


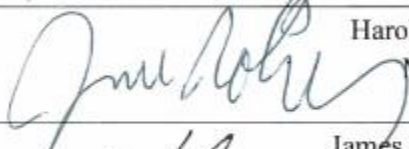
**Grade Distribution and Perceptions of School Culture and Climate
In a New Secondary School**

Lisa V. Lauck
B.A. William Jewell College, 2007
M.Ed. Rockhurst University, 2008


Submitted to the Graduate Department and Faculty of the School of Education of in partial fulfillment of the requirements for the degree of Doctor of Education in Educational Leadership



Harold Frye, Ed.D.
Major Advisor



James Robins, Ed.D.



Kelly Saluri, Ed.D.

Date Defended: April 30, 2019

Copyright 2019 by Lisa V. Lauck

Abstract

The current study explores grade distribution patterns and administrator perceptions of school culture and climate in new urban schools. Prior research on grades, grade distribution patterns, school culture, and school climate reveal strong support for potential correlations between these various concepts. Just as grade distribution patterns may contribute to the establishment of specific school cultures and climates, specific school cultures and climates may also facilitate student achievement, including grades and non-academic achievements that may be related to grades. The results of the current study revealed higher grades for students in the first three years of operations. Based on the perceptions of administrators, the facilitation of school climates and cultures in promoting shared values and bolstering strong relationships and student motivation promotes improved student academic and non-academic performance. Such climates and cultures also are perceived to require a holistic approach to education that promotes various non-academic outcomes which, in turn, can promote academic outcomes.

Dedication

I would like to dedicate this disseration to my family. First, to my parents for always pushing me to achieve my dreams and believing in my ability to do so, for making sure that I have always had the opportunity to thrive and grow, and for giving me a foundation of love all of my life that has raised me to become the confident and motivated individual I am today. Next, to my husband for believing in me, encouraging me and supporting me throughout this process with his patience and understanding, always holding my hand in all of my highs and lows and genuinely sharing his excitement with me as my goal became reality. Finally, to my daughter, who may not understand yet what it means to her mother to have accomplished this milestone, but was by my side at my computer (often attempting to type and "do work," too) and who will someday know that she too can achieve anything she strives for with the love of her family to guide and support her.

Acknowledgements

I would like share my deepest appreciation and gratitude for my Major Advisor, Dr. Harold Frye, who has guided me throughout my doctoral process. The road has been long, but your kindness, patience and wisdom has been the most tremendous help. I have thoroughly enjoyed getting to learn from you both professionally about the world of education, but also about you personally as a teacher, administrator, father, husband, and mentor. I could not have done this without you!

I would also like to acknowledge and thank Dr. Li Chen-Bouk for helping me in revising and clarifying my topic, providing me a clearer path for this study, and to Dr. Richard Ochberg for his help with statistical analysis. Finally, I would like to thank the members of my committee: Dr. Kelly Saluri, with whom I spent time in observation with during my program and who provided insight and knowledge that led me to my dissertation topic, and to Dr. Jim Robins who has provided me with invaluable feedback in refining this dissertation. Thank you all!

Table of Contents

Chapter 1	1
Introduction.....	1
Background	3
Statement of the Problem.....	4
Purpose Statement.....	4
Significance of the Study	5
Delimitations.....	5
Assumptions.....	6
Research Questions	6
Definition of Terms.....	6
Organization of the Study	7
Chapter 2	8
Review of Literature	8
Grading Practices and Perceptions.....	9
School Culture and Learning Environment	12
School Culture	18
Enrollment.....	20
Conclusion	22
Chapter 3	24

Methods.....	24
Research Design.....	24
Selection of Participants	26
Measurement.....	27
Interviews.....	27
Enrollment, grades, and grading procedure assessment	27
Data Collection Procedures.....	28
Data Analysis and Synthesis.....	28
Reliability and Trustworthiness	31
Measurement.....	31
Researcher’s Role	32
Limitations	32
Summary	33
Chapter 4.....	34
Results.....	34
Descriptive Statistics.....	34
Research Question 1.	34
Research Question 2.	38
Summary	52
Chapter 5	56

Interpretation and Recommendations	55
Study Summary.....	55
Overview of the problem.	55
Purpose statement and research questions.	55
Review of the methodology.	55
Major findings.....	55
Findings Related to the Literature.....	56
Conclusions.....	57
Implications for action.	57
Recommendations for future research.	57
Concluding remarks.	58
References.....	61
Appendices.....	69

List of Tables

Table 1. Advanced versus basic / proficient grades math.....	36
Table 2. Advanced versus basic / proficient grades science	36
Table 3. Advanced versus basic / proficient grades English	37
Table 4. Advanced versus basic / proficient grades social studies	37
Table 5. Advanced versus basic / proficient grades all subjects.....	38
Table 6. Thematic Analysis Results of Participant One	44
Table 7. Thematic Analysis Results of Participant Two.....	49
Table 8. Thematic Analysis Results of Participant Three.....	52
Table 9. Thematic Analysis Results of All Participants	54

List of Figures

Figure 1. Mixed Methods Procedural Diagram	25
Figure 2. Number of Advanced Grades	35

Chapter 1

Introduction

To accommodate increasing suburban populations, an increasing number of school districts need multiple high schools. New high schools face challenges and needs that are distinct from existing high schools (Vogels, 2018). According to the National Center for Educational Statistics, enrollment has been booming since the mid-nineties "hitting new record levels every year through 2006" and then again reaching new record numbers in the fall of 2013 with national enrollment of 55.4 million students (NCES, "Enrollment Trends", 2018, para. 1). This increase in students shows no current sign of slowing with "increases projected to continue at least through the fall 2025 (the last year for which NCES has projected school enrollment), when enrollment is expected to reach 56.5 million" (Borghans, Golsteyn, Heckman & Humphries, 2016). While the decision to build additional schools relieves pressure on overcrowded buildings and overloaded teachers and staff, it provides a range of new challenges, one of which is establishing a new professional learning community, building a rich school culture and establishing policy and procedure (Latham, 2019). One very important aspect of creating a new building culture is developing grading practices as a building, by department, and as an individual (Alvarez, 2014). The analysis of grade distribution may not be of much consequence among elementary schools, but for secondary schools, it can have greater implications: grade point average, class rank, scholarship opportunities, and so much more, are extrinsically tied to grading (Spencer, 2017). Grade distribution and equity then becomes a unique concern when looking at the subject of opening a new building (Vogels, 2018). The Patriot School District (PSD) is one such district that has expanded to include two secondary schools within its boundaries and is now taking a closer look at the phenomenon of building

school culture and establishing grading practices in a newly opened school. Since the school is new, practices must be adapted according to what works in the past and the decisions of the faculty members.

