability to solve different mathematical problems. In one classroom, students could be working on completely different lessons or units even though they are in the same class. The online curriculum could have multiple videos or examples to help the student work through the content. If a student continues to have difficulties, the teacher in the classroom can work with that student in a small group or one-on-one to help the student further.

Also, leaders need to ensure their school's policies support student choice and voice in learning and demonstration of learning (U.S. Department of Education, Office of Educational Technology, 2016). For example, in student-centered schools, "Students frequently complete a series of self-directed, collaborative, multidisciplinary projects and inquiries that are assessed through a profile or portfolio" (U.S. Department of Education, Office of Educational Technology, 2016, p. 39). Teachers in these schools need support and professional development in creating and assessing these self-directed, collaborative, and multidisciplinary projects as they are not common practices in many conventional schools.

Effects of Blended Learning

Research has been slow to keep up with the growth of K−12 blended learning (Picciano, 2015). One reason for this slow growth is blended learning does not fit neatly into the traditional fields of research of distance learning or classroom instruction. Past research on instructional technology focused on distance learning—online learning. Early research on blended learning was primarily focused on its use in higher education. In the past decade, researchers have begun to switch their attention to blended learning in K−12 environments. Education researchers whose

focus has been face-to-face instruction have been slow in researching blended learning (Graham, 2013; Picciano et al., 2012).

Research on the results of blended learning is mixed. While some studies show promise of improving student achievement, others cast doubts on that promise. Molnar et al. (2017) highlighted these mixed results, which were based on annual school report cards. These report cards vary between states, but are usually based on student performance on standardized tests in English/language, arts, and math. Also, the report cards include data on student achievement gaps and graduation rates. According to Molnar et al., "Blended schools outperformed virtual schools across all categories: for-profit, independent, nonprofit, charter, and district. Nonprofit blended schools emerged as the top performer among all blended schools" (p. 8). However, in the section on blended schools, Molnar et al. cited a 2016 study which, "found that students attending full-time online schools did worse than students in traditional brick-and-mortar settings, and that students attending blended learning schools did even worse than students in full-time online settings" (p. 54). Molnar et al. continued to explain the disparity,

> In this year's "Full-Time Virtual and Blended Schools" section, Miron and his colleagues again reported that while blended schools performed better in comparison to their virtual school counterparts, the blended school student performance and on-time graduation rate was still less than their traditional brick-and mortar counter-parts. (p. 54)

One of the issues related to researching the effectiveness of blended learning is the lack of consensus regarding the definition and implementation of blended learning. Molnar et al. (2017) noted that even in schools that utilized blended learning school-wide, researchers were unable to discern the amount of learning that could be considered blended (i.e., the learning that occurs using computers). In addition, a majority of blended learning in the United States is most

likely occurring at the classroom level and not school-wide: “This means that researchers are limited in their ability to examine the effectiveness of blended learning” (Molnar et al., 2017, p. 52). The issue of a lack of consensus on the definition of blended learning complicates the research of scholars who have to depend on schools to self-identify as blended schools. Proponents of blended learning may identify blended schools for advocacy or ideological reasons (Molnar et al., 2017).

Regardless of the reasons, the vast majority of the research being done on blended learning is focused on the use of blended learning in institutions of higher education (Picciano, 2015). Ideologically-oriented think tanks such as the International Association for K–12 Online Learning, and the Clayton Christensen Institute have published the majority of reports about blended learning in the K−12 realm (Molnar et al., 2017). These “advocates of full-time virtual schools and blended schools remain several years ahead of policymakers and researchers” (Miron & Gulosino, 2016, p. 32). Studies have also been done by governmental agencies, primarily at the state level. In 2009, Means et al. published a landmark meta-analysis on blended learning, which found instruction that used blended learning had a more significant effect size than purely online or face-to-face instruction. However, a majority of the studies were of undergraduate and older students. The meta-analysis did not find as significant effect sizes for kindergarten–12 (K–12) students (Means et al., 2009). While there is conflicting evidence regarding achievement in schools and classrooms that utilize blended learning, few studies have compared the results of schools that used competency-based, blended learning school-wide or districts that used blended learning district-wide (Lee, 2015).

In 2015, the RAND Corporation (Pane et al., 2015) published a study of 62 schools that implemented various personalized learning methods including blended learning. The study

analyzed student achievement data from the Northwest Evaluation Association Measures of Academic Assessment. The Measures of Academic Assessment produces a growth score based on a continuous scale that can provide data on how much progress a student makes over a period of a semester, school year, or longer. The study found students' Northwest Evaluation Association Measures of Academic Assessment scores in math and reading grew substantially compared to national averages, and a significant portion of students who started at lower achievement levels experienced more significant growth than peers in schools who were not using personalized approaches. Also, the results were widespread with a majority of the schools having positive results (Pane et al., 2015). This same study was reviewed by Penuel and Johnson (2016) who came to very different conclusions. Their review disputed the findings in the RAND study. One of the most noticeable critiques discussed in the review was 90% of the schools were charter schools and most of the schools had a 1:1 ratio of students to computers. The review compared this to the 5.3:1 ratio in United States public schools in 2009, which was the last year statistics were available.

Credit Recovery

Many high schools across the country have used blended learning for their credit recovery programs (Watson et al., 2013). According to the National Survey on High School Strategies Designed to Help At-Risk Students Graduate, credit recovery is a strategy that enables high school students to re-take and earn credit for a course they previously failed (U.S. Department of Education, Office of Planning, Evaluation and Policy Development Policy and Program Studies Service, 2015). These programs were designed as a way for students to recover credits faster than having to repeat an entire course. Many of these programs used software to enable this process. Most software programs have a pretesting option where the student can test

out of specific units, tests, or standards. The software also allows students to work at their own speed, independent of other students in the class (Darling-Hammond, Zielezinski, et al., 2014). This ability to flex time in high school is different than what is expected from the traditional Carnegie seat time unit, which has been used to measure student contact time with the content (Chubb, 2012). Because of this seat time mandate, many high schools have been wary of implementing blended learning (Chubb, 2012). However, many students who have failed a class the first time and have then taken a blended learning credit recovery class meet the Carnegie seat time requirement.

Besides using blended learning for credit recovery, some incidental evidence indicates blended learning can decrease student course failures (Cakir et al., 2009; Darling-Hammond, Zielezinski, et al., 2014). In a paper on turn-around schools and online learning, Green (2012), a principal at Clintondale High School in Michigan, observed a drop in school-wide failure from 61.2% to just below 10% using a type of blended learning called the flipped model. In the flipped model of blended learning, students interact with online content including lectures and readings at home and work on problem sets and questions in the classroom with the one-on-one support of the teacher.

The Dark Side of Blended Learning

There are several potentially harmful aspects of blended learning. Some of these were noted before the creation of the World Wide Web. Some of these fears were based on the fear of machines replacing teachers who, “sometimes assume a defensive posture, fearing they will be replaced by machines” (Joiner et al., 1980, p. 498). While teachers have not been replaced by robots, there have been cases where schools have replaced certified teachers with paraprofessional educators to monitor computer labs (Jacob, 2011; Simburg & Roza, 2012).

With the incorporation of learning analytics, teachers and building and district administrators have real time access to student performance data (Bienkowski et al., 2012). This ability to use learning analytics allows teachers to target gaps in students' learning and create small groups and mini lessons to address those gaps. For example, some software programs help teachers to group students based on assessment data and then create a mini lesson specifically targeted to the needs of those students.

Another concern among some scholars is about blended learning and the privatization of public schools (Molnar et al., 2017; Santori et al., 2016; Selwyn, 2016). Wright and Peters (2017) raised concerns about the growth of the educational technology market and the exploitation of students. They traced their concern to Touraine's (1971) prediction of education and other aspects of social life becoming integrated into the world of production. Indeed, the growth of social media can be seen as fulfilling this prediction. By people interacting socially through corporate owned social media, these corporations are able to collect, analyze, and sell peoples' social information in a way that was not possible before the invention of social media. Wright and Peters found close ties between the language surrounding the information society and neoliberalism: "The neo-liberal view that the individual is solely responsible for every facet of their lives, feeds into a narrative about 'personalized learning,' understood as self-teaching" (p. 167).

In many instances, early examples of school-wide blended learning practices occurred as a result of a decrease of funding in public schools. These events also occurred at a time of increased accountability based on standardized tests and fears that students in the United States were not competitive compared to international peers. According to de Saxe et al. (2018), the move of education from critical thinking and activism towards an emphasis on competition and

upward mobility allows a neoliberal ideology to emerge into the ecology of education, "framing it as a competition where standardization and individualism drive not only teaching and learning but also the manner in which success and quality are socially constructed, so that private is seen as superior to public" (p. 4). Part of the overlap between neoliberalism and blended learning is based on how learning on the computer can become "measurable, quantified and standardized, as opposed to organic and genuine" (de Saxe et al., 2018, p. 9). Castañeda and Selwyn (2018) noted a tacit promotion of neoliberal values through digitization of teaching. In addition, they found it "striking that many forms of digital education seemed aligned closely with the promotion of market mechanisms and free-market values" (p. 6). This also fits with the idea that education is a product that is consumed by individuals for private interest instead of the more traditional view of education being a collective or public good.

Other scholars such as Selwyn (2016) saw the double-edged sword of digital technologies in the classroom. Some teachers use technology to create engaging learning opportunities where students can collaborate and think deeply about content. Some teachers might also use the same technology to create shortcuts in their students' learning. Selwyn urged scholars to focus on "matters of fairness, equality, and genuine empowerment through digital education" (p. 440), because some powerful interests and agendas have been hijacking the language and conversation concerning educational technology. Castañeda and Selwyn (2018) noted that these interests include the wealthy and powerful information technology industry that has been central to many of the recent digital related educational ideas and reforms. Ideas such as digital badges, flipped classroom, and personalized learning, "have been supported and sustained by the likes of Mozilla and Gates Foundations, Pearson, Cisco, Intel, Microsoft, Apple and a host of smaller corporate names" (p. 6). In terms of hijacking the language around instructional technology, Selwyn (2016)

illustrated a change in the use of terms from the 1980s when terms such as computer-based instruction and computer-assisted learning were used to the 2000s when terms such as technology-enhanced learning and connected learning were used. This change is a good example of a concept Biesta (2009) termed learnification. This concept of learnification is when educational technologies are described in language that is associated with learning. Wright and Peters (2017) offered another warning to educators about the lure of educational technology:

> The tendency to draw a straight line between digital technology use and what is described as transformational learning is strong, ignoring the complexities of classrooms, teaching and learning: lures of straightforward solutions to complex issues of teaching and learning are strong. (p. 170)

This warning is why Arney (2015) recommended educators be healthy skeptics when considering blended learning.

Another concern of blended learning that could have negative impacts for the K−12 educational field involves money. The two areas of blended learning that involve money are the educational technology industry and cost savings that can be made by a school using blended learning. The first area involves the educational technology industry which is worth billions of dollars (Santori et al., 2016; Wright & Peters, 2017). A long history of corporate influence and marketing is in schools (Boninger et al., 2017). However, with more technology in the classrooms, corporations and technology companies have more access to student data than in the past (Molnar & Boninger, 2015). To counter this access, states such as Colorado have enacted stricter student privacy laws to ensure technology companies do not abuse student data. However, there are still significant concerns that the educational technology industry is moving faster than legislation aimed at protecting student privacy (Boninger et al., 2017).

The second concern regarding money and blended learning involves cost savings in using computers to help teach. Some charter schools such as the Knowledge is Power Program in Los Angeles and Carpe Diem moved to blended models to offset budget cuts at their schools (Jacob, 2011; Staker & Horn, 2012). Some authors have advocated for schools and districts to move to blended learning primarily for its cost savings potential; they point to examples of Rocket Ship schools that use a paraprofessional in a computer lab instead of a certified teacher as a way to save money (Jacob, 2011; Simburg & Roza, 2012). Certain for-profit schools such as Connections Academy use blended learning to make a profit (Miron & Gulosino, 2016). Other schools have found ways to invest the cost savings of utilizing blended learning to have additional counselors and elective teachers or compensate their teachers above the market average (Barrett & Ableidinger, 2013; Battaglino et al., 2012; Simburg & Roza, 2012). These cost savings become an equity issue as many blended schools have a higher proportion of Hispanic students and low-income students. Also, those blended schools operated by education management organizations have proportionally higher low-income students than those run by public school districts (Miron et al., 2018).

Instructional Leadership

In order to study the phenomenon of leadership in schools that use blended learning in a competency-based system, it is important to situate the phenomenon in current research. There is a long history of research on educational leadership; from that research, several types and theories of leadership have arisen and coalesced. Leithwood et al. (1999) identified six models from their scrutiny of 121 articles in four international journals: instructional leadership, transformational leadership, moral leadership, participative leadership, managerial leadership, and contingency leadership.

Another theory not included in the Leithwood et al. (1999) review of the literature, possibly due to more current trends in educational leadership research, was distributed leadership. According to Robinson et al. (2008), out of seven types of leadership, three stood out regarding their popularity in the literature: instructional leadership, transformational leadership, and distributed leadership. Of these three, instructional leadership and transformational leadership "dominate empirical research on educational leadership" (p. 638).

For the purpose of this study, instructional leadership was the lens to situate the phenomenon of leadership in schools utilizing blended learning. There are two reasons for choosing this lens. The first reason is that the instruction used as a part of blended learning and competency-based learning is different from instruction in more conventional schools. Since the instruction is different, it lends itself to the possibility that instructional leadership in a blended and competency-based school would be different. The second reason is the predominance of instructional leadership in the research on school leadership (Robinson et al., 2008).

According to Elmore (2000), "instructional leadership is the equivalent of the holy grail in educational administration" (p. 7). DuFour (2002) said the fundamental role of a principal is that of the instructional leader and "30 years of research has described the principal in this way" (p. 12). Instructional leadership has its origins in research conducted in the late 1970s and early 1980s, where students succeeded in schools despite being in poor urban communities (Robinson et al., 2008). In a 2008 meta-analysis of 27 studies published between 1978 and 2006, Robinson et al. (2008) found that instructional leaders emphasized four sets of activities with implications for instruction: (a) developing the school mission and goals; (b) coordinating, monitoring, and evaluating curriculum, instruction, and assessment; (c) promoting a climate for learning; and (d)

creating a supportive work environment (Murphy, 1990). Those four leadership practices will be discussed below.

Developing the School Mission and Goals

Numerous studies have found a statistically significant relationship between school leaders who established school goals and expectations and positive student outcomes (Hallinger & Heck, 1996; Leithwood et al., 1999; Marzano et al., 2005; Robinson et al., 2008). In several studies, establishing purposes or goals for a school ranked as the most significant factor for a school leader's influence on student achievement (Leithwood et al., 1999; Robinson et al., 2008). In the Leithwood and Jantzi (1999) study on student engagement and school leadership, the leadership domain of purposes and goals was the only domain that "explained a significant (although quite small) proportion of variation in student engagement" (p. 699). The term student engagement in the study was based on Finn's (1989) model of student engagement. The model is based on two constructs. The first relates to a student's identification with the school. The second construct is based on the student's actual participation is school activities. These measures were collected using The Student Engagement and Family Culture Survey, which contained 52 items.

In a meta-analysis by Robinson et al. (2008), the dimension of establishing goals and expectations had a 0.42 effect size on student outcomes. These student outcomes included academic and non-academic outcomes. Since their study was a meta-analysis of 27 studies, the outcomes in the studies varied from reading and writing scores to attendance and student engagement. In their review of 40 empirical studies, Hallinger and Heck (1996) found that principals impacted student achievement through the creation of school goals. However, the effects of the relationship were small (Hallinger & Heck, 1996; Leithwood et al., 1999). These results were also shared by Marzano et al. (2005) who found that creating and focusing on clear

goals did have an impact on student achievement, but it did not have the highest effect size of other responsibilities identified in their meta-analysis.

Coordinating, Monitoring, and Evaluating Curriculum Instruction, and Assessment

Robinson et al. (2008) found planning, coordinating, and evaluating teaching had a statistically significant 0.42 mean effect size on student achievement, which was equal to the mean effect size of establishing goals and expectations. This finding was similar to four core strategies discussed by Klar and Brewer (2013). According to Klar and Brewer, four core strategies were the basis for their study, which was conducted under the International Successful School Principalship. In their framework, they labeled planning, coordinating, and evaluating teaching and the curriculum as managing the instructional program. In their study, Klar and Brewer found school leaders managed their instructional program by focusing on student achievement data and creating a "data-driven school" (p. 781). Also, principals at the schools closely monitored the instructional program by monitoring data and then working with the school's leadership team to provide instructional support that included providing teachers with training on research-based strategies (Klar & Brewer, 2013).

Promoting a Climate for Learning

In their study of leadership practices in high-needs schools, Klar and Brewer (2013) found that schools used the following practices: building collaborative cultures, modifying organizational structures to nurture collaboration, building productive relations with families and communities, and connecting the school to the broader community. Some of these practices included inviting families to events after school to celebrate learning and reading with students'

families (Klar & Brewer, 2013). These same elements were also noted by Blase and Blase (2000) in their study on teachers' perceptions of effective principal practices.

Creating a Supportive Work Environment

Klar and Brewer (2013) uncovered two significant themes of principal practices teachers believed improved their classroom instruction: promoting reflection and promoting professional growth. Under the theme of promoting professional growth, their study found "effective principals encouraged teachers to redesign instructional programs and supported a multitude of diverse approaches to teaching and learning as well as flexibility concerning teaching elements" (Blase & Blase, 2000, p. 136). These behaviors improved teacher motivation and efficiency and led teachers to be more reflective and innovative in their lesson design (Blase & Blase, 2000).

In addition to encouraging teachers to redesign their instructional programs, both the Blase and Blase (2000) and Klar and Brewer (2013) studies included supporting collaborative efforts among educators. Blase and Blase stated, "Collaborative networks among educators were essential for successful teaching and learning" (p. 135). These findings were consistent with a more recent study by Sebastian and Allensworth (2012): "The indirect association of principal leadership on instruction is greater only through certain aspects of professional community-reflective dialogue, teacher socialization, and teacher collaboration" (p. 646). These studies on the collaborative structures of teachers demonstrate the importance of instructional leaders to support and maintain these structures.

Leadership in Schools That Use Online and Blended Learning

Research on leadership skills required for schools using online and blended learning is evolving. According to the U.S. Department of Education, Office of Educational Technology

(2016), there is an acute need for leadership in the integration of technology at all levels in the education system. School leaders need to ensure their teachers have the right equipment and support to personalize the instruction in their classroom: “Although leadership in technology implementation is needed across all levels of the education system, the need in PK−12 [prekindergarten–12] public schools is acute” (p. 39). A school leader’s role of supporting teachers continues in schools where the role of the classroom teacher has changed to become one where they “serve as educational designers, coaches, and facilitators, guiding students through their personalized learning experiences” (U.S. Department of Education, Office of Educational Technology, 2016, p. 39). For online schools the relationship between students and teachers is dramatically different. In addition, the relationship between the teachers and the school’s principal can also be very different. However, there are very few studies on leadership in blended schools. According to Quilici and Joki (2011), research on leadership of online K−12 schools began to emerge in 2008.

Since 2008, the research has centered on comparisons between the leadership skills of leaders in face-to-face schools and those of online schools (Palloff & Pratt, 2008; Saleh & Lamkin, 2008). Quilici and Joki (2011) noted, “most of the studies in online education have taken place at the postsecondary level, and they do not take the unicameral needs of secondary schools into consideration” (p. 147). One of the differences between leadership in online schools and face-to-face schools identified in the research regards the evaluation of courses. For the National Policy Board for Educational Administration (2015), “Effective educational leaders develop and support intellectually rigorous and coherent systems of curriculum, instruction, and assessment to promote each student’s academic success and well-being” (p. 12). These systems look different in a school that uses blended learning than in a conventional school.

Some researchers argue that there should be similar, if not the same, evaluation used for both types of courses (Graham et al., 2000; Tobin, 2004). Other more recent research suggests that online courses must be evaluated differently than face-to-face courses. The studies concluded that online course evaluations should be more formative and frequent than those of face-to-face course evaluations (Fang, 2007; Saleh & Lamkin, 2008; Thomas, 2008).

Another aspect of leadership that appears to be different between face-to-face and online schools regards the amount of time required by principals. Quilici and Joki (2011) argued that principals of online schools may be more required to spend more time leading their schools than principals of face-to-face schools. They base this on the Gallien and Oomen-Early (2008) finding that online teachers feel they spend more time teaching online courses than face-to-face courses. However, Quilici and Joki (2011) also argued that leadership of online schools is not as difficult since there is more transparency in online schools because much of the interaction between a student and teacher in an online school is recorded digitally, and there are fewer student discipline incidents that need to be addressed by the principal. For example, it is easy for an online school principal to observe the feedback a teacher gives to students who participate in an online discussion, or to see the grades or progress of students in that class.

Tucker's (2014) study revealed no significant differences in the leadership qualities, characteristics, and necessary skillsets of traditional brick and mortar school leaders and K–12 online school leaders. However, Tucker did uncover a new paradigm called leadership by design, which is a way of innovation through virtual K−12 leadership. Tucker based this paradigm on the software and computer design process that has created many of the software and computers that are used in virtual schools. In addition, Tucker discussed a lack of research concerning leadership practice in virtual K−12 education: "While there is currently little available research

on effective instructional practice in the virtual K−12 environment, there is even less research on virtual K−12 leadership practice" (p. 9). Currently, there is no clear consensus in the research between the different skills and knowledge needed to lead an online school as compared to a traditional face-to-face school.

While there are a few studies of K−12 online school leadership, there are even fewer on leadership in blended K−12 schools. I have found only two studies that are focused on leadership in schools that use blended learning. The first is Agostini's (2013) dissertation on the role of leadership in starting and operating blended learning charter schools. The second study is Pratt's (2019) study on blended learning in elementary schools.

Agostini's (2013) study was based on three research questions. The first two questions related to starting and designing a blended learning charter school. While these two questions are interesting, they do not directly relate to my particular study. The last research question, " When hiring their school leaders, what particular skills and knowledge do the founders of blended learning charter schools seek and how do these desired qualifications differ from those of traditional public school leaders" (p. 101) did relate to my particular study. One of the particular skills Agostini noted about leaders of schools using blended learning is being able to analyze and assess individual student data and then leveraging technology to improve a student's outcomes. In addition, the blended school leader needed to lead their teachers to support students in ways that were fundamentally different than the way they were trained. School leaders needed to guide their teachers to, "rethink standard approaches to teaching and instruction and often providing teachers with the flexibility and autonomy to experiment with new strategies" (p. 111). Blended school leaders also reported the need to create a school culture that embraces change and the use of technology. This placed the school leaders in a role of, "change agents continuously searching

for improvements and then analyzing data to evaluate progress" (p. 101). For Agostini, the approach differed from some of the traditional roles of school leaders who had a focus on trying to improve a teacher's instruction.

The most important skill perceived by the participants in the study was the ability to collect, analyze, and act on individual student data in real-time or on a daily and weekly basis. Agostini (2013) compared the more traditional schools where student data are analyzed on a monthly or quarterly basis. While some skills needed to lead a traditional school are the same as leading a school using blended learning, there are other more specialized skills necessary to running a school using blended learning. Agostini used the metaphor of general practitioner doctors and surgeons. He compared traditional school leaders to general practitioners, while leaders of schools that use blended learning are surgeons.

In the Pratt (2019) study, the researcher wanted to understand teacher perceptions and the power of leadership as changes occurred in an elementary school that began to integrate blended learning. The study found that for schools making the transition it was recommended that school leaders build a culture of learning, commit to a plan of meaningful professional development, model expectations, develop an awareness of the influence of teacher decisions, respectfully honor teachers' time, and lead through challenge.

Given the mixed evidence of the success of these schools and the rapid growth of blended learning, it is imperative for these schools to be studied to serve as guides for schools as they adopt blended learning and for future blended schools. According to Evans (2012), "Innovative leadership that can spur personalized learning is imperative" (p. 5). Leaders of these student-centered schools need to create a school culture of innovation and trust where teachers are encouraged to take risks and experiment. Teachers and school leaders collaboratively create a

strategic plan where technology is utilized for learning for both teachers and students (Evans, 2012).