Over the years, many schools have considered the implications of changing grading systems and how this may affect students. For example, Anderson (2017) examined the viewpoints of teachers in a schooling system in Rowland Hall and found:

The process of abandoning the A-F system proved to be harder than expected. It challenged everything the administrators, teachers, parents, and students thought they knew about education. What were grades for? What was school for? What did kids need to know and how were teachers meant to impart that? How should schools communicate to parents not just whether their kid would get an A or B, but whether their kid was actually learning? (para. 5)

Long (2017) corroborates this theory, suggesting that students who have been graded over time have demonstrated a lack of motivation over the years, suggesting that schools may have to make various adjustments in order to maintain high performance. This suggests that traditional grading systems are both good and bad for several reasons. They allow a uniform system of measurement of success, allowing students to use these grades to present to colleges of their choice and set personal goals; however, it is more a question of how students are graded that can determine outcomes (Jesse, 2018). When a new school opens, educators must place an emphasis on the system of grading to ensure that it is the most beneficial for the students and that they will be prepared for college (Jesse, 2018).

For students in today's fast paced world, grade point average is important to earning valuable scholarships and college acceptance. With placement and scholarship opportunity

being highly competitive, students are seeking every opportunity possible to stay ahead of the game. Opening a new school and creating a unique culture while establishing consistency in areas such as grading are important aspects to be considered. The following study will therefore explore the development of grading systems in new schools in order to come to a conclusion regarding the best way to prepare students for high academic achievement. Although traditional grading systems have remained for many years, educators are beginning to recognize their many flaws, which is why it is important to observe students who are taught in different ways in order to devise teaching plans that play to strengths.

Background

Located in the northeast region of Missouri, the Patriot School District is home to more than 11,500 students who reside in an 85 square mile district (Patriot Public Schools, 2012b). This suburban district has grown exponentially over the past 10 years and is the second fastest growing school district in the state. According to the Missouri Department of Elementary and Secondary Education, students enrolled in 9th through 12th grades have increased by more than 1,000 in the last decade, an average increase of 105 secondary students annually (MODESE 2003-2013).

At the time of this study, PSD had 3223 students enrolled in grades nine through twelve. PSD opened the doors to Patriot North in 2010, admitting sophomore and junior students in its inaugural year, and followed with re-introduction of a freshman class at both high schools for the 2013-14, making that school year the first year Patriot North had a full complement of students grades 9 through 12.

PSD uses a standard A-F grading scale to assess student success within each course. The grading scale PSD follows aligns with the Achievement Level Descriptors set forth by the

Missouri Department of Education; advanced, proficient, basic/below basic. The following are letter grades that most typically are associated with the Achievement Level Descriptors; A - advanced, B and C - proficient, D and F - basic/below basic (Missouri Assessment Program Grade-Level Assessment).

Statement of the Problem

Schools that have been in existence for a long time usually have well established professional learning communities with a grading policy that is consistent from classroom to classroom and through each department (Vogels, 2018). However, there are a number of factors that lend to the establishment of such practices and policies such as standardized/individualized grading, administrative, teacher and community expectations, and mission of the school and district. Teachers in the Patriot School District have autonomy in how students within their classes earn a letter grade, with most teachers choosing to use either total points or a weighted grading system. "[A] teacher must summarize and communicate a student's classroom progress in an academic subject through one grade... there must be consensus that the grade represents the most accurate statement..." (Allen, 2001, p. 1). While autonomy of the teacher is important, there is a unique problem that may occur within a single school in providing students with an equitable grading experience throughout their high school experience and regardless of school placement or classroom teacher (Jesse, 2018).

Purpose Statement

The purpose of this study was to analyze grade distribution and administrators' perception of the influence of school culture at the building level among ninth through twelfth grades in core classes at Patriot North High School. These students were analyzed for three years (2013-2016) in order to examine how grade distribution changed during this time. All of

this information is implemented in the study in order to explore ways to improve grading performance in newly opened schools.

Significance of the Study

The results of the study may further the understanding of grades and the influence of school culture on grading, which can shed light on practices for administrators and teachers in this school district. The study may also be informative to others who are conducting research in this area. Although this study does not directly examine academic environments, the researcher seeks to provide information regarding educational environments and access to academic opportunity for each student, which will be of interest to district families who are involved in the progress of their children.

Delimitations

There are several delimitations for this study which included:

1. The location of this study was the Patriot School District located in Patriot, Missouri.
2. This study utilized archived data from the Patriot School District for the 2013-2014, 2014-2015 and 2015-2016 school years.
3. The quantitative sample for this study was limited to viewing only core academic courses (mathematics, science, English, and social studies).
4. The qualitative sample for this study was limited to 3 individual administrators; the lead administrator for Patriot North who has been there since the opening of the school and was previously the lead administrator of Patriot High School, and one assistant administrator from both Patriot High School and Patriot North High School.

Assumptions

It is assumed that all responses from individuals who were interviewed in this study were made with integrity and gave honest and best to their knowledge information regarding the school culture and its influence on grading. Additionally, it is assumed that all data collected and archived in the Patriot School District for their secondary school's core courses for the 2013-2014, 2014-2015, and 2015-2016 academic years are accurate and complete.

Research Questions

The purpose of this study was to examine if a statistically significant difference in grading exists when comparing grading in core courses. The following research questions (RQ's) guided the research in this study:

RQ1. To what extent is there a change over three academic years, 2013-2016, in grading (advanced, proficient, basic/below basic) at a newly established school?

RQ2. How do administrators perceive the influence of school culture on grading after a new secondary school opened?

Definition of Terms

The defined terms below were utilized in this study and are significant for the reader to be familiar with in order understand the purpose of this research.

School culture. School culture refers to the beliefs, assumptions and values that faculty, administration and staff share regarding the school environment and the way in which they interact with one another. ("School Climate and Culture," n.d.)

School climate. The climate of a school refers to the way in which traditions, norms, policy, learning practices, teaching pedagogy, organizational structures and relationships affect

those with in the building (i.e. students, faculty, administration, and staff) and is what gives a school its character and quality (National School Climate Council, 2007).

Organization of the Study

This study is comprised of five chapters. This first chapter covered the background, problem, significance, purpose, delimitations, assumptions, methodology, terms and research questions involved in this study. Subsequent chapters provide a review of literature significant to this study, including, but not limited to, the concepts of grade equity, social justice in education, best practice, educational environment, establishment of school culture, and professional learning communities. Research design and method of data collection and analysis will also be introduced, along with the final results of this study. Finally, chapter 5 concludes with the summary of this study, its findings, implications and recommendations for further research and analysis.

Chapter 2

Review of Literature

Secondary schools face numerous challenges in their efforts to provide high-quality education to students and to provide the necessary tools to improve academic performance. There are several aspects schools must consider relative to student performance and when secondary schools are created, merge, or face other changes, grading practices may be perceived unfairly due to the attention paid to students in these settings. There are several important reasons to examine some of the underlying issues which may affect grading practices that include teacher quality, available resources, segregation within schools, redistricting, and other factors. Understanding these issues can play an important role in determining how perceptions regarding grading practices can influence student achievement and if other factors also play a role. School districts must examine their capacity to optimize students' academic achievement and to promote fair and equitable grading practices that will benefit students as they seek future opportunities in college and in their careers.

In the secondary school environment, there are many traditions, requirements and expectations to consider which support teachers' actions and interactions with students. These traditions include the grading of academic performance that are based upon historical precedence and require teachers to take many different issues in to account when addressing areas of need relative to grading. Perceptions of grading may almost be as important as the grades themselves when parents and students develop ideas of what they believe grading should entail and if the reality fits their perception or if it is very different from what is expected. These issues must be considered because they emphasize the importance of a culture that affects teaching and learning on many levels and influences how grading patterns are conducted. For many people, the

development of a successful framework to address grading in the classroom requires an examination of different factors that include student performance, grading policies, and building culture; all of which can contribute to different levels of academic strength and weakness which are conveyed in performance. Teachers in new schools must demonstrate their understanding of the desired culture from the very beginning and acknowledge the importance of leadership and oversight to ensure that students receive the proper education and are evaluated accordingly. The purpose of the following discussion is to address some of the key challenges associated with the formation of a new secondary school with a specific emphasis on the following research questions:

Research Question 1: To what extent is there a change between 2013-2016 in grading practices (advanced, proficient, basic/below basic) after the opening of a new secondary school?

Research Question 2: How does perception of building culture affect grading practices after a school district opens a new secondary school to accommodate increased enrollment in the district?

Grading Practices and Perceptions

When enrollment increases require the addition of a new school to an existing district, this can be a challenging situation with a lengthy period of adjustment, as its occupants begin to create a climate and culture of scholarship, trust, and support to bring students into the fold and be successful as early as possible. There are many elements of this process that must be addressed, but it is also important for the school district to offer widespread support during this type of situation and engage in activities that will have a lasting impact on the lives of the students in attendance at the new school. This dilemma precipitates a variety of conditions

which may have a lasting impact on students if they are not properly addressed from the beginning and impact students' potential academic growth and development.

Grading has a unique and rich history. This includes a variety of assessment tools which have evolved to accommodate perceptions of bias and lack of association between grades and actual student achievement; furthermore, while students perceive grades as the ultimate measure of their academic performance, they may not always tell the real story and can complicate matters for students if they do not translate into comprehension and retention of the assigned material (Brookhart et al., 2016). In certain settings, grades are not an accurate measure of student performance and can distort the relevance of true markers which indicate the ability of students to retain knowledge for future use; therefore, teachers must examine their own grading practices and determine if bias or judgments may unnecessarily cause harm to students and create difficult challenges; these tools are important in providing students with grades that align with true achievement and the application of knowledge in the future (Brookhart et al., 2016).

Grades are often perceived as a means of understanding students' personality and their potential for success in the future that is not dependent upon strict intelligence or IQ scores (Borghans, Golsteyn, Heckman, & Humphries, 2016). In addition, personality characteristics have a strong influence on cognition and influence the degree of motivation that students have regarding particular subjects as well as the grades that they receive (Borghans et al., 2016). Many know that, "The predictive power of grades shows the folly of throwing away the information contained in individual teacher assessments when predicting success in life" (Borghans et al, 2016. p. 13358). Under these circumstances, student grades may not tell the entire story because personality characteristics play a role in shaping academic performance and future potential in different types of careers (Borghans et al., 2016). However, other experts

argue that intelligence is a critical predictor of grades and is marked by the ability to comprehend more expansive and challenging content across different subjects (Roth et al., 2015). At the same time, grades are influenced by parental influences on students and can lead to behaviors and decisions which either favor strong performance and grades or lead to poor performance and poor grades (Christofides, Hoy, Milla, & Stengos, 2015). From this perspective, parents should emphasize the appropriate educational priorities and promote an environment for students that can have a positive and lasting impact on their performance to optimize their potential for stronger grades (Christofides et al., 2015).

The construction of grades and grading systems can impact students who are transitioning from primary into secondary school because this period can be filled with angst and turmoil for students and impact their academic performance; therefore, addressing the challenges of this transition is one of the key requirements of today's school leaders and teachers to ensure that students have a smoother transition and their academic potential is not disrupted (Hong, Zimmer, & Engberg, 2015). The transition into secondary school can be very challenging for students but can also support students' desire to excel academically to accomplish future goals such as attending college (Waters, Lester, & Cross, 2014). However, this transition can also be problematic for students to earn good grades and achieve optimal performance if they are impacted by outside influences, so it is important for students to have the necessary resources to be successful and to seek optimal achievement through the work that they perform (Waters et al., 2014). Secondary school transitions are important and require an evaluation of current tools versus new ideas which can have a significant impact on student growth and academic performance (Yeager et al., 2016).