Technology is also used in communication and creating feedback loops between stakeholders (U.S. Department of Education, Office of Educational Technology, 2016). For example, software programs called learning management systems can provide communication between teachers, students, administrators, and parents. Teachers can assign assignments, quizzes, and tests for students. Teachers can grade student work and provide student feedback through the learning management system. Administrators can track student scores on assessments and track student progress in the course. Also, administrators can view teacher feedback to students and monitor communication between students in the learning management system. Parents can view their students' work and teacher feedback to their child. In many learning management systems parents can also communicate with their child's teacher.

Conclusion

In order to study the phenomenon of leadership in schools that utilize blended learning, it is important to have an understanding of the history, theory, and research of the phenomenon. A review of the research helps to situate the phenomenon under investigation. It is clear the research is mixed on schools using blended learning. Some evidence shows blended learning has positive effects such as decreasing the dropout rate. However, research also shows blended learning to be ineffective and possibly harmful. While the purpose of this study is not whether blended learning and competency-based learning is effective, this study focused on the phenomenon of leadership in these types of schools and in understanding how the leaders in these schools understand their lived experience.

It is also important to have a lens to help understand the phenomenon of leadership. The construct of instructional leadership was used for this study to help understand the leadership phenomenon. Also, illuminating the phenomenon by using the instructional leadership lens helped to highlight any possible differences between the leadership phenomenon in more conventional schools and those that use blended learning and competency-based learning. These highlights could help future research on schools that use blended learning and competency-based learning (Joiner et al., 1980).

CHAPTER III

METHODOLOGY

In this chapter, I explore the methodology utilized to study the lived experience of leaders in schools using blended learning. Throughout, I show how the research question is supported by the methodology. In qualitative research, a fundamental component of both the purpose statement and the research questions is the central phenomenon (Creswell, 2012). Based on the lack of research on the leadership of personalized learning schools, the exponential growth of these types of schools, as well as the recent dramatic increase in blended learning and online learning due to the corona virus disease 2019 (COVID-19) pandemic, the central research question for this selected study is as follows:

Q1 What is the lived experience of leaders in high performing schools that use blended learning?

The findings of this study may help inform preparation programs to the necessary skills and knowledge that leaders in schools who use blended learning will require.

Qualitative Research

The focus of this study is the lived experience of leaders in schools who utilize blended learning. To uncover that experience, it is necessary to conduct a qualitative study. Qualitative researchers are "interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam, 2009, p. 5). A qualitative study is a suitable type of inquiry to investigate the lived experience of the participants. Patton (1985) argued that qualitative researchers seek to understand the uniqueness

of situations and their contexts and the interactions that occur within the situation. Unlike an experimental study where there is a hypothesis that attempts to predict what will happen in the future, a qualitative study seeks to illuminate the nature of the situation.

Since there is limited research on leadership of schools using blended learning, I chose to utilize a qualitative approach to the subject. Creswell and Clark (2017) advocated for a qualitative research approach as being effective when a subject or concept is new or there have been few studies conducted. Also, Patton (2002) explained that one possible reason for conducting a qualitative study before a quantitative inquiry is that not enough is known about the phenomenon for "standardized instruments to have been developed" (p. 33). Another reason to conduct a qualitative inquiry is because the variables that could be used as a part of a quantitative study are unknown (Creswell, 2012). In addition, Creswell (2012) asserted that qualitative research sets an "agenda for change or reform" (p.17); therefore, the findings of this study may inform future leadership and organization of these types of schools.

Epistemology

In his book, *The Foundations of Social Research*, Crotty (1998) explained that researchers must have a thorough understanding of the epistemology guiding their study. Epistemology provides the philosophical foundation for a study, the researcher's view of knowledge, and its legitimacy (Maynard, 1994). The epistemology of this study is constructionism. According to Crotty, constructionism is a view where the ultimate truth and meaning is not waiting to be discovered. However, meaning is constructed through "our engagement with the realities in our world" (p. 8). Crotty also explained that there can be no meaning without a mind and that people can construct very different meanings regarding the same phenomenon.

Constructionism is the belief that the individual constructs meaning—meanings that "are constructed by human beings as they engage with the world they are interpreting" (Crotty, 1998, p. 43). The world and objects in the world may be filled with possible meaning, but the manifestation of meaning only occurs when a consciousness engages with the world (Crotty, 1998). As Crotty (1998) explained, "No object can be adequately described in isolation from the conscious being experiencing it, nor can any experience be adequately described in isolation from its object" (p. 45). Constructionism was the most suitable epistemology to guide this study, since the primary research question is focused on the participants' relationship or intentionality with the phenomenon. According to Vagle (2016), the word intentionality is used by phenomenologists, "to mean the inseparable connectedness between subjects (that is, human beings) and objects (that is, all other things, animate and inanimate, and ideas) in the world" (p. 27). Vagle also found the concept of intentionality to be similar to the Buddhist and Taoist concept of interconnectedness and unity.

Theoretical Perspective

Phenomenology was the applicable theoretical perspective for this research study as I sought to understand the lived experience of school leaders who use blended learning at their schools. Phenomenology focuses on lived experience of participants. It looks at people's everyday experiences of phenomena and how these experiences are structured, focusing the analysis on the perspective of the individual experiencing the phenomena (Creswell, 2012; Vagle, 2016). Phenomenology attends to how people experience phenomena existentially (Vagle, 2016). The aim is to describe and interpret how the situated body makes sense of a phenomenon (Wolff, 1999). According to Merriam (2002), "Phenomenological study focuses on the essence or structure of an experience" (p. 7). It is a form of inquiry that attempts "to deal

with inner experiences unprobed in everyday life" (Merriam, 2002, p. 7). The phenomenologist is interested in how the phenomena manifest and come to be through our being in the world (Vagle, 2016). In addition, Cilesiz (2011) stated that for investigating experiences with technology, phenomenological studies become a "unifying framework" (p. 494) between the methodological, theoretical, and philosophical aspects of research.

Post-Intentional Phenomenological Study

Post-intentional phenomenology is a phenomenological approach created by Vagle and Hofsess (2014). They wanted to take phenomenology and "stretch its limits, re-imagine it, and put it in dialogue with other theories, philosophies, and methodologies" (Vagle & Hofsess, 2014, p. 14). In order to stretch and re-imagine phenomenology, they combined elements from post-structural philosophies. One of those elements of post-structural philosophies is a view of knowledge, which is "partial, situated, endlessly deferred, and circulating through relations" (Vagle & Hofsess, 2014, p. 111). Because of this view of knowledge, the post-intentional researcher must embrace intentionalities that are de-centered, multiple, partial, and endlessly deferred. This approach is different from more traditional phenomenological investigations such as descriptive or interpretive studies, where the researcher would seek to uncover the essence of a phenomenon. In the post-intentional method, the researcher seeks to craft a text that captures the phenomenon in its tentative manifestations.

For this particular study, post-intentional phenomenology was a congruous methodology to investigate the phenomenon of leadership. By its nature, leadership is experienced as a social, cultural, and individual phenomenon. Historically, phenomenology has focused on the individual's view of the phenomenon outside any cultural meaning. Caelli (2000) noted that "both Husserl (1931) and Heidegger (1927/1962) were severely critical of the effect that culture

and tradition might have on a true examination of phenomena" (p. 368). However, according to Vagle (2016), phenomena are not experienced by individuals in isolation but by people connected with others through culture; "this type of phenomenological research means that we embrace phenomena as social and not belonging to the individual" (p. 41). Post-structural phenomenologies, such as post-intentional phenomenology, view "the various ways phenomena are socially produced in context" (Valentine et al., 2018, p. 466). This methodology allowed me to investigate leadership in its social, cultural, and individual contexts.

By utilizing a post-intentional phenomenological approach instead of a descriptive or interpretive phenomenological study, I was able to incorporate elements of the school's culture into the study. In descriptive and interpretive phenomenological studies, the study is focused on the essence of the phenomenon. For these types of phenomenological studies, the culture that surrounds a phenomenon would be reduced or bracketed out in order to focus on the essence of the phenomenon. In these types of phenomenological studies, the phenomenon is experienced by the individual (Vagle, 2016).

In a post-intentional phenomenological study, the culture that surrounds a phenomenon is not reduced. The approach embraces the idea that phenomena can be experienced socially and not only belonging to a single individual (Ihde, 2003; Vagle, 2016). Leadership is experienced not simply by the leader but by the other stakeholders in a school. This study incorporated these shared, social aspects of the phenomenon as a part of the research. Part of this social approach to phenomenology is based on the work of Dahlberg et al. (2008) reflective lifeworld approach.

Methods

The methods section of this chapter describes the procedures and techniques utilized to collect and analyze data (Merriam, 2009). For this study, the methods included a purposeful

sample criteria and data gathering from semi-structured interviews, and document analysis. Some techniques are particular to a post-intentional study such as a post-reflexion plan and a bridling journal. These two particular techniques will be discussed at the end of the chapter.

Setting

Identifying the phenomenon in its multiple, partial, and varied contexts is the first step recommended by Vagle (2016) in post-intentional research methodology. For this particular study, the phenomenon under study was leadership and how it manifests itself in the lifeworld of schools utilizing blended learning. The settings for this phenomenon was schools located across the United States. These schools utilized blended learning. Since these schools follow a different pedagogical model than a more traditional school, one could assume the phenomenon of leading these schools would also be different.

Participation

A purposeful criterion approach was used to select the participants for this study. This approach provided a narrow range of samples for the study (Creswell, 2013). For this study, I interviewed the principals of two elementary schools, two middle schools, three high schools, and five schools consisting of multiple levels (elementary, middle, and high school grades). The sample was schools that had utilized blended learning for at least one academic year. Also, the principal had to have been the principal for at least one year prior to the year of the interview. This helped insure that the principal had a well-developed understanding of the school, its community, and the phenomenon under investigation. Additionally, these schools were accredited at the highest level by their state. For example, these schools had an accreditation rating of “performance” in Colorado. The reason for this need for accreditation rating was because the research is mixed on the effectiveness of these types of schools (Molnar et al., 2017).

As mentioned in the literature review, some schools utilizing blended learning are ineffective at increasing student achievement and some are rated at a high academic level. It is critical to study leadership in schools that are educating students at a high level, so that these attributes can be shared.

One aspect that needed to be considered for this study was when a school attained its achievement status. While some schools reached the highest accreditation level after utilizing blended learning, there are probably other schools that were achieving at high levels of learning before utilizing blended learning. There needs to be additional research on the effectiveness of using blended learning to improve school performance.

Each principal must have worked at the school for at least one year. The reason for this requirement was a principal who had led in this particular environment would be able to reflect on lessons learned and have a deeper relationship with the phenomenon. After identifying the six schools that met the qualification of being a school utilizing blended learning for at least a year with a "performance" rating and a principal that had been a principal at the school for over a year (see Appendix A), I contacted the leaders to schedule interviews. After Institutional Review Board approval was obtained (see Appendix B), the school principal was contacted by phone, and I explained the purpose of the study. Also, I requested their voluntary participation. After I had contacted the principals and they agreed to participate in the study, an informed consent document (see Appendix C) was emailed to them as well as a calendar invitation and an email reminding them of the date for the interviews. All participants signed an informed consent form before being interviewed.

Data Collection

In order to illuminate the phenomenon in its multiple and varied contexts, I collected data in a variety of different modalities. Vagle (2016) recommended the researcher "remain open to all the possible ways to gather data" (p. 78). To study and understand the lived experiences, I collected data through semi-structured interviews, and document analysis.

Interviews

A post-intentional phenomenological study is focused on "studying one's participants' intentional relationship with the phenomenon under investigation" (Vagle, 2016, p. 129). In order to study the participants' relationship to the phenomenon, I decided to utilize semi-strutted interviews of the participants. Semi-structured interviews allowed me flexibility and openness during the interview process by being able to probe participant questions and ask follow-up questions. According to Vagle (2016), this flexibility and openness is critical to studying the constantly moving phenomenon. Participants completed interviews in approximately 60 to 90 minutes using Google Meet, and audio recordings were made of the interviews. The primary set of questions for the interviews was included in the Institutional Review Board application and can be found in Appendix D.

Five follow-up interviews were scheduled based on whether I needed to ask clarifying questions. The selection of participants from six different schools provided multiple lenses to study the phenomenon in various contexts. Participants selected the interview location that was most comfortable for them. Most of these locations were at the principal's home as many of the principals were not at their schools during the COVID-19 pandemic, but there was one interview that was conducted when the principal was in his office at school. The interviews were recorded by two separate devices. These devices included a smartphone and a handheld digital audio

recording device. All of the recordings were password protected. After completing the interviews, I uploaded the audio recordings into the application Otter. The interviews were transcribed by Otter. After the application transcribed the interviews, I reviewed the transcripts while listening to an audio recording of the interviews and made corrections to the transcripts. In addition, the transcripts were password protected. There was a total of 347 pages of double-spaced transcripts that resulted from the interviews.

Document Analysis

In addition to conducting interviews, document analysis was performed. Documents included in the document analysis included material on the school's website, results of assessment data on the State Department of Education website, parent and community communication documents from the school, instructional material used by teachers, school promotional material, and weekly all-staff memos created by the leaders in the school to communicate with the staff. After my day spent shadowing the principal, I asked them to share with me any documents that they felt would help me understand their leadership. These documents were used to triangulate the data from the interviews.

Data Analysis

According to Merriam (1998), the phenomenological analysis is an analytical construct used to decipher meaning from interviews and field notes using specific techniques. There are many strategies to analyze qualitative data; however, for this particular study I decided to follow the method developed by Vagle (2016) in his book on conducting post-intentional phenomenological studies. The primary reason for following Vagle's method was I would be able to better illuminate the phenomenon under investigation. Vagle recommended a six-step process to analyze data.

Step 1: Holistic reading of the entire text. This first step allowed me to get attuned to the whole of the data collection event. The data were organized onto one column allowing a second column for the researcher to take notes during this first reading.

Step 2: First line-by-line reading. During this first line-by-line reading, I took careful notes and mark excerpts that appeared to contain initial meaning. I highlighted different chunks of text and made notes and questions in a second column regarding the highlighted chunks of texts.

Step 3: Follow-up questions. After completing the initial line-by-line reading of one particular interview or observation, I reflected on the notes and questions on the second column to create follow-up questions for each participant. These questions were used to clarify meanings that might be important to interpret or describe the phenomenon.

Step 4: Second line-by-line reading. In this second line-by-line reading, I described the meanings based on the notes written in the second column, markings, and the participant's answers to the follow-up questions. These elements in the second column were used to create a new document for each participant. This new document contained the potential pieces that were used to contribute to the final text.

Step 5: Third line-by-line reading. This third line-by-line reading was conducted to further articulate my thoughts about each piece. This process continued until each participant's interview, observation, and description had been articulated with my analytical thoughts.

Step 6: Subsequent readings. Subsequent readings necessitated reading across particular participant's data with the purpose of uncovering what Vagle (2016) called tentative manifestations. These tentative manifestations or themes were given titles. This procedure ensured the researcher had reached a level of saturation from the data to illuminate the

phenomenon under study. It also allowed the researcher to craft a text that captured the tentative manifestations of the phenomenon under study in its partial, multiple, and varied contexts (Vagle, 2016).

The whole-part-whole analysis approach is vital because it puts various parts or moments in dialogue with other parts. According to Sundström and Dahlberg (2012), the process of whole-part analysis is an analytical method that describes the movement between a whole, its parts, and then back to the whole. Dahlberg et al. (2008) stated, "it is imperative that each part is understood in terms of the whole, but also that the whole is understood in in terms of its parts" (p. 236). This movement between the parts and the whole can also be "between different abstract levels of meaning" (p. 573). During the whole-part-whole analysis, I attempted to uncover all occurrences of meaning, nuances, and other clusters of meaning. By coupling the various parts back and forth with the whole, patterns of meaning emerged to produce what Sundström and Dahlberg called a meaning structure. This whole-part-whole analysis enabled me to become open to and enter into a relationship with the text by following the movement between the parts and the wholes.

During the data analysis process, analytical memos were recorded in my bridling journal. These memos documented my thought process during the data analysis period of this study.

Trustworthiness

Merriam and Tisdell (2009) suggested the credibility of a study relies on the researcher's commitment to following clear ethics. Accordingly, for this study I adhered to strategies recommended by Merriam (2009) including triangulation, member checking, and clarification of researcher bias. In addition, I also created a post-reflexion plan recommended by Vagle (2016) when conducting a post-intentional phenomenological study. For this study, I triangulated

sources by comparing data from interviews, documents, interview notes, and my bridling journal. These documents were used to triangulate themes that emerged from the analysis of the participant interviews.

Triangulation

In qualitative research, triangulation is one of the methods used to improve the trustworthiness of a study. The term is borrowed from the navigational practice of using three known points to locate oneself on a map. For this particular study, I use data source triangulation. According to Stake (1995), the researcher uses data source triangulation to see if the phenomenon remains the same in different locations, times, or as people interact in various ways. The researcher interviewed twelve different school leaders about the phenomenon. In addition, the researcher collected data from two different sources. Those sources included interviews, and documents collected after the interviews.

Member Checking

Member checking is another method to increase the trustworthiness of a study. Member checking or respondent validation is a process where a participant is asked to review material collected from them during the research process (Stake, 1995). For this study, five participants were interviewed in a follow-up interview, and offered an opportunity to clarify or respond to anything they said during the initial interview.

Researcher Stance

In post-phenomenological research, Vagle (2016) recommended the researcher create a post-reflexion statement to help bridle the researcher's own intentionality and relationship with the phenomenon including his own thoughts, emotions, and connections to the phenomenon. The post in post-reflexion statement refers to the post-structural aspects of post-intentional

phenomenology. The post-reflexion statement is comparable to a subjectivity statement that is used in certain qualitative studies. For Vagle, there is an important difference between subjectivity statements and post-reflexion statements. Those differences include the importance of revisiting and writing new post-reflexion statements throughout the research process. By revisiting and examining my assumptions, I had a better chance of taking hold of my assumptions instead of them taking hold of me and in turn the phenomenon under investigation (Vagle, 2016).

I have had a connection with aspects of the phenomenon since I was young. My father bought an Apple II E in the early 1980s, and I would spend hours as a child playing the games *Oregon Trail* and *Where in the World is Carmen Santiago.* While both games were educational in nature, they were not a part of my daily educational experience in school. Most of my experience with computers in classrooms was relegated to word processing and keyboarding classes. I consider myself a digital native, which means that I have grown up using computers on a daily basis.

This relationship with schools became deeper as I started to work as an educator in public schools. My first position as a public school district employee was as a substitute teacher. Next, I started working as an elementary classroom teacher. Eventually, I transitioned from a classroom teacher to becoming an instructional coach and an assistant administrator in an elementary school. This led me to work as a district administrator, which led me to becoming the assistant principal and principal of a small combined middle and high school that used blended learning. Currently, I am an elementary school principal in a school district that is in its fourth year of implementing a district-wide competency-based system. My former leadership roles in a school that utilized blended learning are relevant because the setting was similar to schools under

investigation in this study. As a researcher who already had a relationship with the phenomenon under study, I needed to contemplate my biases. This contemplation was conducted as a part of the bridling process through my researcher's journal and the data analysis process.

Addressing Researcher Bias

In qualitative research, the researcher is the primary instrument for gathering and analyzing data (Creswell & Clark, 2017; Merriam, 1998; Patton, 2002). It was critical that I was reflective and forthcoming of any biases that I brought with me to the research. I chose to conduct a qualitative study because it fit my research question, personal attributes, and philosophical world view.

In the Husserlian approach to phenomenology, the researcher is asked to "bracket his or her past understandings and knowledge to be able to analyze the data from a fresh perspective" (Vagle, 2016, p. 54). In post-intentional phenomenological research, the essence of bracketing is maintained by utilizing an approach called bridling. For Dahlberg et al. (2008), bridling can cover all the meaning of bracketing including, "the restraining of one's pre-understanding in the form of personal beliefs, theories, and other assumptions that otherwise would mislead the understanding of meaning and thus limit the researcher" (p. 129).

While similarities exist between bracketing and bridling, there are also key differences. Vagle (2016) contended that "bridling is a significant departure, methodologically and philosophically, from bracketing" (p. 66). One of those differences is that bridling goes beyond bracketing, because it is an active process throughout the research process where the researcher actively waits "for the phenomenon to show up and display itself with the relationship with the researcher as a hunter of meanings" (Vagle, 2016, p. 130). This hunting of meaning occurs throughout the research process, and I documented it in the bridling journal plan.

For Dahlberg et al. (2008), bridling has a more positive tone than bracketing, because, "it aims to direct the energy into the open and respectful attitude that allows the phenomenon to present itself" (p. 130). Bridling provides the post-intentional researcher more freedom and openness in studying the phenomenon as it manifests itself and also enables the researcher to create a more radical reflexivity (Vagle, 2016). Bridling allows the researcher to move beyond previous experiences and beliefs and become open toward new insights and understandings (Reimers, 2017).

The term bridling was created by Dahlberg (2006) from her experience living on a horse ranch and searching for a better term than reduction to use in her research.

> The term 'reduction' was not a hit, too loaded with philosophical implications, and for a long time I worked hard to find a better term for research. Marked by my experience on a horse ranch I then found the term bridling" (Dalberg, 2006, p. 16).

According to Dahlberg, bridling enables us to, slacken the firm:

> Bridling means a reflective stance that helps us to slacken the firm intentional threads that tie us to the world (Merleau-Ponty, 1995). We do not want to cut them off and we cannot even cut them off as long as we live, but we must as Merleau-Ponty encourages us to, loose them up in order to give us that elbow room that we need to see what is happening when we understand phenomena and their meanings. (p. 16)

Bridling allows the researcher to maintain the essence of bracketing without limiting the researchers need to remain open to the phenomenon. Bridling is dynamic and allows the researcher to continually engage to the understandings of the whole phenomenon through the duration of the study (Vagle, 2016). In order for me to employ bridling during this study, I relied on creating a post-reflexion plan.

The final document source to be analyzed was my bridling journal which is a part of the post-reflexion plan. I wrote in this journal three to five times per week during the data collection, data analysis, and writing of results period. This journal helped me to reflect on the research as it was occurring. This journal was analyzed in the same manner as the interviews and field notes. This helped me to understand the data under its own terms (Gadamer, 1995) by being able to reflect on the reflections that I noted during the data collection phase.

According to Vagle (2016), creating a post-reflexion plan is the most important component of the method and the most difficult to elucidate. For Vagle et al. (2017), the term post-reflexion is based on the desire for a "more reflexive phenomenology of practice in which pedagogues interrogate the foundations of their beliefs, assumptions, practices, and ideologies" (p. 297). There were several components to the post-reflexion plan in this study.

The first component is writing an initial post-reflexion statement. The statement is the beginning of a process of self-reflection and helps the researcher see what frames his or her perspectives, perceptions, and beliefs (Vagle, 2016). For this study the post-reflexion statement was in the researcher stance section. Another component of the post-reflexion plan was my bridling journal. Since I had a relationship with the phenomenon, it was important to incorporate that relationship into the study. The bridling journal was used to record thoughts and document the journey of the research. The third aspect of the post-reflexive plan was to read and write through the data in a systematic and responsive manner. This part of the research process is discussed more thoroughly in the data analysis section. According to Vagle (2016), it is during this part of the research process that the text becomes post-intentional. During this phase I focused my attention on the following commitments created by Vagle:

1. Moments when they/we instinctively connect with what they/we observe and moments in which they/we instinctively disconnect.
2. Our assumptions of normality.
3. Our bottom lines, that is, those beliefs, perceptions, perspectives, opinions that we refuse to shed; and
4. Moments in which they/we are shocked by what they/we observe. (p. 132)

The moments discussed in number four (above) were based on Vagle's (2016) inclusion of Guattari's lines of flight into his post-intentional methodology. These moments occur when the researcher asks, "themselves, What doesn't seem to fit? If I follow this 'mis-fit' notion, idea, insight perspective, what might I learn about the phenomenon that is not yet think-able?" (p. 135). Overall, these commitments allow the researcher to "uncover underlying, shifting, changing knowledges that are at work in all intentional relations, and can begin to embrace post-structural arguments such as knowing being partial and fleeting" (Vagle, 2016, p. 132).

After the data analysis phase, the final component of the post-reflexive plan is to create a text that, "captures tentative manifestations of the phenomenon in its multiple, partial, and varied contexts (Vagle, 2016, p. 136). For Vagle (2016), it was important that the phenomenon under study become meaningful and animated to the reader through the careful crafting of the text. While crafting the final text I remained mindful of the commitments listed previously. Additionally, I strove to find a balance in the text between my interpretations of the data and the voices of the participants and their views.