Student achievement may be significantly impacted by the culture and climate of a school and this requires a set of leaders (principals and superintendents) who are focused on students' growth above all other priorities to ensure that they are successful from an academic perspective going forward (MacNeil, Prater, & Busch, 2009). In this context, the school climate is critical because it offers students some degree of stability and should promote a culture of learning to improve their potential (MacNeil et al., 2009). At the time of creation of the new secondary school, it is also likely the development of an environment that includes practical reform may have a positive impact on student learning and provide them with the necessary resources to improve their grades and overall performance (Waldron & McLeskey, 2010). From this perspective, the new school environment should invoke a culture of collaboration and professional development for teachers that will have a high degree of impact on their performance, along with areas where leadership improvements can occur from the onset of the school's inception to begin the new effort with a positive and proactive tone (Waldron & McLeskey, 2010). In areas where new schools have been or are under construction, there are significant factors to consider that impact achievement scores for students so that they can improve their academic performance in the new school environment (Neilson & Zimmerman, 2011).

School Culture and Learning Environment

Each school district faces its own challenges relative to the development of tools to accommodate students and community members are influential in shaping how schools work to provide the best possible experiences for students (Barrows, Henderson, Peterson, & West, 2016). However, competition exists among different schools and districts where performance must be optimal to support enrollment needs and to meet expectations; in addition, it is known

that, “If schools do not respond to competitive pressure by, for example, improving their academic services and innovating...they risk losing students and the funding that accompanies them. This could then lead to school closure” (Jabbar, 2015: p. 2). This perspective indicates that student enrollment is largely affected by the quality of the school and the academic programs that are provided (Jabbar, 2015). Furthermore, issues such as learning intensity and an increase in academic requirements is beneficial to students because they may otherwise be ill-prepared to attend college with the necessary prerequisites (Buttner & Thomsen, 2013). Learning in different contexts through the use of online tools, for instance, can also play a role in shaping academic performance and how students are prepared for the future; these tools can impact grades and perception because students are not in a traditional setting when using these tools and this can make it more difficult to understand the impact of these tools (Allen & Seaman, 2014).

In school districts where there is a high degree of diversity, it is essential to develop a framework which is designed to advance diverse student populations rather than segregate them into groups which do not fuel their growth and maturity; therefore, issues such as rezoning which may require some students to attend different schools can be problematic for different reasons and create a challenging environment for students with a need to align them and seek methods to improve their performance relative to other schools within the district (Siegel-Hawley, Bridges, & Shields, 2017). Similarly, there are specific “enrollment flows” which impact students in different districts because they have more choices such as private schools and charter schools; nonetheless, it is possible that increased choice will not provide the desired results and will instead contribute to poor outcomes for some students because there is a higher risk of segregating students and removing choice from the equation (Sirer, Maroulis, Guimera,

Wilensky, & Amaral, 2015). Population changes around the United States, however, have contributed to an increased number of students who are from minority population groups so it is likely that school populations will be similar (Maxwell, 2014). School choice can create new options for schools that may have a positive impact on some students but may not be effective in educating other students (Sirer et al., 2015). With an increase in charter schools across many communities, it is likely that these changes can have a dramatic impact on students in different ways and also influence the availability of resources and academic support for students (Mead, Mitchel, & Rotherham, 2015). When charter schools are unproven, students can ultimately suffer the consequences and may not have the resources available to them to be successful in these schools, so their grades can suffer and make it more difficult for them to transition to college in the future (Mead et al., 2015).

Schools can also be segregated relative to the incomes of families with students at schools; therefore, income inequality can affect numerous school districts in a variety of communities and ultimately impact student achievement when students lack the resources necessary to get through a typical school day, including school lunches (Owens, Reardon, & Jencks, 2016). In this context, income inequality can have a direct impact on grades, performance, and overall student achievement (Owens et al., 2016). Furthermore, schools may be classified by some as “sorting machines” which recognizes that “educational institutions construct and reinforce “highly salient social categories and sort individuals into these categories” (Domina, Penner, & Penner, 2017). Similarly, grouping students based on abilities can be problematic because “less able students lose the opportunity to benefit from positive peer effects, and they argue that being labeled as less able communicates low expectations, which may become self-fulfilling” (Bygren, 2016: p. 3). From this perspective, it may be argued that

categorizing students as such can be detrimental to their achievement because if they are already labeled by others, it may be difficult for them to overcome these labels and to prove themselves as successful (Domina et al., 2017). Sorting students for other reasons may make financial sense for a school district but may not always translate into positive student achievement, so these issues must be considered to provide better support for students both financially and in an academic context (Chakrabarti & Roy, 2012). For children of Mexican origin, for example, academic performance is critical and requires students to have some essence of belonging which can influence their decision-making and level of competency (Hernandez, Robins, Widaman, & Conger, 2016).

Within some communities, it is possible that racial segregation is further exacerbated by district maps and subsequent attendance statistics (Saporito & Van Riper, 2015). From this perspective, communities where there is less diversity and a higher number of minorities, for instance, can affect schools and the populations that are present; therefore, when considering how to map districts, the use of residential areas as a marker for making these selections can produce higher levels of racial segregation and can negatively impact outcomes when students are placed in schools where there is little diversity (Saporito & Van Riper, 2015). It is believed that “more stringent oversight and monitoring of local zoning practices may be an important policy lever for suppressing the creation of segregatively gerrymandered attendance zone boundaries” (Richards, 2014: p. 1151). This demonstrates that students in racially segregated districts may be further compromised by local politics which affect these districts and impact the quality of the education that they receive (Richards, 2014).

In some schools that perform poorly, it is possible that when school districts perform at a very low level, states may take over schools which either results in their closure or mergers with

other schools (Johnson, 2017). In these examples, student performance may not be affected when the school is taken over, but it is possible that changes in performance will be identified when students are sent to other schools which have merged (Johnson, 2017). Furthermore, it is possible that takeover will not have any real impact on the school's overall academic performance (Johnson, 2017). When states perform a takeover of different school districts, this can be highly challenging for many different reasons and demonstrates the importance of appropriate allocations of funding from the government to ensure that these takeovers have a fighting chance (Schueler, Goodman, & Deming, 2017). Nonetheless, "turning around chronically underperforming schools and districts has been an elusive goal, despite prioritization at the highest levels of government" (Schueler et al., 2017, p. 1). These circumstances are important because they reflect that the takeover of schools can be highly problematic and require a high level of resource availability that may be proven to some degree at the individual school level but may not have the same impact at the district level (Schueler et al., 2017).

Students are likely to thrive in environments where students are familiar with their surroundings and have the resources available to them to be successful; therefore, when students are isolated by racial boundaries and strategies such as rezoning within districts, this can be highly problematic when they are not in classrooms with students from diverse backgrounds because their performance may suffer (Daviduke, 2017). When schools are in urban settings, it is possible that they will reap the benefits of environments where redistricting is conducted but this is contingent upon their ability to understand how to best integrate students from different backgrounds to support their academic achievement and productivity (Kovacic, 2015). In this context, it is likely that the development of tools to support teachers and leaders to better integrate students and provide optimal learning environments are essential to students' academic

growth (Kovacic, 2015). Schools which are in redistricting mode require a high degree of attention and can isolate some students who otherwise might have met their potential; therefore, new strategies are warranted which address this phenomenon with the focus on student achievement as the key priority over other needs (Jin, 2017).

When secondary schools are reorganized or are subject to redistricting, it is important to acknowledge the importance of teacher input and support for this process because this plays a significant role in how students respond to these environments and if they can achieve optimal outcomes in these settings (Porter, 2015). It is known that, “The relationships educators cultivate are important to the creation of efficacious school change initiatives” (Porter, 2015: p. 1). Therefore, students are likely to embrace these relationships and seek opportunities to improve their educational potential when they have the necessary resources in place to support their own academic achievement and growth (Porter, 2015). In addition, schools which have smaller enrollment statistics may have numerous benefits because there are fewer students to support and may also influence how teachers interact with and respond to students in smaller settings (Humann, Palaich, Fermanich, & Griffin, 2015). Smaller schools can also influence grading and academic performance because teachers have more time to work with students individually in an attempt to improve their grades and academic performance as needed (Humann et al., 2015).

Many students from disadvantaged population groups do not have the same opportunities as other students and this may be a product of teacher quality; therefore, gaps in quality are observed across different communities where these populations exist and can further exacerbate gaps between population groups (Golhaber, Lavery, & Theobald, 2015). For students, it is important to have access to high quality teachers in all school settings, but this is not always realistic and can exacerbate the discrepancies that exist among students attending schools in

districts where teacher quality is uneven (Goldhaber et al., 2015). Another group which may be adversely affected is students who are in early college programs to earn associate degrees while still in high school, as this can be a challenging environment for many students due to the demands of this curriculum but also provide numerous benefits to support their academic growth and long-term potential (Saenz & Combs, 2015).

School Culture

The culture which evolves within a school is critical to the development of students within that school and requires strong leadership which emphasizes collaboration and dialogue to promote successful performance results by students (Carpenter, 2015). In addition, a strong school culture requires a sense of shared values and purpose; collaborative team members; the ability to solve problems and participate in collective inquiry; and the desire to engage in continuous improvement activities (Carpenter, 2015). These achievements, likely, will have a critical impact on student assessment and performance when there is cohesion and support by parents and by students to accomplish these shared goals (Carpenter, 2015). Current assessment tools may not tell the entire story and therefore require new directions or strategies which demonstrate greater accuracy and alignment with the needs of students in 21st Century schools where learning must be multi-dimensional and relevant for students (Conley, 2015). Educational assessment tools should include elements of problem-solving and knowledge development to better prepare students for the future (Conley, 2015).

Many schools across the country that perform below expectations require reforms which can have a positive impact on students' growth and overall academic achievement; therefore, teachers, leaders, and students must work collaboratively to accommodate student needs, such as greater language proficiency in English for students whose native language is different (Reyes &

Garcia, 2014). For schools that consistently underperform due to language and other barriers, the following is observed in some settings: “In high-performing, high-poverty schools teachers internalize responsibility for student learning. They examine their practices critically, and abandon unsuccessful practices constantly searching for better practices” (Reyes & Garcia, 2014: p. 351). Therefore, teachers play a critical role in shaping a dynamic which is based upon expanding the growth and development of students despite limited resources and support from the community; in addition, their actions should serve as an example to empower students to succeed and to perform academically at a higher level (Reyes & Garcia, 2014).

Grading requires a fair system of assessment which takes many different factors into consideration and supports the development of creative tools to accurately assess students not only on tests and homework assignments but also in their interactions with teachers (Hafen et al., 2015). From this perspective, teacher-student interactions are essential to academic performance and are influenced by behavior in the classroom; level of productivity; and the learning formats that are presented by teachers to students (Hafen et al., 2015). Furthermore, successful teachers will recognize the importance of different resources which affect students’ overall learning potential and their ability to translate said potential into strong academic performance (Hafen et al., 2015). Testing and scores may also be affected by the neighborhoods in which students live and school-based contributions, both of which can have a direct impact on students’ capacity to be successful in their roles and to provide the necessary reforms to promote greater student achievement whenever possible (Carlson & Cowen, 2015). Students should have positive influences from their schools and neighborhoods as strong indicators of their performance and their ability to overcome adversity and potentially exceed their academic potential (Carlson & Cowen, 2015).

Enrollment

As enrollments change across school districts due to the emergence of charter schools, it is important to evaluate how curriculum and teacher quality in different schools can impact academic performance; therefore, it is important to consider the risk factors in these transitions as part of a larger framework which emphasizes student growth and development across all settings (Lake, 2017). The ability of newer schools to not only attract new students but to also provide adaptive tools is critical because learning in these schools requires increased collaboration and a professional dynamic to ensure that students can maximize their academic potential going forward (Wheeler, 2016). Across all communities, student achievement is a key priority which requires the development of new tools and resources which can have a significant impact on students' academic progression, but it is evident that different schools can impact students based upon the resources that are available and the quality that exists (Woessman, 2016). Other choices to consider among different communities are private schools which may be attractive due to the expectation of high academic standards that may not always be present in public school districts; these concerns may include interaction with peers in a safe environment, supporting the comprehensive development of the student as a human being, and providing an academic experience that cannot be accomplished in the public school setting (Parker, 2015). It is also likely that grading practices in private schools may be more difficult which may allow students to work harder and to better understand the information that they receive from their teachers to excel academically (Parker, 2015). When charter schools fail for different reasons, it is possible that students may be negatively affected but it is the responsibility of these schools to remain financially viable so that students will benefit from the resources that they provide (Paino, Renzulli, Boylan, & Bradley, 2013).