Conclusion

The purpose of this qualitative study was to better understand the lived experience of leaders in schools using blended learning. This study is important because the use of blended

learning is a recent phenomenon, and the growth of K−12 schools that use blended learning is increasing (Miron & Gulosino, 2016; Summit Learning, 2018). However, there is a lack of research on K−12 blended learning. This study contributed to the growing body of knowledge around blended learning. This contribution is seen in three different areas.

The first area that could be impacted by this study would be educational researchers. This study contributes to the growing number of studies that explore the leadership needed in these types of schools. In addition, this study could help quantitative researchers identify variables needed to study leadership in these particular schools.

The second area possibly impacted by this study would be K–12 administrators at the district and school level who could use the results of this study to better support and better educate the leaders of these types of schools. This study could help other educational leaders who have not had experience working in or leading these types of schools. This study could also help current leaders of schools using blended learning to see if their experiences are similar to those in other schools using blended learning.

The third area this study could have an impact on would be institutions of higher education that educate future educational leaders. As these types of schools increase, it is important for these institutions to be able to inform future leaders about particular phenomena unique to these particular schools. Also, since many, if not most, educational leadership licensure programs require a mentorship component, this study will provide insights into these types of schools for educational leadership mentors. Many of these mentors have probably not worked or led schools of this type.

CHAPTER IV

FINDINGS

The purpose of this study was to understand the lived experience of principals of successful schools that use blended learning. Twelve principals across the United States participated in this study. The research question guiding this study was:

Q1 What is the lived experience of leaders in high-performing schools that use blended learning?

The schools the participants led were diverse, from rural elementary schools to large urban high schools. The schools' commonalities were their use of blended learning and their success according to their school's performance on standardized testing. One of the design elements of the study was to find a broad range of the phenomenon. Four principals in the study were principals of charter schools or schools of innovation. Most of the participants were leaders of public schools managed by a school district. Some were hybrid schools where students only attended campus two days a week to traditional elementary schools with self-contained classrooms.

This chapter is divided into two major sections. The first is school profiles and the second is tentative manifestations or themes. The first section on school profiles is organized by school and provides a history of the principal and their school's context. The second section of this chapter is organized into four categories. Those four categories include the following: (a) collaboration, (b) cultivating culture and climate, (c) development and evaluation of instruction, and (d) desk work.

School and Principal Profiles

This section describes the contexts of the schools and their leaders. In post-intentional phenomenology, it is critical to understand the contexts of where and how the phenomenon occurs. Because of this study's post-intentional design, it was essential to select participants from a wide variety of contexts and environments. By exploring the phenomenon in different locations and contexts, the phenomenon can be understood more thoroughly. The school leaders were selected based on the following three criteria: their school's use of blended learning, the schools also had to be rated at the highest level of accreditation by their state, and the school leader had to have been the leader of the school for at least one year. Creek Elementary School was included in the study even though it missed the highest level of accreditation by two percentage points. The school was included in the study because of the difficulty of finding participants. The principals' pseudonym used for this study and information regarding the contexts of the school where they work are shown in Table 1. In addition to the principals having pseudonyms for this study, the school names themselves are pseudonyms. The table also classifies the school types. Most of the principals in this study led schools that were a part of a school district. Three of the schools were charter schools and three of the schools were hybrid schools where students only attended campus a few days a week. Garden Grove Middle School was a district school that was accredited as a school of innovation by the state which exempt it from certain district policies. Silicon High School was overseen by 14 representatives from different school districts in the area.

Table 1

School Demographics

School	Principal pseudonym	Years as blended principal	Gender	Race/ ethnicity	Grades served	Setting	Total students	School type	Additional administration team members
Oak Elementary	Rick	7	Male	White	K - 5	Rural	451	District	N/A
Creek Elementary	Christina	4	Female	Latinx	K - 3	Urban	743	District	Assistant principal
Garden Grove Middle School	Stacy	1	Female	White	6 - 8	Urban	673	District innovation	Two assistant principals, dean of students
River Middle School	Michael	5	Male	White	4 - 8	Urban	404	District	Two assistant principals, dean of students
Hamilton High School	Anthony	2	Male	White	9 - 12	Urban	1,991	District	Deputy principal, five assistant principals
Sea View High School	Dave	5	Male	White	9 - 12	Suburban	670	District	Two assistant principals, counseling director
Eagle Academy	John	9	Male	White	3 - 12	Urban	410	District hybrid	Assistant principal, dean of academics

Table 1, continued

School	Principal pseudonym	Years as blended principal	Gender	Race/ ethnicity	Grades served	Setting	Total students	School type	Additional administration team members
Canyon Center for Learning	Amy	10	Female	White	5 - 12	Suburban	222	Charter hybrid	Director of teaching and learning, dean of students
Courage Academy	Daniel	3	Male	White	5 - 8	Urban	500	Charter	Two assistant principals, director of operations, SEL coach
Silicon High School	Amanda	1	Female	Multiracial	9 - 12	Urban	328	Multi district sponsored	Associate principal
Renaissance Academy	Kevin	4	Male	White	6 - 12	Urban	290	Charter	Two assistant principals
Light Speed Academy	Gia	4	Female	White	6 - 12	Urban	150	District hybrid	Assistant principal

Note. SEL = social and emotional learning.

Oak Elementary, Kindergarten Through Grade 5 (Rick)

Rick had been the principal of Oak Elementary for 13 years and was a graduate of the school. The school was in a rural area of the Mid-Atlantic eastern region of the United States. Oak Elementary was the only elementary school in the district and, because of the district's small size, Rick also managed the federal grants for his school district. He was a special education teacher for five years in a different school district before becoming the Oak Elementary principal.

A few years after blended learning started in the district's high school, Oak Elementary started implementing blended learning. The school used several educational software programs from the company Edmentum. These programs included Reading Eggs, Study Island, and Reading Express. Also, the school used ST Math from the Mind Institute. These programs were used as part of a three-station rotation model in classrooms. Also, the school implemented a one-to-one student to computer initiative to support blended learning. After two years, the school cut back the number of programs to just Reading Rockets in the primary grades and ST Math with all grade levels.

Creek Elementary, Kindergarten Through Grade 3 (Christina)

Christina had been the principal of Creek Elementary for four years. Before she became the principal, she was an assistant principal for four years. She was an elementary teacher for five years, working in three different buildings in different grade levels, and spent one year as a culturally and linguistically diverse teacher. Creek Elementary school was in the mountain west region of the United States. The school was located in an urban area surrounded by farms. She felt it was important for a principal to stay current on the research and learning trends. She

regularly read blogs on personalized learning and discussed the research and trends with other teachers in her building. The school was part of a larger district with approximately 22,000 students. The school had been a part of a district-led blended learning initiative that started in 2013.

The teachers used three-station rotation models and individual rotation models in their classrooms. Students were grouped by need and rotated between different stations according to a set schedule in the three-station rotation model. In the individual rotation model, students moved between online content and face-to-face instruction based on an individualized schedule.

Garden Grove Middle School,
Grades 6 Through 8 (Stacy)

The principal of Garden Grove Middle school, Stacy, had worked in the same school for 13 years. She started at the school as a special education teacher and then was the assistant principal for eight years before becoming the principal. She had been the principal for one year. Garden Grove was located in the same urban city as Creek Elementary, in the mountain west region of the United States. Before the school adopted blended learning, Garden Grove Middle School was accredited as a turnaround school with the lowest state accreditation level. Schools that were rated as turnaround had five years to rise to a higher accountability rating or face sanctions that included being taken over by the state department of education. The school was near the end of these five years when the school district decided to allow the school to apply for a school of innovation designation through their state department of education. The innovation status allowed the school to apply for 15 waivers from state laws and district practices and policies. The following waivers helped the school to follow Summit Learning's blended curriculum and allowed teachers and administrators to attend the professional development provided by Summit Learning:

- schedule and calendar, actual hours of teacher-pupil instruction and contact,
- school calendar,
- determine the educational program and prescribe textbooks,
- adopt content standards and plan for implementation of content standards,
- identify areas in which the principal/s require training or development.

The school created a design team that decided to partner with an educational organization called Summit Base Camp. Summit Base Camp was an extension of the Summit Schools charter school network. The Base Camp organization arose with the financial and technological contributions of Mark Zuckerberg, the chief executive officer and founder of Facebook. The school utilized an individual-rotation blended learning model, which occurred during self-directed learning time. During this time, students learned from a playlist of online lessons and materials curated by their teacher. The playlists included videos, written materials, and primary sources. Students always had access to these playlists. Students chose which resources to review during these times and then took an assessment to demonstrate their learning. Also, during this time, the teachers acted as facilitators to monitor and support students instead of delivering the content.

River Middle School, Grades 4 Through 8 (Michael)

Michael had been the principal of River Middle School for 11 years. Before he became the principal, he was an assistant principal for two years and before that he was a high school science teacher for eight years. River Middle School was part of a K–8 school. The middle school campus was comprised grades 4 through 8, and the elementary campus educated grades K–3 on a separate campus. Michael was the executive principal of both campuses but directly

oversaw the middle school campus. The school was located in the same mountain west city as Garden Grove Middle School, and Creek Elementary School.

The school used a three-station rotation and an individual-rotation blended model. The school was one of the first schools in the district to implement blended learning in 2013. The school received a donation of $100,000, from an anonymous donor, to support their blended learning initiative. This donation provided devices, software, and professional development to begin the implementation of blended learning. The school partnered with a blended and personalized learning consulting company called Education Elements. The company helped the teachers design their blended classroom models.

Hamilton High School, Grades 9 Through 12 (Anthony)

Anthony had been the principal at Hamilton High School for three years. Hamilton High School was a large urban high school with a diverse student population. The school was located in a large metropolitan area in the northeast region of the United States. Before becoming the principal, he was a teacher, coach, and assistant principal at the school. He was also the principal of a middle school and district level administration position in a neighboring school district. He then came back to Hamilton High School to be the principal. He felt that blended learning was the wave of the future and the direction that education was moving toward all classrooms becoming blended, and Anthony was excited about the school's future.

The school's story with blended learning began in 2012 with a pilot program using iPads and the flipped-classroom model. The flipped-classroom model was where students were presented with the content through a recorded lecture or slide show which was to be viewed outside of the class. Students were expected to watch the video or presentation instead of completing homework. In the flipped model, new content was delivered to students outside of

class, and traditional homework activities were completed in the classroom with the support of the teacher. During the following year, the school expanded the iPad and flipped model initiative to the rest of the school.

Sea View High School, Grades 9 Through 12 (Dave)

Dave had been at the Sea View High School for 15 years with 11 years as principal. The school was located in a suburban area in the northeastern United States. He began his career as a high school mathematics teacher before becoming an administrator. Before becoming the principal of Sea View High School, he was the assistant principal and curriculum director. The school was a one-to-one school that used Google classroom for blended learning. The blended learning models were different in each classroom. Some teachers did station rotations, some used a flipped-classroom model, and some did not use blended learning.

What made the school unique was its focused-learning period. It was a 40-minute period to provide students with interventions, extensions, and enrichments. The time was incorporated into the daily schedule, so all teachers were available to teach during that time. The period was part of every student's schedule and was a mandatory period for all students. The focused learning period was operated on a six-day cycle. The students attended their advisors' class two days out of the six-day cycle. Students were grouped with their advisor based on the student's grade level or career interest. On the first day of the cycle, every student met with their advisor to plan out the student's schedule for the remaining five days. Each student's schedule was based on their goals and needs. The school purchased a customized software platform that teachers used to schedule the students during the focused learning period.

According to a published report about the school, the school used a standards-referenced grading system for each course. In 2014–2015, the school transitioned from a 100-point grading

scale to a rubric scale; there was also a school-wide rubric to measure student growth on the school's six 21st century expectations. Students were expected to demonstrate proficiency in all the competencies for that class to receive credit. In addition, 90% of each course grade was based on summative assessments. Students who did not provide enough evidence of learning were placed on a personalized recovery plan where they could complete additional coursework or complete online competency recovery models.

Eagle Academy, Grades 3 Through 12 (John)

The principal of the school, John, had been at the school since the school opened. The school was located in a large city in the mountain west region of the United States. Before becoming the online school principal, he had been an assistant principal and an athletic director. When he was chosen to lead the school, it was his first time being a principal. He led the school for several years before he was selected to help start and lead the district's new early college school. He led the early college for two years before being asked to lead the Eagle Academy again. In addition to leading Eagle Academy, he had some oversight over the district's early college, a separate school. The school was similar to a magnet school but was classified by the state as an online school. Most of the students attended the campus two to three days per week. The school also offered an entirely virtual program for qualified students. The school operated an elementary, middle, and high school program.

The middle school program at Eagle Academy had middle school students on campus on Tuesdays and Thursdays when the high school students worked remotely. However, on Wednesday and Friday morning, middle school students who required academic interventions were required to attend campus. On the days that middle school students were not required to attend campus; they were expected to work on their online curriculum. The school's elementary

program was only for students in third through fifth grades. It capped the number of students enrolled in each grade level to 15 students and followed a similar schedule of two to three days on campus. High school students attended the campus on Mondays and Wednesdays. There were approximately 246 high school and 106 middle school students enrolled in the school.

The school used an online curriculum called Edgenuity, a competency-based online program where students took quizzes after every lesson and scored a certain percentage to move on to the next lesson. When students were on campus, the school focused on using project-based learning to teach the state's standards. Teachers in the school had all been trained in project-based learning using strategies and units created by the Buck Institute. By using project-based learning and working in groups, students were able to use skills related to teamwork. In addition to project-based learning, students were also taught social and emotional learning lessons on campus.

Canyon Center for Learning, Grades 5 Through 12 (Amy)

Canyon Center for Learning was started in 2001 and was founded by the school's current principal, Amy, and a friend of hers. The school was located in a small city in southwestern region of the United States. While Amy was working on her master's degree from an online university, she realized that online learning to teach K–12 students could help personalize learning for students. She also realized that curriculum she was using as an elementary school teacher was designed for the average student. She thought this created a gap for the students who were not in the average grade level range. She felt that online learning could be a way to personalize learning for students who were not able to access grade level material. Amy decided to start her charter school where students learned both online and face-to-face from a teacher.

The school had several supports to help students be successful. One of those supports was called the student success lab. According to the school's student handbook, "The SSL [student success lab] is a learning lab designed to give students a structured study environment with a high-speed internet connection to support student success in their online coursework" (Amy, personal communication, July 12, 2020). Students could volunteer to attend the lab, or they could be required to attend if they were on a student success contract because they had fallen behind in their online classes.

The school was considered a hybrid-blended model, where students who attended Canyon Center for Learning were only expected to be on campus two days a week, which were on opposite days that high school students were on campus. Students also participated in what the school calls 21st century learning classes, including leadership, global studies, technology and media, career pathways, and service-learning.

Courage Academy, Grades 6 Through 8 (Daniel)

Daniel had been the principal of Courage Academy since its founding. He started as a fifth-grade teacher at the school for two years and then transitioned to become an assistant principal focused on academics. He was an assistant principal for one year before the previous principal moved into a different role in the small charter school network that the school was a part of, and Daniel became the principal. He has been the principal of the school for three years.

The school had been ranked in the top 5% for growth in its state by its department of education. The school was in the southeastern United States in a large metro area. The building adjacent to Courage Academy was another middle school that was part of the same network. The school's focus was its social and emotional learning curriculum. The school devoted time,

personnel, and training to its social and emotional learning curriculum. The school also used a learning management system, one thing it had in common with all blended learning schools.

In addition to a strong focus on social and emotional learning, the school also started with an instructional model that included a digital personalized learning program. While the school kept aspects of this blended learning model, the amount of planning required to analyze and curate the individual playlists, in addition to the school's social and emotional learning focus, became too time consuming for the teachers to manage. These play lists were activities and assignments that students accessed through the school's digital learning management system. The time required for teachers to manage these playlists affected the staff's ability to focus on other aspects of the school, including the social and emotional learning curriculum. The school also focused on data-driven, tier one instruction and a culture of continuous improvement through instructional coaching. Tier one instruction was the core instruction for all students in the school.

These multiple foci became overwhelming which had an impact on the sustainability of the school's model. According to the Daniel, something had to give. The area that became less of a focus for the school was the personalized-blended component of the school's model. The school still runs specific courses as a blended model; however, the school decreased the amount of blended learning from the amount being used when the school first started. The school still used the assessment components of the learning management system at the end of every lesson to assess student learning in all classes.

Renaissance Academy, Grades 9 Through 12 (Kevin)

Before Kevin began teaching at Renaissance Academy, he had taught in a couple of different private and independent charter schools. He was an English and social studies teacher

for nine years and transitioned from a classroom teacher to becoming its principal. He had been the principal of the school for four years. The school was located in the Pacific region of the United States.

The core of the educational model at the school was project-based learning. The project-based learning that students participated in was designed by teachers using the state content standards, common core standards, and identified school-wide learning outcomes. The projects were aligned to the Buck Institute's design principles and the national network that provides the school's learning management system. Students' projects were real-world, hands-on activities where students solved problems and learned content and skills through a supportive inquiry process that included relevant guiding questions or problems. Students then applied their learning to a publicly demonstrated product.

The school used an individual-rotation blended learning model. The school utilized a learning management system developed by a national network of schools that share the platform. The platform helped to monitor and organize student projects, including feedback and assessment. The platform also helped facilitate instruction and was a tool for students to research and collaborate with other students. The school maintained a one-to-one, computer-to-student ratio. In addition to having access to the networks learning management system, the school had access to professional development resources.

Silicon High School, Grades 9 Through 12 (Amanda)

Amanda was in her 23rd year in education before becoming the Silicon High School principal. She was an English teacher for five years, assistant principal for seven years, a central office administrator and middle school principal for six years, and a middle school director for two years. She had only been the principal of the Silicon High School for one year.

Silicon High School was in a city in the mid-Atlantic region of the United States. The school was unique in the way it was created and accredited. The students who attended the school came from 14 different school districts in the region where the school was located. Each district was allocated a certain number of students that could be enrolled from each district. The school's accreditation was through the state's department of education. A board of directors oversaw the school and hired the school's principal. The board of directors was composed of 14 members. Each member of the board was a district leader from one of the 14 districts that paid for a certain number of students to attend that school. The school used a lottery system to select the students from each district.

An algorithm was also used in the lottery process to ensure that the school represented the area's demographics. Students were transported from each district to the school free of charge. A board was made up of one district administrator from each of the 14 districts that sent students to the school oversaw the school. Students also needed to participate in an interview process to attend school. The students were expected to have an interest or passion in computer science.

The school used a flex model of blended learning. The students worked on assignments that were delivered via the schools digital learning management system. The students attended classes in breakout rooms; however, students would also learn in a large communal space in the middle of the school building. While students were in the small break out rooms, the students would work on collaborative projects, and receive support of the teacher, but students would also work on independent assignments when working in the large communal space. Students rotated back and forth between the sizeable communal space and the breakout rooms in a similar fashion to a flipped model, but instead of students working on independent assignments at home they

would work on the independent assignments in the communal space. The communal space was monitored by paraprofessional educators. The school focused on computer science, and computer science classes were a required course of study at the school.

Light Speed Academy, Grades 6 Through 12 (Gia)

Gia, the Light Speed Academy principal, had been in the education field for 23 years, primarily working in middle schools. She taught seventh and eighth grade English for seven years before becoming an assistant principal and principal of one middle school for 13 years. She applied to become the Light Speed Academy principal because, “It was time for me to do something new . . . and take a new journey.” She has been the principal of Light Speed Academy for three years.

Light Speed Academy was part of a large school district located in a metropolitan area in the southwestern United States. The school contained one large room and several smaller classrooms located around the large central room. Like Eagle Academy and the Canyon Center for Learning, the school used an enriched virtual blended-learning model. Students worked primarily on the school’s curriculum Edgenuity even when they were on campus. However, students would also participate in science labs and other hands-on activities when on campus. Middle school students attended school three days a week and high school students attended school twice a week. The students also worked on Edgenuity when they were working from home. Even though the school only had approximately 160 students, there was an assistant principal and a principal.

Tentative Manifestations

In post-intentional phenomenology, the data analysis process creates tentative manifestations. These tentative manifestations are similar to the concept of themes used in other

methods of qualitative research (Vagle, 2016). However, in post-intentional phenomenology, the term tentative manifestation is used to recognize the ever-changing nature of phenomena (Vagle, 2016). This section explores the four tentative manifestations that arose from analyzing the transcripts and other documents used in this study. Through this study, I aimed to answer the research question:

Q1 What is the lived experience of principals of successful schools that use blended learning?

These four manifestations were based on the lived experience of the leaders of these 12 blended schools. Those manifestations included the following: (a) collaboration, (b) cultivating culture and climate, (c) developing and evaluating instruction, and (d) desk work. While several of the schools whose leaders participated in this study used different models of blended learning and schedules than traditional schools, many of the principals' day-to-day experiences were similar to principals who led more traditional schools. The principals who participated in this study still spent time in meetings; they still had duties and many of the same responsibilities as principals of more traditional schools. Table 2 illustrates the schools and the tentative manifestations that arose from analyzing the interviews and documents related to the schools.

Table 2

Tentative Manifestations

School	Collaboration	Cultivation of culture and climate	Development and evaluation of instruction	Desk work
Oak Elementary	X	X		X
Creek Elementary	X	X	X	X
Garden Grove Middle School	X	X	X	X
River Middle School	X	X	X	X
Hamilton High School	X	X		X
Sea View High School	X	X	X	
Eagle Academy		X	X	
Canyon Center for Learning		X		X
Courage Academy	X	X	X	
Silicon High School	X	X	X	
Renaissance Academy	X	X	X	X
Light Speed Academy	X	X	X	

Collaboration

The principals in this study spent a great deal of their daily experience collaborating with other individuals. While teachers often interact with students and their learning in a public manner, often in the presence of other students, much of the principals' work in this study happened behind the scenes, in meetings with other administrators, teachers, and staff members. Meetings occupied a great deal of time for many of the administrators in this study. There appeared to be a relationship between the school's size and the amount of time the principal spent in meetings. At larger schools in the study, such as Hamilton High, the leader spent approximately half of his day in meetings, while in smaller schools, such as Light Speed Academy, the principal spent only several hours a week in meetings. This section is divided between administrative meetings and meetings with groups of teachers. While the administrators in this study did have meetings with parents and community members, these meetings occurred infrequently compared to the meetings with administrators and teachers.

Administrative Collaboration

Schools are complex organizations where hundreds to thousands of students spend hours daily interacting with dozens to multiple staff members. Leading, organizing, and educating large numbers of students and staff members often requires more than one administrator. Eleven of the 12 principals in this study were part of an administration team at their school which included at least one other administrator. The other members of the administrator teams included lead counselors, directors of operations, or directors of teaching and learning. The larger the school, the more members the school had on its administration team. During the interviews for this study, one of the areas that the principals discussed regarding collaboration was between themselves and other members of their administration team. This time spent collaborating with

fellow administrators, both formally and informally, was an important aspect of their lived experience. The next section explores examples of those administrative meetings.

The largest school in this study (Hamilton High School) had seven members on their administration team, and those members included the principal, the deputy principal, and five assistant principals. The deputy principal is a position between the principal and assistant principal. Anthony, the principal of Hamilton High, mentioned several times during his interview the importance of his administration team. The administration team met several times a day. He was proud of putting together an excellent administrative team. Anthony described the way his administration team solved problems:

> We like to consider it like a triage unit for an emergency room. I know it sounds terrible, . . . [but each] situation is . . . unique and different [and] . . . we have to figure out how to deal with. That's the triage part where . . . a lot of times we're not really ready for anything that comes up, as far as . . . we have never seen that situation. But they pop up, so you have to sort of take it slowly and figure out how to heal the situation as best as you can.

The team met regularly to discuss trends they noticed in classrooms. Also, they spent time during these meetings to plan, and "think about bigger steps or big picture items that . . . to move forward [with]," concerning leading the school.