In areas where students and parents have a choice of which schools to attend, this can be problematic for some students because educational reforms do not always accomplish the desired goals and can influence student performance (Ravitch, 2010). Students who lack consistency due to choice may not have the necessary means to be successful in their academic roles and furthermore, the requirements of standardized testing are not always effective in providing students with a strong foundation for success (Ravitch, 2010). Perception is that public education can be most influential for students and provide them with the resources necessary to be successful and can promote greater accountability due to policies and regulatory requirements for these schools (Ravitch, 2010).

In school districts that are classified as disadvantaged, it is possible that there are significant challenges to consider which have an impact on decision-making and the development of student-teacher relationships (Dufrene, 2018). However, when teachers leave one district for another, this can cause problems for students due to the lack of continuity necessary to achieve a high level of academic performance (Dufrene, 2018). Therefore, the causes of teacher migration can impact student achievement in direct and indirect ways which affect their grades and other achievements (Dufrene, 2018). Teachers can have a strong impact on student performance and when they leave a district, this can cause greater risk to some students who have become accustomed to a teacher's identity and teaching patterns (Ost & Schiman, 2015). Greater consistency among teachers is likely to have a positive effect on student performance and in providing them with the resources that are necessary to achieve successful outcomes (Ost & Schiman, 2015).

School accountability is an important factor in the development of students' overall academic potential and grades; therefore, schools should be responsible for providing the best

possible education with the resources that are available to support students across different areas of achievement, and this is best accomplished through the use of reforms to improve student achievement in examinations (Deming, Cohodes, Jennings, & Jencks, 2013). Teacher-based performance must also be examined to ensure that assessments and other tools are used properly to evaluate students and that resources are timely and appropriate (Ballou & Springer, 2015). For this purpose, the size of each class is also important and provides a basic foundation for student achievement which is reliant upon smaller class sizes to improve one-on-one focus and relationships between teachers and students (Schanzenbach, 2014).

Conclusion

Today's schools face enormous challenges which are associated with a variety of factors that include limited resources to accommodate students, limited creativity, and lack of oversight across many areas; therefore, students may suffer several consequences, which can include poor performance. In school districts where populations have grown, new schools have emerged, or rezoning has led to changes in attendance, there may be additional complications which affect students and may contribute to the perception of unfair grading practices or advantages for some students and disadvantages for others. For school districts it is imperative that leadership teams evaluate their options and consider how to utilize resources wisely to promote equality in grading among students from diverse populations and communities because this will allow many students who might not otherwise have a chance to prove themselves to be successful with strong academic performance that is recognized not only by their teachers but also by colleges and universities. There must be a greater emphasis on understanding the dynamics of this process and in enabling students to have the necessary resources available to be successful through greater consistency in assessments and in other areas. New schools which are constructed due to

increased enrollment, redistricting, or for other reasons require the same opportunities as schools with a rich history because students who are moved into new schools should not be at a disadvantage because of decisions that are beyond their control. It is paramount that schools acknowledge the importance of shaping a dynamic for students in many different types of environments to have the same chances to be successful and to gain encouragement that their academic performance will be fairly and accurately recognized by teachers and by the district.

Chapter 3

Methods

The primary purposes of this study were to identify to what extent grading changes over time in a newly opened secondary school and if the absence and creation of a new school culture effect grading outcomes. This study was conducted using quantitative archival data from the PSD 2013-14, 2014-15, and 2015-16 school years for Patriot North High School, as well as qualitative information gained from interviewing secondary administrators with insight to the professional academic learning communities of both district high schools. The study focused on grade distribution over a three-year span and perceptions on building culture in relation to grading practices. This chapter is an organizational overview of this study and includes details as to data collection, validity and reliability, analysis and limitations.

Research Design

This study used a mixed-method design which is a model of inquiry that utilizes both quantitative and qualitative research models to provide data and research that more fully provides knowledge that could not otherwise be achieved singularly (Creswell and Plano Clark, 2007). The dependent variable for this study was the attainment of PSD archival course grading data for Patriot North High School core subjects. The independent variable for this study were the interview responses from selected administrators at Patriot and Patriot North High Schools.