Anthony was not the only principal in the study to use the triage metaphor when describing their lived experience. Michael at River Middle School said that the administrative team went into a "planned triage mode" to deal with student incidents that occurred during lunch time. Michael gave the example that the assistant principal was usually stationed in the cafeteria, and the dean of students would handle discipline in the front office and call families. Michael's

role would be to support the assistant principal in the cafeteria or the dean of students in the office. Michael said he would help "triangulate all that." They also had regularly scheduled meetings with his office team and administrators. Since the school had two campuses, administrators from both campuses would meet "for almost two hours each Monday with the four- to eight-campus team of admin[istrators], plus the office manager." There was a standing agenda for these meetings. The administrators used a "Google Doc where we put things, and we talk[ed] through them." The team would review the school calendar and plan a month or two out into the future.

Another middle school principal, Kevin from Renaissance Academy, also oversaw two campuses. Kevin was the high school campus administrator, and a vice-principal led the junior high school campus. Kevin said, "I do a lot of checking with my junior high vice-principal. . . . She handles most of the day-to-day, but we are usually dialoging once or twice a day about issues that come up." In a follow-up interview, Kevin said he would usually visit the middle school campus once a week and meet with the vice-principal. Kevin also regularly participated in district leadership meetings with the principals of other schools in the district, even though his school was a charter school.

Kevin also met with his administration counseling team daily, but the meetings were not formal. His administration team members were his campus safety officer, office manager, and the high school vice-principal, who was also a half-time social studies teacher. He would often check in with the counselors of his school because his school did not "necessarily pull the . . . regular, average student . . . we get a lot of students that are very high achieving..... but we also get a lot of students who have maybe not found success in traditional learning." Some of these

students needed additional counseling support, so he met with his counseling team on a daily basis.

While Renaissance Academy was chartered with the local school district, Silicon Academy had a unique governance structure. The school was affiliated with 14 local school districts. It was a state-sponsored multi-district school that was not governed by one particular district. When the principal, Amanda, first started, she had few opportunities to interact with colleagues from other schools. Amanda decided to reach out to the leaders of a few of the other schools in the area that were sponsored by the state and "bullied them into being in a PLC [professional learning community] with me." According to Amanda, she told the other two leaders, "we're going to be friends." The three leaders have been meeting regularly since then. Also, she asked if she could attend the local administrator network meetings of her former district which was one of the districts that supported the school. This way she was able to stay engaged with other administrators.

Some of the blended schools in this study were relatively small compared to more conventional schools, so the administrator meetings were less formal and more frequent. At Light Speed Academy, which only had 150 students, Gia did not have formal administration meetings. However, the school did have an assistant principal, who Gia spoke with "every morning before the day starts." Gia said they talked throughout the day and that their offices were right next to each other, so they were always in contact with each other. She said, "I can call her on a Saturday morning at seven o'clock . . . we have a great relationship and work really well together." Since the school was small and there were only eight teachers, the two administrators shared many duties and interacted and supported the students and teachers throughout the day.

Collaboration with Teachers

Meetings between teachers and their principal is common in any school, and it was also a part of the lived experience of all the principals in this study. Collaboration with teachers was a sub-manifestation of the manifestation of collaboration that arose from the data. The principals spent a large portion of their day meeting with teachers, both formally and informally. These meetings included staff meetings where teachers and administrators discussed upcoming issues or events. High schools and middle schools would traditionally have department-level meetings separated by subject areas, and elementary schools would often have grade-level meetings. While most of the principals in this study discussed these meetings, the leaders used different labels for the meetings, and the meetings were organized differently. Some of the principals in this section used the term professional learning communities (PLCs) to describe these types of meetings, and others did not use the term. Some schools also used the term design session to describe certain types of meetings.

Along with the principal collaborating with teachers, another sub-manifestation that arose from three of the principals was the need for calibration among the teachers. This was because those three schools used a competency-based framework. In these schools, it was important for teachers to understand what proficiency looked like regarding student work. If one teacher's understanding of proficiency was not calibrated with their fellow teachers, gaps could occur in the students' demonstration of their learning.

In some schools they called some of their meetings design sessions. In those meetings they would adjust or recreate the blended learning model for their classroom. Two schools that used the term design session were Creek Elementary and River Middle School. At these schools, teachers and administrators went through a design session every year. During these design

sessions, the teachers would revisit the purposes of the digital content, and teachers adjusted and modified their blended approaches. If there had been updates to the students' online programs, the teachers incorporated those changes into their instructional model. These design sessions were led by the schools' administrators.

At River Middle School, Michael used what he called the "tight, loose construct." Michael said that this construct allowed him and the teachers in his building to agree on what blended-learning elements they would be tight on and what aspects they would be loose on. These blended learning elements referred to the district's elements of blended learning, which was modified from the critical elements of blended learning created by Education Elements, a blended learning implementation and professional development company. Those key elements were student partnership, tight feedback loops, peer-to-peer collaboration, and targeted small group instruction. Michael said that teachers then could use that construct "to be architects and designers of the student experience." These four elements were what Michael was tight on, other parts of instruction, such as having objectives posted on the board, he would be loose on. Michael stated, "I think a lot of leaders . . . [would say] I need the objective posted on the board . . .[here] we would never say we need the objective posted on the board." For Michael, this was an example of the tight, loose construct. The tight loose construct helped Michael to stay focused on those elements he needed to be tight on and less focused on those areas that could be loose on in terms of evaluating and developing instruction.

At Creek Elementary, it was important for Christina that teachers incorporated all of the components of school district's blended learning model in a meaningful way for students. Those components of the district's blended learning model included the following: tight feedback loops, peer-to-peer collaboration, targeted small group instruction, and student ownership of their

learning. Christina had started to question some of the instructional designs the teachers used in their classrooms. Christina felt that some of the teachers were using the online content to help with classroom management instead of using the technology to improve student learning. This concern was also shared by Michael, the principal at River Middle School. Both principals believed that teachers of blended classrooms had to have better classroom management skills than teachers in a more traditional classroom. Christina said teachers, "need more classroom management because you have to be able . . . to pull groups . . . to set up the foundation to have . . . self-directed learners . . . and reinforce that." She also felt that teachers needed to be very intentional about why they were using digital content. She feared that teachers put students on digital content longer than necessary because they felt pressured to get through the grade-level material. She would ask her teachers to reflect and think deeply about what they were doing in terms of their instructional design. For example, if students were going slower than expected, through the grade-level standards, she asked the teachers to think about what was causing the students to learn the material at such a slow pace. Also, she would ask about what prerequisite skills the students might lack, which might be causing them to go slower than expected.

An additional concern that Christina shared was the complacency of some teachers. She felt it was important that teachers were continually revising their blended learning models and keeping students' needs at the forefront. Christina felt that the school was still using common blended learning models and was not being as innovative as it could be. She believed that the school could still go to a higher level of innovation regarding blended learning.

The manifestation of collaboration between the principal and teachers was something that appeared differently depending on the context of the school and the school's mission. At Sea View High School, the school had a positive culture that was centered around PLCs. These PLCs

had served as a structure that had developed the school's vision of personalized learning. The principal, Dave, had a firm belief that everyone had something they could contribute to making themselves and the school better. He intentionally looked for teachers who could collaborate well with other teachers. For him, teachers needed to work as part of a team. For Dave, the PLC was central to a school implementing a competency-based system, and blended learning. Before Sea View High School began its journey to becoming competency-based, the school visited several other school districts that had begun the journey towards competency-based learning. After visiting these different sites, the school's design team realized that implementing a competency-based system without going through the school's PLCs would lead to failure.

The school did adjust the way the PLCs were composed. Instead of subject based departments, the school organized the PLCs based on grade level; therefore, there was a better chance that the teachers in each community would have the same students on their rosters. In addition to restructuring the composition of the PLCs, the school's leadership team adjusted the master schedule so that the members of each PLC had common planning time throughout the week. This change allowed for common planning time in addition to their regularly scheduled PLC meetings. In addition to having regularly scheduled PLC meetings, the principal Dave was proud of his school's work with PLCs. Dave stated the following, "we're [a] very big PLC [professional learning community] school here . . . we put a lot of the decision-making power for curriculum, instruction and assessment into PLC teams." Dave described the PLC teams as using a collaborative model. The school also felt that the PLCs would be essential for the implementation of the competency-based learning at the school.

For Dave, the school's transformation was an evolution. It did not change overnight. After the design team created the foundation for the change to a competency-based system,

things slowly came together. By letting the PLCs take the lead in implementing the competency-based system, teachers and staff had a sense of ownership in the system and its results. Dave said, “our teachers make most of the decisions they need to make with their team, and we just try to be a member of the team sitting alongside them.” This allowed the teachers to “open up with us” and develop positive working relationships with Dave and the other school administrators.

Another school involved in this study, that had also adopted the structure of PLCs was Light Speed Academy. The teachers and Gia had PLC meetings every Wednesday after the students were dismissed early. The meeting would start “as a short staff meeting to discuss logistical matters, and then the meeting would change its format and purpose to [become a] PLC [professional learning community].” During the PLC, the teachers and Gia would analyze the data from their learning management system called Edgenuity. The staff would look for trends in the data and discuss students who were falling behind. The teachers also served as advisors for groups of students, so if a student was struggling in a particular area, their advisor teacher would reach out to the student and the content area teacher. In addition, Edgenuity had an internal intervention system, so the content area teacher could push out lessons to remediate a student lacking skill in math or English language arts.

At Renaissance Academy, the school held regular staff collaboration meetings every Wednesday morning. Kevin stated that these meetings “can be kind of stressful.” However, he felt the meetings were also a time when there was great camaraderie among the staff. He felt that camaraderie came about through the staff “getting something productive done, or where we’re addressing a problem or addressing a need together.” Kevin said that he was able to view the “strengths that different staff members bring to the table to . . . to better our program.” For

Kevin, these meetings were some of the best parts of his week; even though "they stressed me out," he enjoyed the collaboration time with his colleagues.

Cultivating Culture and Climate

Cultivating the culture and climate was another daily aspect of the principals' lived experience in this study. A healthy culture of an organization is important to the leader of any organization. I have used the term cultivation because the culture of an organization is like a garden. A garden is composed of many different plants and they all depend on certain elements outside of the garden to survive such as water and sunlight. Similarly, an organization is composed of many individuals and those individuals also depend on outside elements for its survival. The principals in this study were similar to gardeners in the way they cultivated their school's culture. The cultivation of the school's culture was different at every building, and each building had different ways of assessing and addressing the school's culture and climate. This section on cultivating climate and culture is divided into three sections: monitoring culture and climate, ceremonies, and relationships.

Monitoring Culture and Climate

The following two principals kept a close watch on their school's culture and climate. Michael and John wanted their schools to be close and caring communities. Michael from River Middle School was proud of the culture he had developed at his school. He felt that the building's culture was critical for its success. He wanted the culture of the building, "we want it to feel like family . . . where students know they're loved and cared for." Michael shared that the culture of the building he worked to create was also one of growth and achievement. He said that growth was the same for staff and students. Michael stated that, "we're going to grow one and another . . . including the adults, we're going to grow." According to Michael, this culture was

cultivated in several different ways, including walking around his building, and talking to staff and students, and through the traditions of the school such as having a wall-of-fame of former students who have graduated from high school, and attending the high school graduations of former students.

One of the ways that Michael monitored the building's culture occurred in the morning with what the school called uniform checks. While this practice was called a uniform check, it was actually a method that Michael used to monitor the building's climate and culture. During these checks, Michael walked around the building and engaged staff and students in informal conversations. Each of the three administrators would walk through all the classrooms in a different part of the school. The school required students to wear uniforms, so the walkthroughs in the morning were called uniform checks. The uniform checks were originally used to monitor compliance with wearing the school uniform; however, the uniform check evolved to have a dual purpose. John stated, "The purpose is to see if everybody's okay, to see if anybody needs anything, and . . . just lay eyes on the whole system." These brief walkthroughs ensured that every student and staff member had seen at least one school administrator every morning.

Another principal who discussed monitoring his building's culture and the climate was John from Eagle Academy. According to John, besides evaluating instruction, his other role was to evaluate the building's culture and climate. John said that he would ask himself, "are we really universally . . . all on board, and do we maintain that alignment to our mission and vision." The school's culture and climate was important for John. The reason why the culture was important for John was that most of the students who attended his school because they were disengaged at their previous school. John felt that his school provided an opportunity for students who "do not feel safe or cared for" in traditional schools. He said that he visited classrooms daily, because he

was “really making sure [the]culture, the climate . . . [and] the customer service piece that we say we provide, we actually provide.” John felt the culture and climate “really contribute[d] to our kids feeling at home, feeling safe, feeling valued.” Since the school was a school of choice, students who attended Eagle academy must choose to enroll in the school. The school’s culture was critical for John in order to recruit and keep students enrolled in the school.

Ceremonies

The ceremonies that school leaders ran were another way in which the principals in this study cultivated their school’s culture. While not all the principals in the study participated in ceremonies like pep rallies, assemblies, or community meetings there were several that did. These ceremonies provided an opportunity for the principal to reinforce the school’s mission, vision, and values. During these ceremonies the principal would recognize students and staff members for their success and achievement.

At Garden Grove Middle School, the school did not have large whole school assemblies. However, the school did hold regular grade level community meetings. Each school administrator led a different grade level community meeting on Monday. Stacy said that, “the grade level comes together, we shout-out to kids, we shout out teachers, kids shout out to kids, kids shout out to teachers, it goes batch and forth . . . that’s another place where we’re trying to build community and culture for the kids.” These community meetings were an important aspect in how Stacy cultivated the school’s culture.

Stacy was not the only leader of a building that used morning meetings to cultivate its school culture. Amy, from the Canyon Learning Center, said that she would usually start the day’s community meeting. Amy said the meetings were a time “to give announcements . . . [and for] celebration time, we do birthdays . . . just to touch base in the morning.” It was the time

when they would celebrate when the school won an award or received an accolade. For example, she said that some of the students had won a STEM (science, technology, engineering, and mathematics) challenge, which they celebrated during the meeting. Also, she said she would usually share a "quote of the day or joke" but said the dean of students had taken over telling the jokes. She said, "I love that meeting." She also mentioned that the morning meetings were her favorite part of the day.

One unique part of the school celebrated during these meetings was the school's Electronic Arts Mixed Martial Arts team. Amy said that the students were "also chess players that game all the time, and very high tech. They're pretty neat kids. Again, few of them are high-level autistic kids." The following year the state had to cancel state competitions due to corona virus disease 2019 (COVID-19), but Amy was looking forward to how the school moved forward with Electronic Arts would support and expand EA sports in the future. Amy was the only participant that mentioned their school having Electronic Arts sports team.

Another school that had morning meetings to cultivate the school's culture was Silicon High School where Amanda would help run the morning meetings. That school had weekly morning meetings that were 30 minutes long. The meetings had a social and emotional learning focus. The school counselor created the slides for the meetings and differentiated them for each of the school's four grade levels. During these meetings, students would receive recognition for positive behavior support referrals. Students got their names on the morning slide, and the student and their parents would receive an automated email. Also, the students would receive a "treat bag." The school would also recognize the student of the month during the meeting.

Relationships

One sub-manifestation that arose in every interview conducted in this study was the building and maintaining relationships as a part of developing the schools' culture. These relationships included those between the principal and students and the principal with staff

members. Principals would model their positive relationships with students to show staff members how they expected staff to build relationships with students. Stacy, the principal at Garden Grove Middle School, modeled this by her interactions with others. She said that she told staff members all the time, “What comes first is . . . loving and caring for our kids.” She felt her “job . . . is to love and care for my people too.” Stacy believed that, if she asked teachers to love and care for the students, she must show love and care for the people working in the building. The relationships with students started for approximately six of the principals every morning when the students arrived on campus. Several of the principals mentioned greeting students every morning when they arrived at school. Stacy stated, “I would meet every seventh-grader, [who were] required to come in one door.” This was similar to Rick, from Oak Elementary, who would usually visit the cafeteria every morning to meet with students. For Anthony, from Hamilton High School, the daily goal for himself “is to come into the building and interact with students as much as possible.” This daily interaction with students and being in classrooms as much as possible was a common goal for the principals in this study.

Building relationships with staff members was an active part of the principals’ day. For some of the principals, they intentionally worked to build and maintain relationships with staff members because it was so critical for their leadership. For Daniel, from Courage Academy, his advice for new leaders was to be “always looking for opportunities to build relationships.” When asked about his school’s culture, Daniel began by saying, “We put relationships at the forefront,

that's understood [by staff members]." This intentional building and maintaining of relationships arose in other interviews.

In the interview with Dave, from Sea View High School, he mentioned building relationships through meetings. He mentioned that he tried to get to know staff members both in and outside of school. He also mentioned: "We practice the team model . . . we just try to be a member of the team sitting alongside them, and . . . when they see us as peers, they're more willing to open up . . . and develop some of those positive working relationships." This team approach to building relationships made sense in this school because of their focus on PLCs at the school, where each grade level team met regularly.

In the interview with Christina from Creek Elementary, she recalled a professional development retreat several years ago. During one activity, participants were asked to list all the staff members in their building. Next, they were asked to write a list about what they knew personally about each staff members they listed. This activity made an impression on Christina. After the activity, she realized that she needed to build those relationships with all the building staff members on a continual basis.

After that summer retreat, she has worked at deepening those relationships with her staff. As a part of her process of continuously building those relationships, she gave the following example, "when they talk about the chickens they just bought, then in a week remembering to ask them . . . hey, how are those chickens?" It was essential for Christina to go out of her way to talk to her staff members "intentionally and authentically." She did this by taking her relationships to the next level by "continuing to show them that I am genuinely interested in whatever is happening in [their] life." This development of relationships happened throughout the day for Christina, especially when the staff arrived. In a follow-up interview, she noted,

"When possible . . . I want to get out in the morning to talk with staff and really check-in with them." Christina checked in with the staff from 7:00 a.m. to 7:30 a.m. She said that the staff was not expected to be there until 7:30 a.m., but many of them would come in before 7:30 a.m.

About five years ago, the school had a different name and was rated the state's lowest accreditation rating. The district decided to combine the school with another school and rename it. This transition was when Christina joined Creek Elementary as its assistant principal. During the interview, Christina mentioned the hard feelings that the staff had when she came to the school as the assistant principal and worked to build relationships with the staff. She said the following during the interview, "It's not hard for me to build relationships . . . when I came, there were some hard feelings, and so, I knew that I had to build those relationships. ..... But now we're .....really close." At the time of the interview, having been both the assistant principal and principal of the school, she had developed more robust relationships with that team. Relationships were a critical aspect of her leadership and helped her to develop the culture in the building.

In addition to the principals building relationships with staff, Amy who was one of founders of Canyon Center for Learning was also an elementary teacher for many years before creating the school. She explained why she wanted to keep the feeling of an elementary school in a secondary school. She stated, "There's not a kid that walks in the building, that we don't know what's going on..... with that kid." Amy felt it was essential to create and model the development of relationships when she was at her school. Amy stated that her relationship with her staff was "hugely important to me." She felt that building strong relationships with her staff helped staff to build strong relationships with students.

Amy felt that many secondary school students became lost in the shuffle with thousands of other students in large high schools. Amy had recently completed her doctoral degree. The topic of her dissertation was on the leadership of schools that used blended learning. When asked about leading a blended learning school, she felt that relationships were more important because of the amount of technology. Amy stated, "that relationship piece . . . is what's important in a blended learning setting." Because relationships were so critical to blended schools, Amy believed that blended schools needed more teachers than traditional schools. The reason for this was that more teachers created smaller class sizes and students were able to develop stronger relationships with teachers. Amy said the following, "We can save money because we can have less teachers . . . [but] each teacher could have 180 kids . . . you can't do that. You have to have more teachers . . . because we want to keep it small. It's [about] the relationship to the learner." Through blended learning, Amy believed that there could be smaller schools, and those schools would have closer relationships between students and teachers than would be possible in a traditional secondary school, where teachers are responsible for teaching six to eight classes in a week.

For Amy, this schedule was a design flaw of many secondary schools. In the interview, she stated, "In education, we say we value [the] relationship, [but] when we really get down to classrooms and how they're organized, it's not there." For Amy, the ability of secondary schools to adjust traditional schedules and create larger blocks of times for teachers to work with students was significant. For her, blended learning allowed schools to create schedules to maximize relationships between teachers and students.

> Teachers are extremely important..... I'll be the first one to say that, but they're important for the relationship piece; not necessarily the content delivery, right..... We

> need them to . . . help kids learn, not to [deliver] content . . . that's a hard message, that's a huge shift for teachers.

While the school had a strong focus on relationships from its inception, the school was not immune to many of the struggles adolescents face. In one year, the small school had four student suicides. In response to those tragedies, the school started restorative practices to improve the school's relationships and culture.

> It was a huge impact on our school. . . . It [had] nothing to do with blended learning . . . I think that because of our strength and . . . our focus, from the beginning, on relationships . . . it helped a lot, but boy . . . we still had to do a ton of work [to do].

The school's restorative practices focused on relationships and helped the school have more structure in providing students with social and emotional learning opportunities.

Amy saw the building and maintaining of relationships as being central to her leadership style. During the interview with Amy, she said, "My relationship with my staff is hugely important to me." Amy empowered her teachers by letting them act. She said that her teachers would ask her about their ideas for trying something new, and she would say yes, and it empowered her teachers and gave her the chance to build a stronger relationship with each teacher. In the interview, Amy stated, "It's amazing to me how people will say, oh, let me let me do this and then I'll show it to you; sweet win for me and win for them, and I get a chance to build [the] relationship." In turn, Amy believed that the teachers would empower their students in the same way and build stronger relationships with their students.

Rick from Oak Elementary believed that he was ultimately responsible for its culture and climate. He believed that, to create a positive culture in the building, he had to empower the teachers and staff in the building by including them in making decisions and modeling positive

relationships. Rick stated the following: “It starts with me . . . changing how I approach things and solve problems and make decisions and interact with people. Again, it’s all about building relationships, and building relationships is the number one thing to build a positive culture.” He believed the school’s culture was better than it was 10 years ago after he first started. He credited this change in culture to his work on building relationships with staff. Rick, said, “relationships are number one.” He started every day welcoming students to the school and talking to parents. He ended the day the same way, helping students into cars and talking to parents. Also, he would help in the cafeteria during lunch which allowed him time to talk to students.

Rick believed that it did not matter if the student was learning in a blended format or a face-to-face format; the relationship was an essential aspect for the student to learn. When asked about the school’s data from their online platforms and what they did with the data, Rick brought his answer back to relationships. He stated, “even if a kid is learning on a device all day or part of the day, or none of the day yet he has to, you know, build a relationship with that student, build rapport and with the student and his family.” Building rapport with families was one of the areas that Rick pushed his teachers to work towards improving. He encouraged his teachers to call parents instead of emailing them or sending notes home with students. He felt that it was more personable for the teachers to call their students’ parents instead of sending them an email.

When asked what he was most proud of in his work being the principal of his school, Rick’s answer was the building and maintaining relationships with staff, students, and families. Since it was his 13th year in the building as the principal, he had the time to develop those relationships. He sought staff input into most of his decisions; he also tried to build their capacity. Rick discussed the following when he needed to make a decision:

> Seeking input from the teachers as much as possible and try to build capacity with them . . . they are making the decisions for the building. Not to say that I don't make decisions, but if possible, and when possible, I include the teachers, or the stakeholders.

Including others in the decision-making process created a positive culture in his building. The relationship between staff and the students was also a concern for Rick. He believed that a good relationship between teachers and students was crucial for students to learn.

This building relationships with students extended from the principals' time spent daily in the classrooms, cafeterias, and playgrounds. The ability to build relationships was one of the primary characteristics that the principals in this study would look for when hiring teachers. Seven principals mentioned looking for teachers who would build strong relationships with students; hiring new teachers and staff members was an integral part of the principals' lived experience.

The principals of hybrid schools were especially keen to hire teachers who were nurturing and engaging with students. They were less concerned with the teacher's academic background or knowledge when hiring teachers because the online content delivered the academic content. John was not as concerned with the strength of a teacher's traditional pedagogical skills in terms of delivering content, because his teachers did not spend time designing lessons to deliver content. That aspect of instruction was delegated to the online curriculum. Teachers did have to plan projects for students as a part of the school's project-based learning program, but not for traditional content-based lessons.