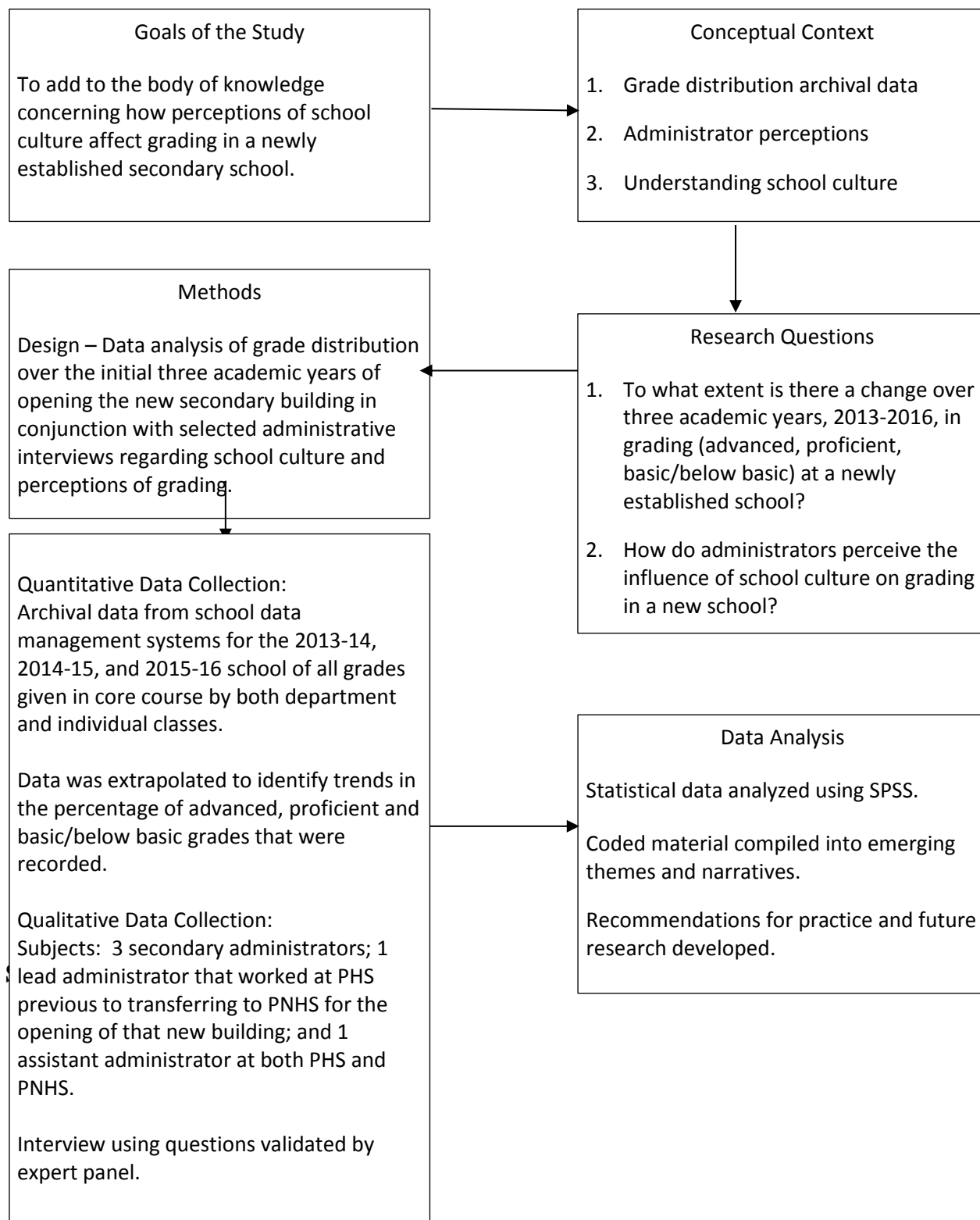
Mixed

Figure 1. Mixed-methods procedural diagram.

Selection of Participants

The setting for this study was the Patriot School District located in the suburbs just outside of Kansas City, Missouri. For the qualitative portion of this study three individuals were interviewed; one selected assistant administrator from Patriot High School, one selected assistant administrator from Patriot North High School and one lead administrator with time in leadership at both district high schools. The quantitative sample was taken from archival district data involving grades 9 through 12 at Patriot North High School. The sample was limited to academic grades given in the core courses of mathematics, science, English, and social studies. Individual student names were not viewed. Selection of both the quantitative data and qualitative respondents was purposive in that it served to help identify the information sought by the research questions in this study. Additionally, the Patriot School District provided a unique setting with the opportunity to observe grade distribution and the establishment of school climate and culture in a newly established building in the context of a large district with one already established secondary school.

Utilizing the PSD learning management system, PowerSchool, archival data were recorded for state records and posterity. The learning management system maintained grading records by student, course, department, grade and school. For the purposes of this study, grade data by course, department and school were selected. Administrator interviews were conducted in the method preferable by the respondent (i.e. phone interview, document response, etc.) with all responses transcribed. Those administrators selected fit some, or all, of the following criteria; current secondary administrative position at one of the PSD high schools, administrator at Patriot North at time of opening with tenure over the three years samples were collected, and/or experience as an administrator at both secondary locations. The interviewees selected provided

the most illustrative and useful information to the study due to their professional experience within the district.

Measurement

Interviews. The creation of the interview questions began with identifying the second research question and how it related to, and enhanced, the understanding of the first research question. Following the establishment of both research questions, presented previously in Chapter 1, an intensive literature review was conducted to fully explore the concepts of both school culture and grading. The interview questionnaire consisted of seven questions that were written to address research question two and focused primarily on addressing how school culture affects perceptions of grading. Once, the interview questionnaire was finalized participants were selected and then formally invited to participate. Interviews of the individual administrators were then conducted to generate data. Interviewees were asked to describe their perceptions of school culture and climate in relation to their role as an administrator and their experiences of setting, supporting, or establishing policies and procedures related to such topics. The three interviewees were chosen based on their position at either secondary school, knowledge of their school and/or time served at either or both secondary school locations. The interviews took place both over the phone and via written response. Each interview took the respondent approximately thirty to forty-five minutes. All phone interviews were conducted using an audio-recording device which was then transcribed.

Enrollment, grades, and grading procedure assessment. The second type of measurement conducted for the current research is the measurement of the enrollment and grading procedures implemented by the school. Such data will be used to determine whether there have been any recent changes, which may reflect school cultural or climate changes.

Data Collection Procedures

The request for permission to conduct research in the Patriot School District was requested and granted in February of 2015, and again for additional data in October of 2018. Upon receiving research approval from the district and advisor approval of chapters 1, 2 and 3 of this study, an Institutional Review Board (IRB) Proposal to Conduct research was submitted to the Baker University IRB on September 1, 2018. Data from this study was collected in the summer of 2014 as part of a study conducted during a field observation during a field observation, as mentioned above the permission to use the data and subsequent analytical findings were granted in 2015.

To begin the process of this study a number of pivot tables in Excel were gathered from the information management system for the Patriot School District. Once the data was collected information was then analyzed by overall passing and failing grades, looking at core subject areas combined, followed by grades in each core subject area individually. The data was then compiled in to various composite charts and tables that demonstrate the similarities and dissimilarities.

Following the collection of data, three administrators (one lead and one assistant administrator from Patriot North High School and one assistant administrator from Patriot High School) participated in an interview regarding research question two. These interviews were transcribed and used to help identify relationships between grading observations and educator perceptions.

Data Analysis and Synthesis

Following the completion of the collection and compilation of all archival data the hypothesis tests were conducted for the research questions. Analysis of the hypotheses utilized a

three percent variance to determine a statistically significant occurrence. Each of the research questions and accompanying hypotheses and null hypotheses are listed below.

RQ₁. To what extent is there a change over three academic years, 2013-2016, in grading (advanced, proficient, basic/below basic) after a new secondary school opens?

H₁. *There exists a change in grading practices in the initial years after a new secondary school opens.*

H₀. *There is no significant change in grading practices in the initial years after a new secondary school opens.*

RQ₂. How do administrators perceive the influence of school culture on grading after a new secondary school opened?