Eagle Academy started as a purely virtual school. John, the principal, started working at Eagle Academy when it was an online school and began to realize the importance of "bringing them in" when describing the need for online learners needing a place where they could receive

support and build relationships with their teachers, staff, and other students. One of the characteristics that John looked for during the hiring process was a "sense of nurturing" from the candidate. John stated during the interview, "I gotta feel that you're going to nurture kids; you're not all about your content. You're not all about control. You're about how do we grow kids." The type of nurturing that John looked for during the hiring process was not merely caring for the students or being nice to them, but that by nurturing the student, the teacher also had to hold the student accountable. John clarified this distinction in the interview when he said, "You know I can be hard on a kid and still be nurturing and care about them moving forward." During the interview process, John tried to keep things focused on nurturing pieces.

At Renaissance Academy, Kevin also looked to hire teachers who would help maintain its culture. He said the forefront of the school's culture was a focus on relationships. He continued by saying that teachers who did not put relationships at the forefront "don't stick around; either we do our best to push them out or they realize that it's not for them." Besides hiring teachers who were "good fits," he also paired new teachers with colleagues who could mentor them. He also structured opportunities for the pairs to work together during professional development. The school also revisited its mission, values, and expectations during summer professional development, "so things are understood, particularly for folks who are coming in." Kevin also felt that the cultural norms of the school tended to be transmitted informally between teachers. He stated, "I think a lot of it is transmitted informally through the relationships; our department teams are quite tight." The school also had a team made up of upper classmates who mentored first-year students. Kevin felt that those upperclassmen helped to transmit the student culture to new incoming students.

Developing, Evaluating, and Instruction

Evaluating classroom instruction has been a traditional duty that every principal has engaged in regardless of whether the school used blended learning or not. The same has been true in schools that use blended learning. The conversations regarding the instruction in a school that used blended learning might sound different than a school that used non-blended instruction. However, conversations regarding instruction still occurred in blended schools. Eight of the principals who participated in this study discussed observing and evaluating the instruction that occurred on campus. The principals used tools such as rubrics or frameworks to help them evaluate the instruction in their schools. These tools varied by schools, but nine of the principals in the study discussed using some framework in the interviews. Some of these frameworks were borrowed from other schools, districts, or charter school networks.

John from Eagle Academy spent part of everyday going into classrooms and observing the instruction. Since Eagle Academy was a hybrid school where students were not on campus every day, his observations and evaluation were slightly different depending on the grade levels of the students on campus that day. A particular focus for John was that the students were engaging in rigorous project-based learning. In the school's blended learning model, students used the online software programs Edgenuity and the program ALEKS (Assessment and Learning in Knowledge Spaces) for math when they were off campus. When students were on campus, they were engaged in hands-on and cooperative learning. John stated, "spending time in classrooms to kind of evaluate the . . . on-campus instructional models and are we . . . meeting our instructional framework?" John's instructional framework to evaluate classroom instruction was the rigor and relevance framework (Daggett, 2005). The framework was used by John to help evaluate the project-based learning that occurred when students were on campus. The framework helped John to measure the rigor of what students were asked to do and the real-

world relevancy of the instructional tasks. While John did not focus his observations and evaluations on students using computers in the classroom, other leaders whose students were on campus daily, evaluated teachers while students using their computers as part of the school's on campus blended learning model.

At Garden Grove Middle School, Stacy observed instructional time when students were using their computers. The school used the Summit Learning model and curriculum. One key component of this model was the self-directed learning time. Stacy said that after the morning bell rings, "I'm doing classroom walkthroughs pretty much immediately because that is when we have our SDL [self-directed learning] time." This time was focused on students learning content knowledge. Students learned from a playlist of online lessons and materials curated by their teacher during this time, and teachers acted as facilitators to monitor and support students instead of delivering the content. The playlists contained different types of learning materials, and activities including the following: videos, interactive presentations, simulations, written materials, and primary sources. Students and their families had access to these playlists both at school and off campus. Students chose which resources to review during this time and then took an assessment called a checkpoint to demonstrate their learning. Students were encouraged to take notes while learning from the playlists, but they could not use their notes while taking a checkpoint assessment, and they could not take the checkpoint assessments off-campus.

The reason why this self-directed learning time was essential for Stacy was because it provided students the opportunity to practice being self-directed, which was one of the "big pushes" for the school. She discussed the following about the self-direct learning time:

> During that time, we're not telling a kid, here's what you have to work on, do this [and] this. We say, look at all of the data at your fingertips, like look at your page, look at your

> progress, look at all of your assignments. Now, you prioritize, what are the things that you're going to get done today, to make . . . it happen. ..... I think that has been really powerful in putting it in the hands of kids.

Stacy used a one-page document that listed "look-fors" of what she should be seeing in the classroom during self-directed learning time. In a follow-up interview, Stacy noted that, "I'm trying to get into SDL [self-directed learning] classrooms just to see if we're having those norms upheld in classrooms." After conducting observations, Stacy used her notes from the observations to her weekly administration team meetings to compare notes and discuss trends and gaps in the instruction.

Stacy was the only principal that used the term self-directed learning was only used by Stacy. However, three other schools (Eagle Academy, Canyon Center for Learning, and Renaissance Academy) in the study had similar times when students would work on projects as a part of their project-based learning time. This project-based learning time was similar to Garden Grove's self-directed learning time. During project-based learning, the students were responsible for managing their time, and the teacher acted as a facilitator of learning instead of deliverer of content. At Renaissance Academy the instructional design for all the school courses was based on project-based learning, and students were self-directed when they were working on their projects in their classes.

The document that Stacy used for these observations was titled *Instructional Look-fors + Strategies*. The document was organized into Summit Learning's six principles of personalized learning. Those six principles were rigor, customization, purposefulness, relevance, collaboration, and community. The document was 26 pages long, and Stacy said that when she went into a classroom to observe, she only brought a small section of the document that was one

or two pages. These sections corresponded to different instructional strategies that aligned with the six principles. These sections had checkboxes next to the indicators for each of the strategies.

After Stacy and the other instructional team members observed instruction in the classrooms, they would meet every Monday and discuss the patterns they saw from their observations by using the *Instructional Look-fors + Strategies*. Then they would discuss additional professional development and coaching opportunities for their faculty based on their findings. Stacy described how they used the document,

> When I go in, I'm really looking . . . are students doing the cognitive work? If not, then I use [the document] as a cross-reference. If I'm not noticing some of those student actions, what I do on the right-hand side that are your actions, then I can coach a teacher.

The document provided a structure for the teachers' growth and development based on the Summit Learning model.

At another middle school in the same district, River Middle School, Michael did not attend regular grade level meetings to look at data. When he would do a walkthrough, he did not use checklists or look-fors. He said that when he walked around, he engaged in "real qualitative type classroom visits where [there] isn't some objective of . . . seeing if they are complying with some initiative. It's more just being in the room and being in the space and seeing how everything is going." Michael would engage teachers in what he called the "ongoing conversation." This ongoing conversation with the staff regarded the teacher's instructional design and the amount of time students had for working different components of the district's blended learning model, including the online curriculum choices. The ongoing conversation also revolved around the amount or "dosages" of the different elements of the school's blended-learning model. Michael stated that, "every time I'm going through rooms . . . we're just trying

to continue the conversation about how we do our work." In addition to discussing teaching and learning that was occurring, he would also discuss particular students and how they were doing academically and socially.

Coaching

Another sub-manifestation that arose from the interviews was the collaborative act of coaching among administrators and between teachers and administrators. According to Galey (2016), "instructional coaching has emerged as an important policy lever for districts to improve instructional practice" (p. 54). One school in the study, Courage Academy, seemed to have the most developed culture of coaching. All instructional staff and administrators participated in regular coaching cycles. Daniel would coach the assistant principals, director of operations, and the social and emotional learning coach, and six teachers. When Daniel discussed coaching in the school, he framed it as an observation, feedback, and coaching model, which he felt supported teachers because it allowed them to improve their craft. Daniel felt that it contributed to the retention of teachers at the school, which was an issue that the school had been trying to improve. Daniel, said the following:

> The other piece here is just the support that we provide teachers . . . I think that's primarily seen through . . . our observation, feedback, and coaching model, where teachers are getting their weekly coaching meeting and observations. .....Teachers are growing and learning and getting better at their craft, which I think teachers are often really eager to do..... I think that also really contributes to the retention that we've seen.

The Courage Academy administrative team had divided the instructional staff into groups, so each administrator was responsible for coaching between six to ten teachers on a regular basis.

Daniel spent most of his time managing the work of the other four administrators. He would coach them and help them develop measurable outcomes for their work. Daniel would coach the assistant principals on their coaching by watching videos of their coaching sessions. The coaching cycles the teachers went through with the administrator helped them improve their instruction, but the coaching cycles also helped contribute to building relationships between the staff and the overall positive culture of the school. Daniel discussed this in the following quote:

> We, really believe, that . . . good relationships will help in those challenging moments when you're . . . having those challenging conversations, or those difficult disagreements . . . our teachers have these touch-points with a leader, week in and week out, which . . . helps develop that relationship. So, when that challenging conversation needs to happen there's that foundation . . . I trust him and the feedback that he's . . . giving me.

The coaching cycles of observation, feedback, and coaching had become central to the building's culture. According to Daniel, it had improved teacher retention in the building and helped to scaffold the school's social and emotional learning focus and the data-based instructional practices in the building.

For Daniel, instructional coaching and frequent coaching were among the key reasons the school had been as successful as it had been on standardized assessments. The amount of administrative support that teachers received was much more significant at Courage Academy than when Daniel remembered being a district, public school teacher. He remembered that when he worked in a district public school, the principal and assistant principal did not have the time to coach the teachers. At Courage Academy, they had more administrators so that teachers could participate in regular coaching cycles.

> When I think about . . . when I worked at the traditional elementary school, we . . . had about the same number of teachers; I would guess about . . . 28 to low 30 teachers . . . We just had a principal and assistant principal, and a . . . instructional coach . . .Those three people were trying to run the school, and . . . support teachers, and . . . kids. [They] just didn't have the capacity to . . . invest in teacher development and maintain culture just based on a . . . pure numbers game.

Courage Academy had two assistant principals, a director of operations, a social and emotional learning coach, which was a hybrid position similar to a dean of students, and a guidance counselor. With the five administrators in the building, each responsible for coaching a group of students, the numbers game was more manageable.

Garden Grove Middle School was another school where instructional coaching was vital to the school's culture. When asked about the process of hiring new staff members, the principal Stacy said she looked for candidates who could "receive feedback . . . [because] that's important to us." She explained that, during the interview process for new teachers, they would ask the teacher to teach a lesson as though the people on the interview team were the students. After the lesson, the applicant would receive feedback on the lesson, and then they would have to reteach the lesson. This process allowed Stacy to see "right away . . . is this person open to sitting and having a collaborative experience." Stacy wanted the teachers to see her not as a boss but as a "coach and colleague, that support him and just to get better as I do with them all the time." The coaching process was significant for Stacy and something that she and all the teachers would participate in throughout the academic year.

Stacy did her morning walkthroughs in her building after the day had started and students were in their classrooms. When conducting her walkthroughs, she would think about what type

of coaching did her teachers need based on what she saw during the walkthrough. A few years ago, the school went through relay training through the Relay Graduate School of Education and, as a part of that, the school had been committed to every teacher going through a 3-week coaching cycle. Stacy discussed this in the following quote:

> Every teacher gets a three-week observation feedback cycle . . . I'm in those rooms a lot . . . I was in charge of coaching math teachers, and . . . I had some special ed . . . but my primary was . . . math, so I was in and out of [the] math classrooms to plan their feedback cycles, data team meetings . . . every Tuesday, my whole day was consumed with grade-level data.

The observation, feedback, and coaching cycle that Garden Grove Middle School utilized seemed to be like the one that was being implemented at Courage Academy. The Relay training that the school's leadership team participated in several years ago strongly emphasized what they called drivers that improved student achievement in schools. Some of those drives were based on Bambrick-Santoyo's (2018) book, *Leverage Leadership 2.0,* which emphasized that school principals needed to continually participate in observation, feedback, and coaching cycles with the teachers in their buildings. These were in addition to other drivers, such as engaging in a continuous school improvement process and data-driven instruction.

For the administration team, it was also important for them to be coached by each other. The administration team's choice was an example of what Kouzes and Posner (2014) would call modeling the way. By the administration team participating in coaching cycles just like the teachers in their building, they were seen as fellow participants in a new way of learning, instead of mandating that teachers go through coaching cycles and not do it themselves. Stacy described

the administration team's use of videotaping themselves as a part of the administration's coaching cycles.

> Each one of us would videotape either a . . . feedback cycle or a weekly data meeting. . . . We would then give feedback to each other .....We would put that up and then say, 'here's what you did really well, next time, try this.' So, we tried to do that..... if we're expecting our teachers to receive feedback and grow, then we need to model that as . . . leaders.

Using Data to Improve Instruction

One of the most apparent sub manifestations of the principals in this study was data usage and its impact on instruction. By having students utilize digital platforms for their daily learning, the teachers and administrators had immediate access to various types of learning data. Schools such as Garden Grove Middle School had much more data after transitioning to a blended learning model. Stacy stated she now had,

> All this data at my fingertips. That's really what has . . . changed . . . I used to spend . . . hours . . . as an AP [assistant principal], putting these elaborate spreadsheets..... and color-coding . . . I mean hours, and now..... we really have data at our fingertips.

The school's use of data was one of the benefits the school received from the Facebook engineers who helped create its curriculum. According to a blog post, the Summit network analyzed every click the students made when using the platform. The teachers used the data from Summit Learning's personalized learning platform, which students used when they were in the self-directed learning time. Teachers used this data to identify students who needed additional support managing their time or making better choices of resources to use in learning the content.

Another school in the study, Courage Academy, had a unique example of the manifestation of developing and evaluating instruction. The school had decreased the amount of blended learning from the amount the school used in its first few years of its existence. However, the school still maintained some aspects of blended learning, including using computers to collect data to inform instruction. The school still used digital content to teacher certain honor math classes. The school used digital exit tickets to assess student learning in all content area classes. The Courage Academy teachers were expected to analyze the data from the digital exit tickets to advise the following day's instruction. They used a learning management system to collect and analyze student data. The school administrators also had access to the data from the exit tickets to see trends in the school and see what sort of additional steps they needed to support teachers or students. The school had quarterly retreat days where staff analyzed data from the previous quarter.

The school also benefited from an employee in their small charter school network's central office who specialized in data analysis and helped the school utilize their data. The school collected academic data and social and emotional data collected by teachers and other staff members from an application called Kickboard. The application tracked student and group behavior. The network data specialist would send the school and teachers spreadsheets with the academic and behavior data. Teachers looked at the data daily to see how students did on lessons from the day to inform their instruction for the following day. The school also spent a day or two each quarter to analyze quarterly summative data to plan for the upcoming quarter.

Another middle school in the study, River Middle School, also realized the importance of analyzing student learning data on a daily basis. The school transitioned from weekly data team meetings with teachers, to teachers independently analyzing their data, adjusting their instruction

based on that daily analysis. Michael noted, “we [used to] look at data . . . when we’re sitting together on Thursdays at one o’clock, when really, the culture we want is . . . [to] look at data . . . every single day, all the time.” One of the first teachers in the building to adopt blended learning used math data from the website Khan Academy on a daily basis. The data would help her to create small groups for small group, face-to-face math lessons the following day. This daily use of data to inform instruction the following day was something that Michael felt helped make blended learning more student centered.

At Garden Grove Middle School, the administrative team met regularly to review data and plan action steps. In a follow-up interview, Stacy stated she would have leadership meetings once a week. During those meetings, the team looked at data and set “action steps for ourselves.” The team also discussed “where our data teams are,” the next steps for those teams, and trends between the data teams. They also discussed professional development plans. The school had a waiver from the school district, so the school did not receive the same professional development that other schools in the district received, so the administrators had to plan and implement their own professional development.

Stacy also had meetings with a success manager every two weeks. The success manager was similar to an instructional coach and was provided by the Summit Learning Network. The success manager helped the administrative team look at school-wide data from Summit’s personalized learning platform. The success manager also coached Stacy and the other administrators on the next steps for professional development. Garden Grove Middle School was unique among the other schools in the study, in its relationship with an outside organization that would help coach and support the administrators.

Oak Elementary appeared to be less involved in analyzing data from their online programs than most schools in this study. Nine of the 12 participants discussed analyzing data from their online programs during the interviews. At Oak Elementary, Rick admitted that because of the school's focus on reading, he only spent time on analyzing reading data. However, the school did not analyze any of the math data from the students' online math platforms. Rick stated the following:

> As far as data analysis, we put a lot of effort into literacy. As far as we have data meetings, we analyze DIBELS [Dynamic Indicators of Basic Early Literacy Skills] data. But I would say . . . overall; we don't put a whole lot of stock into the information that comes from ST [Spatial-Temporal] math or any of the other online programs.

Rick's statement was a unique tentative manifestation because eight of the principals in the study discussed using data as a regular feature of their lived experience. The Dynamic Indicators of Basic Early Literacy Skills data that Rick discussed was data that was collected by teachers listening to students read letters, words, sentences, and passages. However, most of the assessments used in Dynamic Indicators of Basic Early Literacy Skills were not digital assessments.

Desk Work

For the school principals, there were times when they had work at their desk to complete tasks such as filling out reports, creating newsletters, answering emails, and making phone calls. This section addresses the principals' lived experience when working in their office. There appeared to be differences in the amount of time spent behind their desk between those principals that were part of a school district and had the support of central office and those schools that did not have the support of a large central office. This section has been organized

between schools with minimal to no central office support and those with substantial central office support.

Renaissance Academy was a dependent charter school that operated under the local school district which had a memorandum of understanding. That memorandum of understanding outlined the school's contractual agreement with special education, maintenance, custodial, and human resources support. However, the school had freedom over its curriculum and budget. The principal, Kevin, had to report monthly to the school's advisory board composed of 12 members of stakeholders. In addition to overseeing his campus, he was also the school's middle school campus executive principal, requiring additional administrative work. Since the school was a part of the local school district, he also had to coordinate with district leadership around issues that did not deal with curriculum or budgets. Kevin still got opportunities to be involved in curriculum and learning but not as much, "as I had hoped." He was not the only principal in the study who spent a large amount of their lived experience engaged in administrative work.

When Kevin took over as the principal of his school, he "discovered after moving into this job that . . . [it was] far different from what I could imagine it as when I was a teacher." Kevin thought he would be more of a "curriculum innovator and supporter and educational leader." He believed this because he considered himself a successful teacher at the school and felt that being a principal would be similar to "steroids." However, this was not the case, "I find myself being much more of an administrator and manager and not being involved with the curriculum and learning as I had hoped." Some of this was due to the circumstances involving of his school being a charter school without the support of the district central office to help with the school finances.

Canyon Center for Learning was an independent state charter school and did not have a connection to the local school district. The school was chartered through the state department of education. Amy felt that most of her time was spent managing "compliance with the state." Amy stated that she was the "superintendent of our own local educational authority, so we are our own district, which means that we have all the compliance pieces and state requirements of all districts across the state. That is a humongous job." When Amy first started the school, she felt that she was under the "microscope" of the state because the school had asked "for a bunch of variances from the state." She said, "In the beginning, I had to fill out form . . . after form . . . and check the boxes that made us look like every other school in the state." As enrollment increased, the "compliance officer" role of her job became too much.

Amy mentioned that, "for years," she ran both the school and managed its compliance roles. She said, "We got to about 200 [students] I could not keep up with all that . . . the teacher evaluation system . . . got really convoluted and all the high stakes testing . . . it got too much." That was when Amy created a new position called the director of teaching and learning. However, Amy was still the school's executive administrator. The director of teaching and learning oversaw the instruction, curriculum, and teacher and student schedules. Amy's role oversaw the operation, finance, facilities, and state compliance.

River Middle School was a district school that had the support of a large central office. Michael described some of the procedures he had developed with his office manager to minimize the time spent working on administrative items. Michael stated, "The office manager checks my email; she receives all my phone calls and transcribes them in a certain way." Also, the office manager would schedule all his meetings. During the interview, he went through the process and gave the following example. If someone sent him an email asking to meet with him, his secretary

would read the email, schedule the meeting on his calendar and send the person an invitation, and "tuck it in a folder for me." Michael said this process "gives me the freedom to be in the moment at the school, rather than checking emails and things." Having this freedom to engage with students and staff members during instructional hours was important for Michael.

When Michael was in a meeting, the office manager would sort his emails and place any notes or requests from staff members in an urgent box if they needed his urgent attention. This allowed him not to be interrupted during meetings. When he came out of a meeting and saw that he had a message in his urgent box, he knew that he needed to address the issue. Michael stated that these systems "allow us [principal and assistant principal] to basically be on the walk, during school time, to be with people, rather than . . . doing email, [and] phone calls." He noted that he still did phone calls during the day, but he did most of his phone calls in the evening. In addition to making phone calls in the evening, he would also write and respond to emails after 4:30 p.m. John would walk with the students who walked home. The school area did not have sidewalks near it, so John would go and stand by the corner of the school property where students would begin walking home on the side of the road. Then he would go back to his office for meetings or work on his more administrative tasks.

Other schools in the study had found ways to manage the administrative work that the job required. These ways included separating tasks between administrators, hiring additional administrators, and scheduling time administrators in the school to be able to work uninterrupted in their office. One school in the study that was unique was Oak Elementary school. It was part of a small school district with only one elementary, middle, and comprehensive high school. Because of the district's small size, the central office support that Rick had was minimal. In addition to being the principal of the elementary school he also had duties that were normally

conducted by a district's central office. Rick said that, "All the administrators [in the district] wear many hats." For Rick, the other hat he wore was that he managed the school district's federal grants. For many larger districts, the role of managing federal grants could be a full-time position. In his interview, Rick mentioned that he would typically do grant work or work with the district's business manager and business office regarding the federal grant work in the afternoons. However, he would usually help with students' dismissal from the school by the end of every day.

Conclusion

The purpose of this study was to understand the lived experience of principals of successful schools that utilized blended learning. The findings of the study were a series of tentative manifestations. After following a six-step whole-part-whole analysis of the data recommended by Vagle (2016), four tentative manifestations arose: (a) collaboration (b) cultivating culture and climate, (c) developing and evaluating instruction, and (d) desk work. While there were additional manifestations that arose, they were not shared by the majority of the principals in the study. For example, there were sub-manifestations that were shared by the principals of some of the larger schools in the study, such as thinking about aspects of their job as being a triage unit in a hospital, but those manifestations were only shared by two principals.

The first of those four tentative manifestations were the leader's experience of collaboration. The amount of time a leader spent in meetings seemed to be proportional to the size of the school they led. The larger the school, the more time the leader spent in meetings, and the smaller the school, the less time the leader spent in meetings. However, it should be acknowledged that just because a principal was involved in a meeting does not mean that they

were involved in collaboration. The leaders' meetings seemed to primarily be separated into meetings with fellow administrators and meetings with groups of teachers.

The second tentative manifestation that this study explored was the leaders' cultivation of climate and culture in their building. This manifestation was something shared by a majority of the leaders in the study. This phenomenon of maintaining and changing a school's culture has been discussed widely in the literature of school leadership. The principals in this study recognized the importance of having a healthy school culture, and they spent part of their daily experience developing their school's culture.

The principals in this study developed their schools' culture by monitoring the culture through ceremonies and through building and maintaining strong relationships with students and staff. This manifestation was another critical aspect of leadership in any field. Relationships with staff and students were also critical in schools' lived experiences that used blended learning. The importance of relationships came up in every interview with the leaders of these schools. The types and depth of relationships differed depending on the size of the school. In larger schools like Hamilton High School, Anthony primarily had more robust relationships with this administrative team; however, even at the smallest school in the study, Light Speed Academy, the maintenance and building of relationships between Gia and the staff and students at the school was a common manifestation. One principal felt that because of the high level of technology used by students and teachers in schools that use blended learning, relationships were more important than in schools that did not use blended learning.

The third tentative manifestation that arose from the data analysis was the development and evaluation of instruction. This experience is shared by any principal as instructional supervision is a traditional duty of a school principal. Principals in this study were expected to

observe teachers, provide feedback, and complete teacher evaluations. Some leaders in this study also participated in instructional coaching with teachers and fellow administrators.

One aspect of the development and evaluation that was unique in terms of these schools and their use of blended learning was the impact of digital data sources from online instruction. This allowed the principals in this study to have instant access to student learning data. This allowed the administrators to be able to see how classes and groups of students were progressing on a daily basis.

Nine of the principals in this study used some type of framework or observation tool during their lived experience. These frameworks and constructs served as tools to help the leader frame their thinking and to organize their actions in leading their schools. Some used constructs to help them structure meetings and professional development others used them to help manage change in their schools.

The last manifestation that arose from the data was desk work. This aspect of leadership is common in many professions, but it was also a worthy topic of exploration in this study. How the leaders in this study managed their time and workflow was a daily experience for these schools' leaders. Some leaders woke up in the morning to check their email to prepare themselves for the day. Other leaders would try and save their desk work to the end of the day when students left. Others would schedule time on their calendars during the day to work at their office. Desk work was an inevitable task that was shared by principals across this study.

CHAPTER V

CONCLUSION

This chapter positions the findings from Chapter IV in context with the research on school leadership and blended learning. Also, this chapter expands on and deepens the findings discussed in the previous chapter. The first section of this chapter discusses the significance of the study and its implications. The first section is organized by the tentative manifestations addressed in the previous chapter. In the second half of this chapter, I reflect on the study, its limitations, and discuss research recommendations based on the study. This chapter is divided into five distinct sections: (a) summary of findings and related research, (b) implications for leadership theory and practice, (c) recommendations for future research, (d) limitations, (e) conclusion.

Summary of Findings and Related Research

A post-intentional phenomenological design was used to illuminate the lived experience of principals of successful schools that use blended learning. Through this study, I aimed to understand the lived experience of leaders of successful schools utilizing blended learning. In addition to the 12 interviews, documents were collected about the schools, including articles and blogs written about the schools. Other documents such as charter applications, school improvement plans, and state reports about the schools were analyzed. A post-intentional phenomenological method was used to analyze the data. This methodology included numerous readings and reflections on the data. The findings from the analysis included several tentative manifestations or themes. The purpose of this study was not to find cross-case manifestations

that emerged; however, similar manifestations did arise across sites. These cross-case manifestations were essential to answering the study's research question:

Q1 What is the lived experience of leaders in high performing schools that use blended learning?

The lived experience of principals of these blended schools was consistent with the research of principals and their use of time in traditional schools. In the following section of this chapter, I discuss the significance of the manifestations discussed in Chapter IV. These tentative manifestations include the following four categories: (a) collaboration, (b) cultivating culture and climate, (c) development and evaluation of instruction, and (d) desk work.

Collaboration

Many of the principals who participated in this study spent a great deal of time collaborating with colleagues. Schools are complex organizations that can involve dozens to hundreds of staff members and hundreds to thousands of students. In order to function efficiently, school principals collaborate with various stakeholders on a daily basis. These stakeholders include other administrators, including district administrators, teachers, office personnel, students, and parents. In addition, the increased popularity of distributed leadership models and the work of DuFour and DuFour (2013) on professional learning communities (PLCs) have made the practice of teacher collaboration meetings commonplace in schools across the United States.

Sebastian et al. (2018) found that, on average, principals spent about 23% of their time working alone, which meant that most of their time was spent working with others. Many of these instances of working with others were done in meetings. There have been several studies regarding principals and their use of time during their workday over the years, but there is little research on the actual meetings themselves. The research was clear that the time principals spent

during their day was spent on a wide variety of tasks. These tasks corresponded to the wide variety of meetings that they participated in during their daily experience. The variety of meetings that they participated in was also discussed in the interviews for this study. Some of the meetings that the principals participated in included the following: counseling team meetings, administrative team meetings, meetings with parents, meetings with parents and teachers, meetings with groups of students, meetings with PLCs, and meetings with boards.

The types of meetings and their frequency depended on the school's context. Principals who led charter schools mentioned more meetings regarding finances, maintenance, and facilities than schools that were part of a school district. This aspect to the lived experience of these principals was also seen in the work of Maxwell (2017), who found that principals of charter schools had increased autonomy compared to schools run by school districts; however, there was a detriment to that autonomy because the school principals had to spend additional time managing tasks that would usually be managed by a district office in schools run by a school district. Amy, principal of the Canyon Learning Center, created an additional position to manage curriculum, evaluation, and instructional issues to focus more on the logistical and compliance tasks that would typically be managed by a central office in a school district.

A few schools in the study benefited from the autonomy of a charter school but were a part of a school district and had the support of a central office to manage human resources, finances, and maintenance requests. These schools included Eagle Academy, Silicon Academy, and Light Speed Academy. At these schools, the school leaders could spend more time focusing on instructional matters because they were attached to a school district.

The types of meetings and the number of meetings that the principals of these blended schools participated in were similar to that of principals of more traditional schools. The current

research on the time that principals spent on various tasks mentioned that the current percentages principals spent on various tasks were consistent with earlier research in the 1970s and 1980s (Sebastian et al., 2018). One study by Martin and Willower (1981) found that high school principals spent 44.8% of their time on average involved in meetings. These meetings constituted the most significant amount of time that principals spent during their time at work. The study further categorized the types of meetings between scheduled and unscheduled meetings. The study found that most of the meetings that principals participated in were unscheduled (27.5%). For scheduled meetings, principals spent 17.3% of their time. These studies on principals' time during their day provide further insight into their lived experience.

In her work on transformative leadership in schools that used blended learning, Filiss (2020) found that one aspect of transformational leadership that the principals used in her study focused on developing collaborative environments. Collaborative decision-making was a central finding in her study. According to Filiss, "collaboration in decision making is how transformational leaders influence successful high school blended learning environments" (p. 6). However, this finding of collaboration was not unique to the lived experience of principals of blended schools. According to Martin and Willower (1981), principals have been spending a great deal of time in collaborative meetings for decades.

Cultivating Culture and Climate

Cultivating the culture and climate was a tentative manifestation found in this study. How each principal managed their school's culture and the climate was unique. The principals in this study cultivated the culture and climate in their building in the following ways: monitoring culture and climate, ceremonies, and relationships with staff and students. The theme of cultivating culture and climate is consistent with the research on instructional leadership.

Robinson et al. (2008) in a meta-analysis of 27 studies found that instructional leaders promoted a climate for learning in their schools. In another study, Klar and Brewer (2013) found that the instructional leaders in their study used several strategies to promote a climate for learning. Those strategies included building collaborative cultures, modifying organizational structures to nurture collaboration, building productive relations with families and communities, and connecting the school to the broader community. Two of these strategies, building collaborative cultures and modifying organizational structures to nurture collaboration, were also discussed by the principals in this study.

Another strategy discussed by several of the principals in this study was walkthroughs. However, in the research regarding a principal's use of time, the Grissom et al. (2013) study found a negative association between walkthroughs and student achievement in some instances. They found that "this negative association may arise because principals often do not use walkthroughs as part of a broader school improvement strategy" (p. 1). The principals who discussed walkthroughs in this current study used the walkthroughs to improve instruction or improve the building's culture and climate. Some of the leaders in this study were more specific in their walkthroughs, such as Stacy from Garden Grove Middle school, who used specific "look-fors" in instruction during her walkthroughs. In comparison, other principals like John at Eagle Academy tried to focus on looking at the relational aspects between students and teachers to see how they interacted with each other.

The relationship between a school's culture and student achievement has been studied since the 1970s (Craig, 2006). A central part of that culture are the ceremonies that exist in the school (Hoy, 1990; Schein, 2004). The principals in this study used their school's ceremonies to manage their school's culture. Several of the schools in this study had daily or weekly meetings

either by grade level or the entire school where students and teachers were celebrated for their achievements. In the smaller schools in this study, these meetings were led by the school's principal. At some of the larger schools, such as Garden Grove Middle School, each grade level meeting was led by one of the administrators in the school, but these ceremonies including the school's minute of mindfulness were part of the principals' lived experience. Another strategy that the principals in this study used to improve the culture in their building was through relationships. The phenomenon of leadership is interconnected with relationships. Kouzes and Posner (2014) used the analogy of leadership being not a monologue but a dialogue. The principals in this study spent a great deal of their lived experience in dialogue with others in the school. The time spent with other stakeholders was found in studies that analyzed a principal's time at work. Grissom and Loeb (2011) found that the principals in their study had a high level of confidence in developing interpersonal relationships. The study also found that 72% of principals rated themselves as very effective in developing relationships with students. These scores were also related to the time that principals spent interacting with students and with other staff members in their school.

One of the shared experiences of the principals in this study was their relationships with students. At several of the schools the principals would greet students as they came into the building. Some of the principals felt that by building relationships with students, they were modeling that relationship building to their staff members. Amy, the Canyon Learning Center principal, noted the importance of relationships was critical to learning in a blended environment. In a traditional classroom, where students were taught content from a teacher, there was no technology to create a barrier to developing a relationship with students. A similar study on technologically innovative principals' lived experience found that their connectedness was an

essential theme in their leadership. Withers (2019) found that "the influence of connectedness as a leadership characteristic among participants was similar to how an elementary principal's vision or communication skills might influence their leadership" (p. 119). The connectedness described in the study extended from the principal to teachers and between the teachers and their students. The difference between connectedness in the Withers (2019) study and relationships in this current study was that the connectedness was discussed in terms of a digital connectedness over social media such as Twitter. Social media was not discussed in the interviews with the principals in this study. However, the principals did mention the importance of relationships with the teachers and staff in their building.

The quality of the relationship has an impact on the follower of a leader and the performance of the employee. Thomas et al. (2013) stated that "research shows that the quality of this relationship [leader and follower] is reliably linked to follower well-being and performance" (p. S64). According to Thomas et al., one of the most popular methods to understanding workplace leadership was relationship-based approaches. This approach analyzed the quality of the relationship between the follower and the leader.

In this study, the topic of relationships did occur, but the quality of the relationship between the principals and their staff was not discussed in detail. In large schools, whose principals participated in this study, the number of teachers and staff would impact the principal's ability to create deeper relationships with their staff because of the sheer number of staff members. In smaller schools the principals had the opportunity to have deeper relationships with their staff because of the smaller number of staff members.

One aspect that was similar between Withers (2019) lived experience study and that of this study was the role that technology played in relationships. While technology can impede

face–to–face relationships, several of the principals in this study found ways to balance the amount of technology the students used with opportunities for the students to interact face–to–face. This study found that relationships were significant for the leaders and staff at successful blended learning schools.

Most of the schools in the study utilized a social–emotional learning curriculum. Along with social and emotional learning, several of the schools also used restorative approaches in their schools. Canyon Center for Learning started their restorative approaches after several students committed suicide in one year. After those tragic events, the staff realized they needed to integrate restorative approaches into their culture. Another school in the study, Courage Academy, was designed around its social and emotional learning program. The principals promoted these social–emotional learning programs and restorative approaches because they felt they were important to their school's culture.

At Courage Academy, the school's staff also participated in the school's social and emotional learning program. While the staff's version was not the same as the students', the expectation was that every faculty member developed their own social and emotional learning. The staff also participated in regular circle meetings, similar to those of students. These circles and participation in social and emotional learning created strong relationships between staff. These strong relationships created tension for the principal when evaluating staff members or when they needed to confront staff members who were not performing at an expected level. However, Daniel's tension would be shared with the principal who had to confront a colleague who they had a strong relationship with if that person was not performing at a level they expected. The principals in the study that used social and emotional programs also participated in the programs. For example, at Garden Grove Middle School, the principal would participate in

the school's minute of mindfulness and would promote other aspects of the school's social and emotional program.

Development and Evaluation of Instruction

Tasks related to instruction have been a traditional responsibility of most principals in the United States. Since the purpose of schools has been to educate children, it was evident that the school's principal was responsible for educating the children in the building. This responsibility is known in the literature on school leadership as instructional leadership. Elmore (2000) believed that instructional leadership was the apex of educational administration. This responsibility was carried out in several different ways, including teacher evaluation, coaching teachers in their instruction, facilitating meetings, and professional learning around student learning data and instructional strategies. This finding is consistent with the Robinson et al. (2008) meta-analysis of instructional leadership, which found that instructional leaders emphasized coordinating, monitoring, and evaluating curriculum, instruction, and assessment. The amount of time that principals in this study spent on these tasks depended on their buildings' context. Schools that were part of larger districts or charter organizations could delegate this responsibility of developing and monitoring instruction in the school to assistant principals, teacher leaders, and instructional coaches. One characteristic that arose from analyzing the data was a relationship between the school's size and the amount of related instructional tasks that the principal assumed. The smaller the school, the more the principal had to play a role in managing the teachers' instruction and instructional development in the building. In larger schools, the principal shared this responsibility with assistant principals. Some schools, such as Courage

Academy and Canyon Center for Learning, delegated some of the instructional leadership responsibilities to other administrators.

Another strategy that some of the principals in this study used to develop the instruction in the school was through classroom walkthroughs. Grissom and Loeb (2011) also found that the walkthroughs discussed in their study were not always used the same way. Some principals in their study used the walkthroughs as an opportunity for professional development. This finding was similar to how Michael from River Middle School used his unscheduled walkthroughs as an opportunity to continue their "ongoing conversation," where he and his teachers would discuss the nuances in blended learning instruction. John would also pay specific attention to what the students were doing during his walkthroughs. He said that this focus on student actions during his walkthroughs had been an evolution compared to when he first started as a principal, where the focus of his walkthroughs tended to be on the teacher's instruction. The principals at several of the other schools used walkthroughs as a way to evaluate not only the instruction that was occurring but also the climate of the school. Some of these leaders used frameworks to guide their walkthroughs. After the walkthroughs, the administrators at the schools would discuss what they observed and plan next steps for professional development.

At Garden Grove Middle School, the walkthroughs that the principal and their fellow administrators conducted on a daily basis were guided by documents that were provided by the Summit Learning organization. The school used these instructional walkthroughs as a way to see if the school was in alignment with the Summit Learning model. Instructional coaching was another strategy used by several principals in this study to improve the quality of instruction. Instructional coaching has been a strategy that has been used by a growing number of schools and districts to improve instruction in the classroom. Grissom et al. (2013) found a positive

correlation between instructional coaching and student math scores. In their study, they found, "time spent directly coaching teachers is positively associated with achievement gains and school improvement" (p. 18). Some of the larger schools and districts in the study also employed instructional coaches, which was a position that was not considered an administrative position in these districts. Two of the schools in the study had instructional coaches, provided by their school district, who met with teachers to improve their instruction. However, seven of the schools in this study were not part of larger school districts and likely did not have access to instructional coaches to help support the instruction in their building. By not having instructional coaches in the building, the buildings, principals were the primary person to coach teachers on their instruction and provided professional development.

Another aspect that helped the principals in leading instruction in their schools was the abundant data sources available to teachers and administrators due to students' use of online platforms. One of the distinguishing features of blended learning is the amount of data available to teachers and administrators compared to schools not using blended learning. While most schools use data to inform instruction, blended schools utilize the data from the students' experience learning online. This online learning component provides much more data to the staff than would be possible in a non-blended classroom. Some of the online platforms used by schools in this study, such as Garden Grove Middle School, analyzed every mouse click students made. Three of the schools in the study that used the platform Edgenuity were able to compare the amount of time students spent in each lesson and compared that to an average pace for students to complete each lesson. This study found that most of the principals who participated in this study regularly analyzed the available online data to them. The principals also expected the instructional staff to analyze student learning data frequently; several school leaders expected

their teachers to analyze student learning data daily. While many of the schools in this study used different learning management systems, this focus on data from those systems was common among school leaders.

Leaders differed on how they used the data; some had moved away from weekly meetings where they participated with teachers in analyzing data. Some continued to meet with teams of teachers regularly. The more online content a school used, the more frequent the data analysis seemed to occur. There seemed to be a relationship between the amount of technology used and the amount of data that schools analyzed. However, one school, Courage Academy, did not use online content school-wide but did use online platforms to assess student learning at the end of every lesson. The principal expected teachers to analyze the data from the assessments and adjust instruction the following day. Creek Elementary School had a long history of analyzing data from students' online programs. The teachers used the learning management system's data to adjust their small groups' composition for the following day. Teachers could see which students were struggling, then the following day, the teacher grouped students depending on their need and then re-taught the lesson or skill to the group.

Another manifestation that arose from the data regarding how the principals improved the instruction in their school was through the use of frameworks and constructs that served as mental scaffolds to organize the principals' thoughts or activities, such as a team meeting protocol. John, the Eagle Academy principal, used several frameworks to help him manage change and evaluate the instruction that occurred when students were on campus. Other principals used agreements or graduate competencies to help guide their work and conversations with others. As mentioned earlier, principals would also use frameworks to help them in their instructional walkthroughs.

Desk Work

Desk work has been an inescapable part of any principal position. The image of a principal behind a large desk in an office has been ingrained in the popular imagination. The lived experience of principals in this study also spent part of their lived experience sitting behind a desk to function in their role. The time that principals spent working at their desks was another manifestation that was not unique to principals of blended schools. While the data available to the principal of a blended school sitting at their desk might be different from that of a traditional school, many other aspects related to the work that a principal did at their desk would be similar.

The principals in this study found different strategies to manage the time they needed to spend working behind their desks. Some of these strategies included hiring additional administrators, alternating office time with other administrators, and working on paperwork after instructional hours. The time that the principals sat at their desks corresponded to studies on principals' use of time. In these studies, principals spent 25 to 28% of their time working alone (Sebastian et al., 2018; Youngs et al., 2020), which one would assume was behind a desk. These functions included emailing parents, teachers, students, and other administrators. These communicative tasks could also be seen as examples of the manifestation of building relationships. Besides emails, the principals had to complete teacher evaluations, plan professional development, and complete reports and surveys. The principals of River Middle School and Creek Elementary both found ways to limit the amount of time they spent in their office on desk work. Youngs et al. (2020) found that 57% of the tasks were managerial in nature when the principal worked by themselves. These tasks included "activities related to issues of compliance and completion of paperwork" (Youngs et al., 2020, p. 78). Michael, from River Middle School, who worked on paperwork after instruction hours was also found in the work of

Youngs et al., where over half of the activities that principals worked alone on occurred outside of instructional hours. This last strategy could explain the long hours that principals spent working on the job.

This aspect of principals' lived experience was seen as "aggravating to deal with" (Mathis, 2012, p. 94). Anthony from Hamilton High School would check his email first thing after he woke up in the morning to help him get prepared for the morning so that he knew what he was "walking into" when he arrived at his school. The administrative workload that principals faced was a typical manifestation to all of the principals in the study. Each principal faced the workload in different ways depending on the school's context. While the schools that were part of the school district had the support of a central office that helped ease the burden of some of the managerial tasks, the principals who led charter schools spent more time on administrative tasks related to human resources and finance.

Implications of the Research

The implications of this research remain to be seen. When the interviews for this study were conducted, the world was amid the corona virus disease 2019 (COVID-19) pandemic. Many of the schools around the world had transformed from in-person to online learning. In the spectrum of blended learning, in-person learning and online learning were opposite ends of the blended learning continuum (Graham, 2013). The research on the impact of blended learning during the COVID-19 pandemic is in its infancy stage. It is an open question as to how the blended learning and online learning experienced by teachers and students during the pandemic will impact the future of kindergarten–12 (K–12) education.

There are several implications for this study, both at the school and the district level. One of the issues related to blended learning is the research on its effectiveness is mixed. There is no

clear consensus that it is effective in increasing student achievement. While searching for participants for this study, it was difficult to find principals whose blended schools were rated at the highest level of accreditation by their state education agency. The tentative manifestations that arose from this study should serve as signposts for school and district leaders. These signposts could help improve the leadership of blended schools. These signposts would include the leaders of blended schools focusing on collaboration, school culture and climate, and using frameworks and data to insure quality instruction in their school. The implication of desk work is not as significant as the previous three manifestations that arose from the study. Desk work is a necessary component of the lived experience of any school principal; however, it does not rise to the level of importance of the previous three manifestations.

The implication of collaboration is important as it empowers the teachers and staff in a building. It is important for the principal of a blended school to empower their staff through enabling them to make decisions and have input into the blended designs. By having multiple members on a design team or grade level PLC, the problems can be analyzed and solved by the multiple perspectives of the members of the team. By building a collaborative staff culture, the school principal is also modeling the 21st century skill of collaboration to their staff, who would then, in turn, create collaborative classroom structures.

The second manifestation, developing the climate and culture of the school, is also important. Some prominent blended schools resembled call centers where students sit in cubicles to work on their online curriculum. Most of the principals in this study had a focus on the climate and culture of their building and wanted their schools to be warm and inviting. The principals of this study also used relationships and strategies such as ceremonies to bring the staff and students together to reinforce the values of the school. Even though blended schools have a lot of

technology, the leaders of blended schools need to find ways to balance the technology with face-to-face interactions and relationships.

The final implication would be to use frameworks, data, and coaching to develop the instruction in the building. Blended learning is not simply putting instruction online, but it is the interaction between the online instruction and the face–to–face instruction mediated by the teacher who makes blended learning. The principal in a blended school needs to spend time ensuring that mediation by the teacher is skillful and not just student-centered, but learner-driven. This mediation is very nuanced and dependent on the needs of individual students. Therefore, it is important that principals of blended schools use tools such as frameworks and data to help teachers navigate the complexity in running a blended classroom. Finally, the principal also has to be data literate and needs to be able to develop their teachers into being data literate. One of the most effective ways that principals can develop their instruction is through a coaching model that several of the principals in this study used. The coaching model empowers the teachers to become more effective in their own instructional development.

Future Research

Vagle (2016) wrote that a post-intentional phenomenological text should capture "tentative manifestations of the phenomenon in its multiple, partial, and varied contexts" (p. 121). This study helps lay a foundation for future research on leadership and blended learning. There are many recommendations for future research in blended learning and leadership, both qualitative and quantitative methods. The following section lists recommendations for future research.

1. Because of the mixed research on blended learning and, in particular, the low achievement of some hybrid models, it would be important to understand

leadership factors that affect the achievement of students in these hybrid blended schools. A quantitative factor analysis would help answer what leadership factors affect student achievement at these types of schools.

2. Another area that one of the principals in the study brought up was how blended schools provided professional development for their teachers. A mixed-method grounded theory study could be conducted to examine effective models of professional development that support teachers.
3. The topic of supporting students through the transition from traditional schools to blended schools arose during the interviews with the principals in this study. In this study, every school had different methods to help support students' transition from a traditional school to a blended school. However, a study identifying the best practices of supporting students during this transition would help educators of blended schools.
4. A case study of the lived experiences of students, teachers, parents, and administrators of successful hybrid schools would also help hybrid schools and the districts to determine how to best support these students by carefully examining their lived experiences.
5. Other areas for future research could be on how principals structure meetings and what processes, structure, and language principals use during the various meetings they attend throughout their day. Since this current study corresponded to previous research findings that principals spent a great deal of time in meetings, more research should be done on this aspect of a principal's time.

Finally, given the disruptive growth of online learning in 2020 and 2021, there should be additional research supporting teachers with their newfound technology skills as they return to in-person instruction. There have been many buildings and entire districts that have transitioned to hybrid models because of the pandemic, it would be necessary for school and district leaders to support them with blended learning.

Considerations

The results of this study should illuminate the lived experience of principals of successful blended schools. However, there were several considerations to this study. These considerations are similar to limitations used in quantitative research, but considerations are more dynamic than the more static notion of limitations used in quantitative research. The qualitative nature of this study has both positive and negative implications. Unlike an experimental study, this study's qualitative nature has provided an abundance of information about the phenomenon of leading successful blended schools, but the study was limited in the generalizability of the findings. This study's considerations were primarily related to researcher's bias, generalizability, replicability, and sample size. However, the study was designed to bridle these considerations of the study as much as possible.

Another consideration of the study that influenced the study's sample size was the COVID-19 pandemic. By the time the Institutional Review Board approved the study, many schools across the country had ceased face–to–face instruction, and students were learning remotely from home using either online lessons or work packets that were printed and picked up from school. Many public and school libraries were closed, limiting the number of books that students could access. For K–12 educators, this was an incredibly stressful and challenging time.

I believe the difficulty of running an online or remote school impacted the sample size by limiting the number of principals willing to participate in this study.

Another consideration that affected this study was the impact of not observing the leaders in the study due to the pandemic. Ideally, a study that involves a lived experience investigation would involve some observation of the participants in their daily experience. However, this was not a possibility. Since the primary source of data collection was semi-structured interviews, I did have an influence on the interviews that I conducted. I tried to bridle my influence by asking the questions listed in Appendix D, but I did choose follow-up questions based on the participants' responses.

Another consideration was the broad definition of blended learning and the definition of blended learning pre-pandemic and post-pandemic. The literature review for this study was conducted before the pandemic when blended learning was growing exponentially and there was a clear separation between online, blended learning, hybrid, and technology rich schools. However, during post-pandemic, all of these terms have acquired new meaning. A report by the Digital Learning Collaborative (2019) found that in the 2017-2018 school year, 31 states allowed online schools, and approximately 310,000 students were enrolled in online schools. The report also found that online school enrollment grew at an average of 6% a year between 2009 to 2019. In March of 2020, in a matter of a few weeks, the number of K–12 students learning online jumped from the hundreds of thousands to the tens of millions. However, this online learning and blended learning that occurred in the past year should be labeled as emergency remote learning (Hodges et al., 2020). The reason that online learning and emergency remote learning should not be confused is that "effective online learning results from careful instructional design and planning, using a systematic model for design and development." (p. 1). Many of the online

learning experiences that students had this past year were not planned with such care but were created in haste because of a global emergency. The impact of this disruption cannot be overstated; even the definitions used in this study were limited to the time before the pandemic when most K–12 students and educators had limited experience with online learning.

Finally, considering the millions of students and teachers who have experienced emergency remote learning this past year, it might be time to either redefine blended learning or put the term to rest. The term blended learning had a different meaning before 2020 in part because it was unique and different from the normal mode of instruction in schools. However, during the time of emergency remote teaching, online instruction became the default mode of instruction. As students began to go back to in-person, many students experienced hybrid learning. In the coming years, blended learning could become the standard model of instruction. If this becomes the case, the term blended learning will just become the default mode of instruction and the term will cease to have meaning.

Conclusion

Since the release of *Disrupting Class* by Christensen et al. (2010), the concept of blended learning has been brought to the attention of many K–12 educators. While there has been a substantial growth of blended learning since 2011, the book's predictions of a large-scale transformation of schools towards blended learning have yet to be seen. However, the authors of *Disrupting Class* could not have predicted the large scale move to online learning that occurred due to the COVID-19 pandemic. The impact that this enormous disruption towards online learning will have on K–12 education remains to be seen. The practices and models of blended learning discussed in the book have continued to grow.

However, educators must be cautious about simply putting students in front of computers in the hopes of improving student learning. The research on blended learning has been mixed, and the factors that create successful blended learning schools need to be studied further. This study illuminated some of the lived experiences of educators who have led successful blended schools. There are still many unsuccessful blended schools, and some have failed and closed. Educators need to learn from those educators who have tried different models and methods. While there has been a growing body of research on blended learning in K–12 schools, there has been no consensus on the best way to transition a school to blended learning or lead a school that uses blended learning.

This study found that successful blended learning leaders had similar lived experiences as the principals of more traditional schools. Their experiences and time spent on specific tasks mirrored that of prior research on the experiences of principals of traditional schools going back to the late 1970s and early 1980s. These manifestations included the following: (a) collaboration, (b) cultivating culture and climate, (c) developing and evaluation of instruction, and (d) desk work. While the schools' pedagogical models differed from traditional schools, the principals' lived experiences were similar to those of principals in more traditional schools. Eight of the 12 principals started their school administrative roles in a school before it transitioned to blended learning or at a different school that did not use blended learning. Their experiences in these more traditional buildings had to have had an impact on their role as the leader of their building that uses blended learning. This could be welcomed news to educational leaders as blended learning models will continue to grow into the future because their experiences in traditional schools should serve them well if they transition to leading a school that uses blended learning.

REFERENCES

Agostini, M. E. (2013). *The role of leadership in starting and operating blended learning charter schools: A multisite case study* (Doctoral dissertation). Drexel University.

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, *84*(3), 261. http://llgarcia.educ.msu.edu/910reading/ ames%201992.pdf

Arney, L. (2015). *Go blended*. Jossey-Bass.

Bailey, J., Martin, N., Schneider, C., & Vander Ark, T., & contributors Carter, S. C., Duty, D., Ellis, S., Hassel, B., Ayscue Hassel, E., Martin, N., Owens, D., Patrick, S., Rabbitt, B., Sturgis, C., & Terman, A. (2013). Blended learning implementation guide 2.0. In *Navigating the digital shift: Implementing strategies for blended and online learning* (pp. 15-73). Digital Learning Now. https://www.gettingsmart.com/wp-content/uploads/2013/10/DLN-ebook-navigating-PDF.pdf

Baker, B. D., Farrie, D., & Sciarra, D. G. (2016). Mind the gap: 20 years of progress and retrenchment in school funding and achievement gaps. *ETS Research Report Series*, *2016*(1), 1-37.

Balfanz, R., & Legters, N. (2004). Locating the dropout crisis. Which high schools produce the nation's dropouts? Where are they located? Who attends them? (Report 70). *Center for Research on the Education of Students Placed at Risk CRESPAR* (ED484525). ERIC. https://files.eric.ed.gov/fulltext/ED484525.pdf

Bambrick-Santoyo, P. (2018). *Leverage leadership 2.0: A practical guide to building exceptional schools*. John Wiley & Sons.

Barrett, S. K., & Ableidinger, J. (2013). *Rocketship education: Pioneering charter network innovates again, bringing tech closer to teachers—An opportunity culture case study* (ED560187). ERIC. https://files.eric.ed.gov/fulltext/ED560187.pdf

Batalden, P. (2010). *Every system is perfectly designed to get the results it gets*. https://www.researchgate.net/profile/Paul_Barach/publication/235897432_Actions_and_Not_Words_Report_on_the_development_of_an_overarching_strategy_to_drive_clinician_engagement_for_continuous_quality_improvement/links/09e41513ec5e99abad000000/Actions-and-Not-Words-Report-on-the-development-of-an-overarching-strategy-to-drive-clinician-engagement-for-continuous-quality-improvement.pdf

Battaglino, T. B., Haldeman, M., & Laurans, E. (2012). The costs of online learning. In C. E. Fin, Jr. & D. R. Fairchild (Eds.), *Education reform for the digital era* (pp. 1-13) (ED532508). ERIC. https://files.eric.ed.gov/fulltext/ED532508.pdf#page=60

Bertrand, C., Allen, L., & Steinberg, A. (2013). *Using educational technology to help students get back on track. jobs for the future* (ED559672). ERIC. https://files.eric.ed.gov/fulltext/ED559672.pdf

Biancarosa, G., & Griffiths, G. G. (2012). Technology tools to support reading in the digital age. *The Future of Children*, *22*(2), 139-160. ERIC. https://www.jstor.org/stable/23317415?seq=1

Bienkowski, M., Feng, M., & Means, B. (2012). Enhancing teaching and learning through educational data mining and learning analytics: An issue brief. *US Department of Education, Office of Educational Technology*, *1*, 1-57.

Biesta, G. (2009). Good education in an age of measurement: On the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*, *21*(1), 33-46. https://doi.org/10.1007/s11092-008-9064-9

Blase, J., & Blase, J. (2000). Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools. *Journal of Educational Administration*, *38*(2), 130-141.

Bloom, B. S. (1984). The 2 sigma problem: The search for methods of group instruction as effective as one-to-one tutoring. *Educational Researcher*, *13*(6), 4-16. http://www-inst.eecs.berkeley.edu/~cs375/sp15/resources/Bloom_ The2SigmaProblem.pdf

Boninger, F., Molnar, A., & Murray, K. (2017). Asleep at the switch: Schoolhouse commercialism, student privacy, and the failure of policymaking—The nineteenth annual report on schoolhouse commercializing trends, 2017. *National Education Policy Center* (ED578785). ERIC. https://files.eric.ed.gov/fulltext/ED578785.pdf

Bridgeland, J. M., DiLulio, J. J., Jr., & Morison, K. B. (2006). *The silent epidemic: Perspectives of high school dropouts* (ED513444). ERIC. https://files.eric.ed.gov/fulltext /ED513444.pdf

Brodersen, R. M., & Randel, B. (2017). *Measuring student progress and teachers' assessment of student knowledge in a competency-based education system* (ED572995). ERIC. https://files.eric.ed.gov/fulltext/ED572995.pdf

Buera, F. J., & Kaboski, J. P. (2012). The rise of the service economy. *American Economic Review*, *102*(6), 2540-2569. https://www.researchgate.net/profile/ Francisco_ Buera/publication/24122348_The_Rise_of_the_Service_Economy/links/ 00b495315d21c12a43000000.pdf

Caelli, K. (2000). The changing face of phenomenological research: Traditional and American phenomenology in nursing. *Qualitative Health Research, 10,* 366–77.

Cakir, H., DelialiOglu, O., Dennis, A., & Duffy, T. (2009). Technology enhanced learning environments for closing the gap in student achievement between regions: Does it work. *American Association of Clinical Endocrinologists Journal*, *17*(4), 301–315.

Castañeda, L., & Selwyn, N. (2018). More than tools? Making sense of the ongoing digitizations of higher education. *International Journal of Educational Technology in Higher Education, 15,* Article 22. doi:10.1186/s41239-018-0109y

Christensen, C. M., Horn, M. B., & Johnson, C. W. (2008). How disruptive innovation will change the way we learn. *Education Week, 27*(39), 25–36.

Christensen, C. M., Johnson, C. W., & Horn, M. B. (2010). *Disrupting class: How disruptive innovation will change the way the world learns*. McGraw-Hill.

Choudhury, S., & McKinney, K. A. (2013). Digital media, the developing brain and the interpretive plasticity of neuroplasticity. *Transcultural psychiatry*, *50*(2), 192-215. https://s3.amazonaws.com/academia.edu.documents/31360842 /Digital_media_adoles_brain.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A& Expires=1552933300&Signature=XmPeUBFS2zX%2BGtB0jEcEJ4cvIus%3D&response -content-disposition=inline%3B%20filename%3DDigital_media_the_developing _brain_and_t.pdf

Chubb, B. J. E. (2012). *Overcoming the governance challenge in K-12 online learning*. Thomas B. Fordham Institute. https://edexcellence.net /publications/overcoming-the-governance-challenge-in-k-12-online-learning.html

Church, R. L., & Sedlak, M. W. (1976). *Education in the United States: An interpretive history*. Free Press.

Cilesiz, S. (2011). A phenomenological approach to experiences with technology: Current state, promise, and future directions for research. *Educational Technology Research and Development, 59*(4), 487-510.

Clayton Christensen Institute. (2018). *Blended learning*. https://www.christenseninstitute.org /blended-learning/

Corbett, A. (2001, July). Cognitive computer tutors: Solving the two-sigma problem. In *International Conference on User Modeling* (pp. 137-147). Springer.

Craig, J. (2006). School culture: The hidden curriculum. *The Centre for Comprehensive School Reform and Improvement*, 1–7.

Creswell, J. W. (2012*). Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson Education.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage.

Crotty, M. (1998*). The foundations of social research: Meaning and perspective in the research process*. Sage.

Cuban, L., Kirkpatrick, H., & Peck, C. (2001). High access and low use of technologies in high school classrooms: Explaining an apparent paradox. *American Educational Research Journal, 38*(4), 813-834. http://ocw.metu.edu.tr/file.php/118/Cuban _KirkpatrickHigh_Access_and_Low_Use_ofTechnologies_in_High_School.pdf

Daggett, W. R. (2005). Achieving academic excellence through rigor and relevance. *International Center for Leadership in Education.*

Dahlberg, K. (2006). The essence of essences—The search for meaning structures in phenomenological analysis of lifeworld phenomena. *International Journal of Qualitative Studies on Health and Well-Being*, *1*(1), 11-19. https://www-tandfonline-com.unco.idm.oclc.org/doi/full/10.1080/17482620500478405

Dahlberg, K., Dahlberg, N., & Myström, M. (2008). *Reflective lifeworld research (2nd ed.).* Studentlitteratur.

Darling-Hammond, L. (2006). No child left behind and high school reform. *Harvard Educational Review*, *76*(4), 642–667. https://www.researchgate.net/profile /Linda_Darling-Hammond/publication/251964653_No_Child_ Left_Behind_and_ High_School_Reform/links/0a85e537c69a82670f000000/No-Child-Left-Behind-and-High-School-Reform.pdf

Darling-Hammond, L., Friedlaender, D., & Snyder, J. (2014). *Student-centered schools: Policy supports for closing the opportunity gap*. Retrieved June, 15, 2016 from https://edpolicy.stanford.edu/sites/default/files/scope-pub-student-centered-policy.pdf

Darling-Hammond, L., Zielezinski, M. B., & Goldman, S. (2014). *Using technology to support at-risk students' learning*. Stanford Center for Opportunity Policy in Education. https://edpolicy.stanford.edu/publications/ pubs/1241

DeCharms, R. (1976). *Enhancing motivation: Change in the classroom*. Irvington.

Deci, E. L., Nezlek, J., & Sheinman, L. (1981). Characteristics of the rewarder and intrinsic motivation of the rewardee. *Journal of Personality and Social Psychology*, *40*(1), 1. https://www.researchgate.net/profile/Edward_Deci/publication/232517218_Characteristics_of_the_Rewarder_and_Intrinsic_Motivation_of_the_Rewardee/links/5591655708ae47a34910a185/Characteristics-of-the-Rewarder-and-Intrinsic-Motivation-of-the-Rewardee.pdf

de Saxe, J. G., Bucknovitz, S., & Mahoney-Mosedale, F. (2018). The deprofessionalization of educators: An intersectional analysis of neoliberalism and education "reform". *Education and Urban Society*. https://doi.org/10.1177/0013124518786398

Delorenzo, R. A., & Battino, W. (2009). *Delivering on the promise: The education revolution*. Solution Tree Press.

Dewey, J. (2013). *The school and society and the child and the curriculum*. University of Chicago Press. (Original work published 1900)

Digital Learning Collaborative. (2019). *Snapshot 2019: A review of K-12 online, blended, and digital learning*. https://static1.squarespace.com/static/59381b9a17bffc68bf625df4/t/5cae3c05652dea4d690f5315/1554922508490/DLC-KP-Snapshot2019_040819.pdf

DuFour, R. (2002). The learning-centered principal. *Educational Leadership*, *59*(8), 12–15.

DuFour, R., & DuFour, R. (2013). *Learning by doing: A handbook for professional learning communities at work*. Solution Tree Press.

Elmore, R. F. (2000). *Building a new structure for school leadership*. Albert Shanker Institute. http://www.shankerinstitute.org/sites/shanker/files/building.pdf

Engel, S. (2015). *The end of the rainbow: How educating for happiness not money would transform our schools*. New Press.

European Organization for Nuclear Research. (2017). *Topics*. https://home.cern/topics/birth-web

Evans, M. (2012). *A guide to personalizing learning: Suggestions for the race to the top-district competition* [Education white paper] (ED535179). ERIC. https://files.eric.ed.gov/fulltext/ED535179.pdf

Fang, B. (2007). A performance-based development model for online faculty. *Performance Improvement, 46*(5), 17-24.

Farrington, C. A., & Small, M. H. (2008). *A new model of student assessment for the 21st century*. U.S. Virgin Islands, Math and Science Partnership Network. http://usvi.mspnet.org/media/data/media_000000006483.pdf

Ferguson, R. F. (2007). *Toward excellence with equity: An emerging vision for closing the achievement gap*. Harvard Education Press.

Fesmire, S. (2016). Democracy and the industrial imagination in American education. *Education and culture, 32*(1), 53-61.

Filiss, T. O. (2020). *How Transformational Leadership Competencies and Related Actions Influence High School Blended Learning Environments* (Publication Order No. 27961003). Available from ProQuest Dissertations & Theses Global.

Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research, 59*(2), 117-143.

Gadamer, H. G. (1995). *Truth and method* (Rev. ed.) (J. Weinsheimer & D. G. Marshall, Trans). Continuum International Publishing Group.

Galey, S. (2016). The evolving role of instructional coaches in US policy contexts. *The William & Mary Educational Review, 4*(2), 11.

Gallien, T., & Oomen-Early, J. (2008). Personalized versus collective instructor feedback in the online courseroom: Does type of feedback affect student satisfaction, academic performance and perceived connectedness with the instructor? *International Journal on E-learning, 7*(3), 463-476.

Glowa, L., & Goodell, J. (2016). Student-centered learning: Functional requirements for integrated systems to optimize learning. *International Association for K-12 Online Learning* (ED567875). ERIC. https://files.eric.ed.gov/fulltext/ED567875.pdf

Graham, C. R. (2013). Emerging practice and research in blended learning. In M. G. Moore (Ed.), *Handbook of distance education*, (3rd ed., pp. 333–350). Rutledge.

Graham, C., Cagiltay, K., Craner, J., Lim, B.-R., & Duffy, T. M. (2000). Teaching in a web based distance learning environment: An evaluation summary based on four sources (CRLT Technical Report 13-00). Center for Research on Learning and Technology, Indiana University.

Green, C. (2012, October 3). The flipped classroom turns around an at-risk, failing school. *Getting Smart*. http://gettingsmart.com/cms/blog/2012/10/the-flipped- classroom-turns-around-at-risk-failing-school/

Grissom, J. A., & Loeb, S. (2011). Triangulating principal effectiveness: How perspectives of parents, teachers, and assistant principals identify the central importance of managerial skills. *American Educational Research Journal*, *48*(5), 1091–1123.

Grissom, J. A., Loeb, S., & Master, B. (2013). Effective instructional time use for school leaders: Longitudinal evidence from observations of principals. *Educational Researcher, 42*(8), 433–444.

Grolnick, W. S., & Ryan, R. M. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology*, *52*(5), 890. https://www.researchgate.net/profile/Wendy_Grolnick/publication/ 19575630_ Autonomy_in_Children%27s_Learning_An_Experimental_and_Individual_Difference_Investigation/links/00b7d51866d702860f000000/Autonomy-in-Childrens-

Hall, G. S. (1904). *Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion and education*. D. Appleton. Learning-An-Experimental-and-Individual-Difference-Investigation.pdf

Hallinger, P., & Heck, R. H. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980-1995. *Educational Administration Quarterly*, *32*(1), 5–44.

Hamilton, L. S., Stecher, B. M., & Yuan, K. (2009). *Standards-based reform in the United States: History, research, and future directions*. Research and Development.

Hendon, A. (2010). *H.L. Mencken on governments and politicians.* The American Mercury. https://theamericanmercury.org/2010/04/h-l-mencken-on-governments-and-politicians/

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020, March 27). *The difference between emergency remote teaching and online learning*. EDUCAUSE. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

Horn, M. B., & Staker, H. (2015). *Blended: Using disruptive innovation to improve schools*. John Wiley & Sons.

Hoy, W. K. (1990). Organizational climate and culture: A conceptual analysis of the school workplace. *Journal of Educational and Psychological Consultation, 1*(2), 149–168. https://doi.org/10.1207/s1532768xjepc0102_4

Hughes, B. J., Sullivan, H. J., & Beaird, J. (1986). Continuing motivation of boys and girls under differing evaluation conditions and achievement levels. *American Educational Research Journal*, *23*(4), 660–667.

Ihde, D. (2003). *Postphenomenology-again* [Working paper 3 2003]? Department of Information & Media Studies. http://sts.au.dk/fileadmin/sts/publications/working_papers /Ihde_-_Postphenomenology_Again.pdf

International Association for K–12 Online Learning. (2015). *Blending learning: The evolution of online and face-to-face education from 2008-2015*. http://www.inacol. org/wp-content/uploads/2015/07/iNACOL_Blended-Learning-The-Evolution-of-Online-And-Face-to-Face-Education-from-2008-2015.pdf

Jacob, A. M. (2011). Benefits and barriers to the hybridization of schools. *Journal of Education Policy, Planning and Administration, 1*(1), 61–82.

Jenkins, H. (1998). Childhood innocence and other modern myths. In H. Jenkins (Ed.), *The children's culture reader* (pp, 1–37). University Press.

Joiner, L. M., Miller, S. R., & Silverstein, B. J. (1980). Potential and limits of computers in schools. *Educational Leadership, 37*(6), 498–501. https://pdfs.semantic scholar.org/da75/9b1f3dd599f891cb4359079aa2080263186d.pdf

King, M. L., Jr. (1947). The purpose of education. *The Maroon Tiger*, *10*, 123–124.

King, J. A., & Evans, K. M. (1991). Can we achieve outcome-based education? *Educational Leadership*, *49*(2), 73–75. http://ascd.com/ASCD/pdf/journals/ed_lead /el_199110_ king.pdf

Klar, H. W., & Brewer, C. A. (2013). *Successful leadership in high-needs schools: An examination of core leadership practices enacted in challenging contexts*. SAGE Journals. http://eaq.sagepub.com/content/early/2013/03 /29/0013161X13482577

Koenen, A. K., Dochy, F., & Berghmans, I. (2015). A phenomenographic analysis of the implementation of competence-based education in higher education. *Teaching and Teacher Education*, *50*, 1–12.

Kouzes, J. M., & Posner, B. Z. (2014). *The leadership challenge*. Jossey-Bass.

Labaree, D. F. (2012). *Someone has to fail*. Harvard University Press.

Lee, D. (2015). *Personalized learning practice, technology use, and academic performance in K–12 learner centered schools in the US* (Doctoral dissertation). Indiana University.

Leithwood, K., & Jantzi, D. (1999). The relative effects of principal and teacher sources of leadership on student engagement with school. *Educational administration quarterly*, *35*(5), 679–706.

Leithwood, K., Jantzi, D., & Steinbach, R. (1999). *Changing leadership for changing times*. McGraw-Hill Education.

Leland, C. H., & Kasten, W. C. (2002). Literacy education for the 21st century: It's time to close the factory. *Reading & Writing Quarterly*, *18*(1), 5–15. https://s3.amazonaws.com /academia.edu.documents/46513306/Literacy_education_for_the_21st_century_20160615-4798-dqje72.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1527973150&Signature=sHF7aJRVofuV8l5s0%2FN6EkrQifw%3D&response-content-disposition=inline%3B%20filename%3DLiteracy education_for_the_21ST_Century_I.pdf

Loh, K. K., & Kanai, R. (2016). How has the internet reshaped human cognition? *The Neuroscientist*, *22*(5), 506–520.

Luster, S. M. (2015). *At-risk high school graduates: Succeeding despite the odds.* University of Northern Colorado. https://unco.idm.oclc.org/login?url=https: //search-proquest-com.unco.idm.oclc.org/docview/1776157902?accountid=12832

Maine Department of Education. (2012). *Education evolving Maine's plan for putting learners first*. Retrieved from http://www.maine.gov/doe/plan/strategic_plan_web_final.pdf

Martin, W. J., & Willower, D. J. (1981). The managerial behavior of high school principals. *Educational Administration Quarterly*, *17*(1), 69–90.

Marzano, R. J. (2013). *High reliability school*. Iowa Association for Supervision and Curriculum Development.

Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works: From research to results*. Association for Supervision and Curriculum Development.

Maseleno, A., Sabani, N., Huda, M., Ahmad, R., Jasmi, K. A., & Basiron, B. (2018). Demystifying learning analytics in personalized learning. *International Journal of Engineering & Technology, 7*(3), 1124–1129.

Mathis, P. A. (2012). Experiences of suburban and rural high school principals who have attained longevity in the position: A qualitative study [Doctoral dissertation, Western Michigan University]. Scholarworks at WMU. https://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1118&context=dissertations&httpsredir=1&referer=

Maxwell, T. A. (2017). *Clarity of purpose and the freedom to lead: An exploration of principal autonomy Colorado charter schools.* (Publication No. 10812699) [Doctoral dissertation, University of Northern Colorado]. ProQuest Dissertation Publishing.

Maynard, M. (1994). Methods, practice and epistemology: The debate about feminism and research. In M. Maynard & J. Purvis (Eds.), *Researching women's lives from a feminist perspective* (pp. 10–26). Taylor and Francis.

McLeod, S., & Richardson, J. W. (2014). School administrators and K–12 online and blended learning. In R. E. Ferdig & K. Kennedy (Eds.), *Handbook of research on K–12 online and blended learning* (pp. 285–301). Entertainment Technology Center Press.

Means, B., & Anderson, K. (2013). Expanding evidence approaches for learning in a digital world. *Office of Educational Technology, US Department of Education* (ED566873).

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies.* U.S. Department of Education. https://www2.ed.gov /rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Medved, D. (2016). *Leveraging improvement science to operationalize a competency-based school model: A descriptive case study* (Unpublished doctoral dissertation). University of Denver.

Merriam, S. B. (1998). *Qualitative research and case study applications in education* (Revised and expanded). Jossey-Bass.

Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis.* Jossey-Bass.

Merriam, S. B. (2009). *Qualitative research: A guide to design and interpretation*. Jossey-Bass.

Merriam, S. B., & Tisdell, E. J. (2009). *Qualitative research: A guide to design and implementation* (2nd ed.). John Wiley & Sons.

Miksic, M. (2014). The persistent achievement gaps in American education. *City University of New York, Institute for Education Policy*. https://www.researchgate.net /profile /Mai_Miksic/publication/321590923_The_Persistent_Achievement _Gaps_in_American_Education/links/5a283a0eaca2727dd886fd0e/The-Persistent-Achievement-Gaps-in-American-Education.pdf

Miron, G., & Gulosino, C. (2016). *Virtual schools report 2016: Directory and performance review*. ERIC. https://files.eric.ed.gov/fulltext/ED574701.pdf

Miron, G., Shank, C., & Davidson, C. (2018). *Report full-time virtual and blended schools: Enrollment, student characteristics, and performance.* National Education Policy Center. http://www.greatlakescenter.org/docs /Policy Briefs/Miron-Virtual-Schools-2018.pdf

Molnar, A., & Boninger, F. (2015). *On the block: Student data and privacy in the digital age—The seventeenth annual report on schoolhouse commercializing trends, 2013-2014* (ED558607). ERIC. https://files.eric.ed.gov/fulltext/ED558607.pdf

Molnar, A., Miron, G., Gulosino, C., Shank, C., Davidson, C., Barbour, M. K., Huerta, L., Shafter, S. R., Rice, J. K., & Nitkin, D. (2017). *Virtual Schools Report 2017*. National Education Policy Center. http://nepc.colorado.edu/publication/virtual-schoolsannual-2017

Murphy, J. (1990). Principal instructional leadership. In R. S. Lotto & P. W. Thurston (Eds.), *Advances in educational administration: Changing perspectives on the school* (Vol. 1, Pt. B, pp. 163–200). JAI Press.

National Center for Education Statistics. (2013). *The condition of education 2013.* Department of Education.

National Policy Board for Educational Administration. (2015). *Professional standards for educational leaders 2015*. http://www.ccsso.org/Documents/2015/ProfessionalStandardsforEducationalLeaders2015forNPBEAFINAL.pdf

Ornstein, A. C., & Hunkins, F. (1993). *Curriculum: Foundations principals, and theory* (2nd ed.). Allyn and Bacon.

Owston, R. D. (1997). Research news and comment: The World wide web: A technology to enhance teaching and learning? *Educational Researcher*, *26*(2), 27–33. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.903.9302&rep=rep1&type=pdf

Palloff, R. M., & Pratt, K. (2008). *Assessing the online learner: Resources and strategies for faculty* (Vol. 7). John Wiley & Sons.

Pane, J. F., Steiner, E. D., Baird, M. D., & Hamilton, L. S. (2015). *Continued progress: Promises evidence on personalized learning*. Research and Development.

Parker, W. C. (2006). Public discourses in schools: Purposes, problems, possibilities. *Educational Researcher*, *35*(8), 11–18.

Patrick, S., Kennedy, K., & Powell, A. (2013). *Mean what you say: Defining and integrating personalized, blended and competency education* (ED561301). ERIC. https://files.eric.ed.gov/fulltext/ED561301.pdf

Patrick, S., & Sturgis, C. (2015). *Maximizing competency education and blended learning: Insights from experts* [Issue brief]. CompetencyWorks. http://www.competencyworks.org/wp-content/uploads/2015/03/CompetencyWorks-Maximizing-Competency-Education-and-Blended-Learning.pdf

Patton, M. Q. (1985, April). *Quality in qualitative research: Methodological principles and recent developments*. Address to Division J of the American Educational Research Association, Chicago, IL, United States.

Patton, M. Q. (2002). Qualitative research and evaluation method. Sage.

Penuel, W. R., & Johnson, R. (2016). *Review of continued progress: Promising evidence on personalized learning*. Semantic Scholar. https://pdfs.semanticscholar.org/1555/110f3f407778e5e534d0cf15be313695d1dc.pdf

Picciano, A. G. (2015). How meta-analysis can inform online and blended learning research. In C. D. Dziuban, A. G. Picciano, C. R. Graham, & P. D. Moskal (Eds.), *Conducting research in online and blended learning environments: New pedagogical frontiers* (pp. 84–92). Routledge.

Picciano, A. G., Seaman, J., Shea, P., & Swan, K. (2012). Examining the extent and nature of online learning in American K-12 education: The research initiatives of the Alfred P. Sloan Foundation. *The internet and higher education, 15*(2), 127–135.

Pitre, C. C. (2014). Improving African American student outcomes: Understanding educational achievement and strategies to close opportunity gaps. *Western Journal of Black Studies, 38*(4), 209.

Pratt, C. J. (2019). Blended learning in elementary schools: An interdependent enterprise. *All Theses and Dissertations,* 201. https://dune.une.edu/theses/201/

Prensky, M., & Berry, B. D. (2001). Do they really think differently? *On the horizon*, *9*(6), 1–9. Retrieved from http://trevithick-society.org.uk/downloads/Prensky-Digital_Natives_ Digital_Immigrants-Part2.pdf

Priest, N., Rudenstine, A., Weisstein, E., & Gerwin, C. (2012). *Making mastery work: A close-up view of competency education*. CompetencyWorks: https://www.competencyworks.org/ wp-content/uploads/2012/11/Making-Mastery-Work-NMEF-2012-Inline.pdf

Public Impact. (2013). *A better blend: A vision for boosting student outcomes with digital learning* (ED560178). ERIC. https://files.eric.ed.gov/fulltext/ED560178.pdf

Quilici, S. B., & Joki, R. (2011). Investigating roles of online school principals. *Journal of Research on Technology in Education*, *44*(2), 141–160.

Redding, S. (2013). *Getting personal: The promise of personalized learning*. Center on Innovations in Learning. http://www.centeril.org/handbook/resources /fullchapter/Getting_Personal_SA.pdf

Reimers, F. (2006). Citizenship, identity and education: Examining the public purposes of schools in an age of globalization. *Prospects*, *36*(3), 275–294.

Reimers, H. R. (2017). *It's different: Perceptions of risk and resilience in older siblings of children with disabilities* (Doctoral dissertation) [UMI No. 10685027, University of Northern Colorado]. ProQuest Dissertations and Theses database.

Robinson, K. (2010). *Changing education paradigms*. University of London Law School. http://www.cfpscourseweb.com/pluginfile.php/1099/block_html/content/RSA%20%20K en%20Robinson %20Lecture%20-%20transcript.pdf

Robinson, V. M., Lloyd, C. A., & Rowe, K. J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly, 44*(5), 635–674.

Rose, T. (2016). *The end of average: How we succeed in a world that values sameness*. Penguin.

Ross, E. W. (2010). Exploring Taylorism and its continued influence on work and schooling. in social studies and diversity education. In E. Heilman (Ed.), *Social studies and diversity teacher education: What we do and why we do it* (pp. 51–55). Routledge.

Ryan, R. M., & Grolnick, W. S. (1986). Origins and pawns in the classroom: Self-report and projective assessments of individual differences in children's perceptions. *Journal of Personality and Social Psychology, 50*(3), 550. https://selfdetermination theory.org/SDT/documents/1986_RyanGrolnick_JPSP.pdf

Saleh, A., & Lamkin, A. P. M. (2008). Reliability and validity of an evaluation tool for the online class. *European Journal of Open, Distance and e-learning, 11*(2).

Santori, D., Ball, S. J., & Junemann, C. (2016). 12 financial markets and investment in education. In A. Verger, C. Lubienski, & G. Steiner-Khamsi (Eds.), *World Yearbook of Education 2016: The Global Education Industry* (p. 193). Routledge.

Schein, E. H. (2004). *Organizational culture and leadership* (4th ed.). Jossey-Bass.

Sebastian, J., & Allensworth, E. (2012). The influence of principal leadership on classroom instruction and student learning: A study of mediated pathways to learning. *Educational Administration Quarterly, 48*(4), 626–663.

Sebastian, J., Camburn, E. M., & Spillane, J. P. (2018). Portraits of principal practice: Time allocation and school principal work. *Educational Administration Quarterly, 54*(1), 47–84.

Selwyn, N. (2009, July). The digital native—myth and reality. *Aslib proceedings, 61(4), 364-379*. Emerald Group Publishing.

Selwyn, N. (2016). Minding our language: Why education and technology is full of bullshit . . . and what might be done about it. *Learning, Media and Technology*, *41*(3), 437–443. http://kc.fiu.edu/wp-content/uploads/2016/09/Minding-our-language-why-education-and-technology-is-full-of-bullshit-and-what-might-be-done-about-it.pdf

Senko, C., Hulleman, C. S., & Harackiewicz, J. M. (2011). Achievement goal theory at the crossroads: Old controversies, current challenges, and new directions. *Educational Psychologist*, *46*(1), 26–47.

Silva, E., White, T., & Toch, T. (2015). *The Carnegie unit: A century-old standard in a changing education landscape* (ED554803). ERIC. https://files.eric.ed.gov/fulltext/ED554803.pdf

Simburg, S., & Roza, M. (2012). *Innovating toward sustainability: How computer labs can enable new staffing structures, and new savings. Schools in crisis: Making ends meet* (ED540443). ERIC. https://files.eric.ed.gov/fulltext/ED566877.pdf

Siskin, L. S. (2004). The challenge of the high schools. In S. H. Fuhran & R. F. Elmore (Eds.), *Redesigning accountability systems for education* (pp. 167–188). http://www.untag-smd.ac.id/files/Perpustakaan_Digital_1/ACCOUNTABILITY%20Redesigning%20accountability%20systems%20for%20education.pdf#page=176

Sleeter, C. (2015). Multicultural education vs. factory model schooling. In H. P. Baptiste, A. Ryan, B. Artaujo, & R Fuhon-Sells (Ed.), *Multicultural education: A renewed paradigm of transformation and call to action* (pp. 115–136). Caddo Gap Press.

Small, G. W., Moody, T. D., Siddarth, P., & Bookheimer, S. Y. (2009). Your brain on Google: Patterns of cerebral activation during internet searching. *The American Journal of Geriatric Psychiatry*, *17*(2), 116–126.

Snyder, T. D., de Brey, C., & Dillow, S. A. (2016). *Digest of education statistics 2014*. National Center for Education Statistics. https://nces.ed.gov/pubs2016 /2016006.pdf

Spady, W. G. (1977). Competency based education: A bandwagon in search of a definition. *Educational researcher*, *6*(1), 9–14.

Stake, R. E. (1995). *The art of case study research*. Sage.

Staker, H., & Horn, M. B. (2012). *Classifying K–12 blended learning*. Innosight Institute. https://www.christenseninstitute.org/wp-content/uploads/2013/04/The-rise-of-K-12-blended-learning.emerging-models.pdf

Starr, J. P. (2016, September 12). *Americans still like their public schools* (Phi Delta Kappa Reports). Learning First Alliance. https://learningfirst.org/blog/americans-still-their-public-schools-pdk-annual-poll-reports

Steele, J. L., Lewis, M. W., Santibanez, L., Faxon-Mills, S., Rudnick, M., Stecher, B. M., & Hamilton, L. S. (2014). *Competency-based education in three pilot programs*. RAND Corporation. https://www.rand.org/pubs/research _briefs/RB9796.html

Stoller, A. (2015). Taylorism and the logic of learning outcomes. *Journal of Curriculum Studies*, *47*(3), 317–333.

Sturgis, C. (2010). *Implementing competency education in K-12 systems*. International Association for K-12 Online Learning. http://www.competencyworks.org/wp-content/uploads/2015/06/iNCL_CWIssueBrief_ Implementing_v5_web.pdf

Sturgis, C. (2012). *The art and science of designing competencies* (ED566877). ERIC. https://files.eric.ed.gov/fulltext/ED566877.pdf

Sturgis, C. (2016). *Reaching the tipping point*. CompetencyWorks. https://www.inacol.org/wp-content/uploads/2016/09/CompetencyWorks_ReachingTheTippingPoint.pdf

Sturgis, C., & Patrick, S. (2010). *When success is the only option: Designing competency-based pathways for next generation learning* (ED514891). ERIC. https://files.eric.ed.gov/ fulltext/ED514435.pdf

Summit Learning. (2018, May 13). *About us*. Summit Learning. https://www.summitlearning. org/ about-us

Sundström, B. W., & Dahlberg, K. (2012). Being prepared for the unprepared: A phenomenology field study of Swedish prehospital care. *Journal of Emergency Nursing, 38*(6), 571–577.

Taylor, F. W. (1911). *The principles of scientific management*. Harper.

Thomas, P. Y. (2008). Managing the change towards a blended learning model at the University of Botswana. *NAWA: Journal of Language & Communication, 2*(1).

Thomas, G., Martin, R., Epitropaki, O., Guillaume, Y., & Lee, A. (2013). Social cognition in leader–follower relationships: Applying insights from relationship science to understanding relationship-based approaches to leadership. *Journal of Organizational Behavior, 34*(S1), S63–S81. http://www.jstor.org/stable/44508590

Thorndike, E. L. (1911). *Individuality*. Riverside Press.

Tobin, T. J. (2004). Best practices for administrative evaluation of online faculty. *Online Journal of Distance Learning Administration, 7*(2), 1–12.

Touraine, A. (1971). *The post-industrial society; tomorrow's social history: Classes, conflicts and culture in the programmed society*. Random House.

Tucker, T. N. (2014). *Virtual K-12 leadership: A postmodern paradigm* (Doctoral dissertation, Florida Atlantic University). http://fau.digital.flvc.org/islandora/object/fau%3A13594 /datastream/OBJ /download/Virtual_K-12_leadership_a_postmodern _paradigm.pdf

Tyack, D. B. (1974). *The one best system: A history of American urban education*. Harvard University Press.

U.S. Department of Education. (1983). *A nation at risk.* https://www2.ed.gov/pubs/NatAtRisk /risk.html

U.S. Department of Education, Office of Educational Technology. (2016). *Future ready learning: Reimagining the role of technology in education* (ED571884). ERIC. https://files.eric.ed.gov/fulltext/ED571884.pdf

U.S. Department of Education, Office of Planning, Evaluation and Policy Development Policy and Program Studies Service. (2015). *Issue Brief: Credit Recovery*. https://www2.ed.gov /rschstat/eval/high-school/credit-recovery.pdf

U.S. National Commission on Technology, Automation, and Economic Progress. (1966). *Technology and the American economy* (Report, Vol. 1-2). U.S. Government Printing Office.

Vagle, M. D. (2016). *Crafting phenomenological research*. Routledge. https://doi.org/10.4324/ 9781315173474

Vagle, M. D., & Hofsess, B. (2014, April). *Amplifying the post in post-intentional phenomenology* [Paper presentation]. Annual meeting of the American Educational Research Association, Philadelphia, PA, United States.

Vagle, M. D., Monette, R., Thiel, J. J., & Wester-Neal, K. (2017). Enacting post-reflexive teacher education. *Pedagogies: An International Journal*, *12*(3), 295–312.

Valentine, K. D., Kopcha, T. J., & Vagle, M. D. (2018). Phenomenological methodologies in the field of educational communications and technology. *TechTrends*, *62*(5), 462–472.

Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). Self-determination and persistence in a real-life setting: Toward a motivational model of high school dropout. *Journal of Personality and Social Psychology*, *72*(5), 1161. https://pdfs.semanticscholar.org /96dd/6c876746cb5d6de7c4a32da8486aad2b8d0d.pdf

Van Duzer, E. (2006). *Overcoming the limitations of the factory system of education* (ED490530). ERIC. https://files.eric.ed.gov/fulltext/ED490530.pdf

Vogel, L. R. (2010). *Leading standards-based education reform: Improving implementation of standards to increase student achievement*. Rowan &Littlefield Education.

Vogel, L. R. (2014). *Moving schools from testing to assessment: A case study of education leadership in state-initiated school improvement for assessment literacy*. LAP Lambert Academic Publishing.

Wang, Y. (2012). *Education in a changing world: Flexibility, skills, and employability.* The World Bank Group. http://documents.worldbank.org/curated/en/517491469672142098 /Education-in-a-changing-world-flexibility-skills-and-employability

Watson, J., Murin, A., Vashaw, L., Gemin, B., & Rapp, C. (2013). *Keeping pace with K–12 online learning: A guide to policy and practice.* http://www.kpk12. com/wp-content/uploads/EEG_KP2013-lr.pdf

Web-Based Education Commission. (2000). *The power of the internet for learning: Moving from promise to practice*. http://www.techknowlogia.org/TKL_Articles/ PDF/277.pdf

Williams, M., Moyer, J., & Jenkins, S. (2014). *District conditions for scale: A practical guide to scaling personalized learning*. KnowledgeWorks. https://knowledgeworks.org/wp-content/uploads/2018/01/district-conditions-scale.pdf.pdf

Wilson, W. (1909, January 9). The meaning of a liberal education. *High school Teachers' Associaton of New York City*, *3*(1908-1909), 19–31.

Withers, K. W. (2019). *A Profile of Principals in Digital Learning Environments*. (Publication No. 10812699) [Doctoral dissertation, University of North Carolina at Greensboro]. ProQuest Dissertation Publishing.

Wolff, R. F. (1999). A phenomenological study of in-church and televised worship. *Journal for the Scientific Study of Religion*, *38*(2), 219–235.

Worthen, M., & Pace, L. (2014). *A K-12 federal policy framework for competency education: Building capacity for systems change* (ED561316). ERIC. https://files.eric.ed.gov/fulltext/ED561316.pdf

Wright, N., & Peters, M. (2017). Sell, sell, sell or learn, learn, learn? The EdTech market in New Zealand's education system–Privatisation by stealth? *Open Review of Educational Research*, *4*(1), 164–176. www-tandfonline-com.unco.idm.oclc.org /doi/full/10.1080/23265507.2017.1365623

Youngs, P., Kim, J., & Mavrogordato, M. (2020). *Exploring principal development and teacher outcomes: How principals can strengthen instruction, teacher retention, and student achievement*. Routledge.

APPENDIX A

SAMPLE EMAIL TO PRINCIPALS

SAMPLE EMAIL TO PRINCIPALS

Dear School Leader,

I am a doctoral candidate in the Educational Leadership and Policies Program at the University of Northern Colorado. I am researching the lived experience of leadership in schools that use blended learning. Your school is one of the 12 schools that I will be studying due to your school's performance on the state standardized assessments. My research question is, "What is the lived experience of leaders in high achieving schools that use blended learning school-wide?"

I want to invite you to participate in my study, so I can learn more about your experience as a leader. I would like to conduct a remote, one-on-one interview with you using Google Meet at a time that is convenient for you. The interview is expected to last approximately 60 - 90 minutes. I might contact you after the interview for a possible follow-up interview. Individual names of the participants, their school, and their school district will not be included in the professional reports resulting from this study. I will audio record the interview, but I will only use pseudonyms and will keep these digital files private on a password-protected device. Only my dissertation co-chairs and I will have access to these files. I will not share the information a participant shares in the interviews with other participants.

As a participant, you will also have the chance to review the transcript of your interview for accuracy. There is not a great deal of research on blended learning or competency-based learning in K - 12 schools.

I hope this study will contribute to the body of knowledge around these types of schools. After completing the interview, you will be paid $50 for your time.

Your participation is voluntary. You may decide at any time to withdraw from the study. Your decision will be respected, and there will be no negative consequences associated with your decision.

If you are interested in participating, please email me at alex7780@bears.unco.edu to notify me of your interest.

Thank you,
Ben Alexander

APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL

UNIVERSITY OF
NORTHERN COLORADO

Institutional Review Board

DATE:	April 14, 2020
TO:	Benjamin Alexander, M.A.
FROM:	University of Northern Colorado (UNCO) IRB
PROJECT TITLE:	[1496276-1] Leadership in High Achieving Schools that use Blended Learning
SUBMISSION TYPE:	New Project
ACTION:	APPROVAL/VERIFICATION OF EXEMPT STATUS
DECISION DATE:	April 14, 2020
EXPIRATION DATE:	April 14, 2024

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Nicole Morse at 970-351-1910 or nicole.morse@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

APPENDIX C

INFORMED CONSENT

CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Project Title: Leadership in High Achieving Schools that use Blended Learning

Researcher: Benjamin Alexander, alex7780@bears.unco.edu

Research Advisor: Dr. Michael Cohen, E-mail: Michael.cohen@unco.edu

My name is Ben Alexander, and I am a doctoral student at the University of Northern Colorado. I am interested in researching the experience of school leaders of high achieving schools utilize blended learning school-wide. I have chosen you as a possible volunteer because you are a principal at a school that is using blended learning.

The purpose of this letter is to explain the research study process and describe your potential participation in the process.

Research Process:

Your participation in this study means you agree to:

Participate in a remote, audio-recorded interview, lasting approximately 60 - 90 minutes. The interview will have to occur over Google Meet at time of your choosing. Also, I might ask you to participate in a follow-up interview.

I will also ask you to share with me any documents that you feel would help me to understand you and your leadership. These documents could include staff memos, school newsletters, bulletins etc. I will use these documents to help me analyze data collected from observations and interviews.

Confidentiality:

I will not record your name or identifying information in notes or in any documentation resulting from this research. You will have the opportunity to choose a fake name or pseudonym which I will use to represent your data.

Benefits and Risks:

A potential indirect benefit to you for participating in this research project is that you will be helping us better understand leadership and leadership practices in schools that utilize blended learning and competency-based learning.

There is little or no risk to you in participating in this project. However, if you become uncomfortable or stressed when being interviewed by myself, you can inform me, and you can withdraw from the interview process and study without any negative consequences from your school or me.

Privacy:

The data collected from this study will be stored on password protected computer. Only I will have access to the data. This consent form will be stored in a locked file cabinet in the office of my research advisor. However, legally authorized agencies, including the University of Northern Colorado Institutional Review Board, do have the right to review research records.

When reporting the results of this research project, I will not use your name or any other personally identifying information. You will be given a copy of this consent form for your records.

Compensation:

After completing the interview, you will be compensated with $50 for your time.

Voluntary Participation:

Participation is voluntary. You may decide not to participate in this study and if you begin participation, you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in the loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, IRS Administrator, in the Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

_____ _____

SIGNATURE OF PARTICIPANT Date

_____ _____

SIGNATURE OF RESEARCHER Date

Questions:

If you have any questions about this project, please contact me in person, via phone or email at Benwyattalexander@gmail.com. The study is being conducted under the supervision of Dr. Michael Cohen. If you have any questions you can contact him at Michael.cohen@unco.edu.

APPENDIX D

INTERVIEW PROTOCOL

SEMI-STRUCTURED INTERVIEW PROTOCOL

Participant's name (pseudonym):

Date:

Location:

Interviewer:

Length of interview:

At the beginning of each interview read this statement:

Hello, thank you for allowing me the opportunity to interview you. The purpose of this study is to better understand the lived experience of principals of high achieving schools that use blended learning. You have been selected because of your school's performance on your state's standardized assessment system, and your school's use of blended learning. Now I am going to ask you more specific questions about what it is like to be the principal of your school. Please let me know if you need to repeat any question, or if anything seems unclear.

1. Tell me about your journey becoming the principal of your school.

2. What is it like to be a principal of a school that uses blended learning?

3. What is your vision for the school and how do you communicate this?

4. What are you most proud of in your work at the school? How did you accomplish this?

5. Can you walk me through a typical day at your school?

6. Tell me about how you solve problems that occur at your school?

7. How does your school balance student technology use and the need for face-to-face social interactions?

8. Can you think back to a situation that has been one of the most challenging or difficult situations since you have been the principal at the school?

9. How do you manage change in the school?

10. Your school is rated at the highest level by your state, what role does blended learning have with your schools rating?

11. Describe your interactions with school staff and how you interact with difficult staff members?

12. Can you describe your relationship with the culture of the school?

13. How do you think the staff at your school would describe your leadership?

14. How do you cultivate relationships with your staff?

15. How do you view blended learning?

16. Do you feel there a difference of leadership style in a school that uses blended learning and a school that does not use blended learning?

17. What advice or considerations would you give to a new principal in a similar school?

18. What support do you need to help you become a better leader at your school, and is that support different than what you would need if your school did not use blended learning?

19. What questions would you like to ask leaders of schools that are similar your yours?

20. Do you have any additional thoughts or wonderings that we did not talk about?