H₂. *Administrators will identify the strong importance of instilling a school culture on grading that promotes student development.*

H₀. *Administrators will not identify the strong importance of instilling a school culture on grading that promotes student development.*

The grades of the students of the participating school were analyzed to determine whether there were any significant changes. Assessing any changes in the grades allows for exploring possible connections between school culture, school climate, grading procedures, and student grades. The qualitative analysis in the current research features the coding of interview data. The developed coding procedure allowed the researcher to determine whether there were any discernible patterns between the three participating administrators regarding cultural and climate changes in the school. The following coding procedure will be utilized:

- Connecting non-academic goals with school culture and/or climate

- Recognition of the facilitation of non-academic goals as part of the development of the school culture and/or climate.
- Recognition of the importance of basic health care as part of the development of the school culture and/or climate.
- Recognition of the facilitation of non-academic goals as part of the development of the school culture and/or climate.
- Recognition of the importance of transportation needs as part of the development of the school culture and/or climate.
- Recognition of the importance of basic nutritional needs as part of the development of the school culture and/or climate.
- Identifying the importance of school culture and/or climate on grades and other important student outcomes
 - The clear definition or conceptualization of school culture and/or climate.
 - The implicit recognition that school culture and/or climate are important for the desired grades or other educational outcomes.
 - The explicit recognition that school culture and/or climate is important for the desired grades or other educational outcomes.
 - The implicit recognition that school culture and/or climate is important for the achievement of important non-academic outcomes.
 - The explicit recognition that school culture and/or climate is important for the achievement of important non-academic outcomes.
- Significant school cultural or climate changes have been identified as sources of improvement for the grades or other academic outcomes of students.

- School cultural or climate changes have been directly attributed to the improvement of the grades or other academic outcomes of students.
- School cultural or climate changes have been indirectly attributed to the improvement of the grades or other academic outcomes of students.
- Specific cultural or climate changes are connected to improved grades or other academic outcomes of students.

Reliability and Trustworthiness

The archival data from the PSD high school is not only for district collection and records but is also used for reporting to the Missouri Department of Elementary and Secondary Education (MODESE). The collected data used in this study were part of a broad collection of data provided to the state for the purposes of rating and accreditation and as such is a valid and reliable source of information that is regularly audited by MODESE.

Measurement

After the collection of data and responses, evaluation and measurement were conducted in three main ways; first, comparing each core subject area (math, science, social studies and language arts) and the overall percentage of advanced, proficient and basic/below basic scores given over three academic years. Next, individual courses within each core subject were analyzed to identify what percentage of advanced, proficient and basic/below basic scores were given over three academic years. And finally, 3 individual administrators were selected for interview regarding school culture and grading practices. These administrators were selected based on tenure at Patriot and/or Patriot North High Schools.

Researcher's Role

Identifying the role of the researcher is key to understanding their reasoning behind research decisions and strategy. A researcher may take on several roles during a study including evaluator, investigator, advocate and interpreter (Stake, 1995). The researcher must also undertake self-examination of attitudes that may influence bias, ideologies, interpretations and perceptions (Yin, 1989). According to Creswell and Plano Clark (2007), a “researcher should review the basics of quantitative and qualitative, as both will be included in the mixed-methods study” (p.35). The role of the researcher in this study is one of inquirer and investigator.

Due to human nature and life experience a researcher cannot fully separate themselves from the role they play in a study and as a result must work to control personal bias in order to not compromise data and analysis. To this end, the researcher employs outside references and independent analysts to review various components of the study for quality.

The researcher was able to draw from academic and professional experiences to help guide the purpose of this study. Previous observation experience in the Patriot School district allowed the researcher to have greater insight in to the operation of the district, data management systems, and grading policies during the time of data collection. Furthermore, the researcher recognized that personal experience within the district influenced the subject of this study. The personal background of the researcher, as a secondary ELA and social studies teacher, and length of experience in the classroom, ten years, provided inspiration and knowledge that ultimately gave the researcher appropriate expertise and perspective to investigate the questions asked in this study.

Limitations

Limitations that existed in the study include:

1. Teaching experience of each course educator.
2. Teaching strategies and methodologies used by individual educators.
3. Personal teaching philosophies of individual educators.
4. Departmental collaboration as a school/district

Limitations identified could impact the ability to generalize results of statistically significant differences identified in this study.

Summary

Chapter 3 provided an overview of the primary research goals and limitations of this study while explaining data collection and methodology. The research design was mixed-methods and the sampling procedures and population for this study were identified as archival data from the PSD learning management system and selected educator interviews. Data collection, analysis, hypothesis testing, and limitations that may affect results, were all identified within this chapter 3. The following chapter will present the hypothesis testing results and subsequent statistical analysis.

Chapter 4

Results

Descriptive Statistics

The primary purpose of this study was to use a mixed-methods research design to examine both the quantitative and qualitative properties regarding the affect school climate and culture have on grading perceptions. The results of this study revolve around the two research questions outlined in chapter 1.

Initially, the original archival grade data, from the district's data management systems, presented scores in the form of pivot tables and demonstrated letter grades using the alphabetic representation of A through F. These letter grades were then converted to grade ranges classified as "basic/below basic", "proficient" and "advanced". Grades D-F were classified as basic/below basic, grades B-C were classified proficient, and A letter grades were classified as advanced. From here the classifications were further grouped in to the titles of "lower" for all grades B-F and "advanced" for all A letter grades. This final grouping was then used to set up the data analysis.

This initial data point found that there appeared to be steady, significant growth in the number of advanced grades given from 2014 to 2016. From this first analysis the next step was to view the data more in-depth and test the hypothesis using a Chi-Square test on each core subject by comparing both "advanced" and "lower" grades given in the first year, 2014, to those given in the third year, 2016.

RQ1. To what extent is there a change over three academic years, 2013-2016, in grading (advanced, proficient, basic/below basic) after a new secondary school opens?

H1. There exists a change in grading practices in the initial years after a new secondary school opens.

To begin, the raw data for all advanced grades, in combined core subjects, were entered first in the format of a bar graph to identify if there existed any difference of the initial three years after Patriot North opened with all four grade levels. The figure below shows the findings.

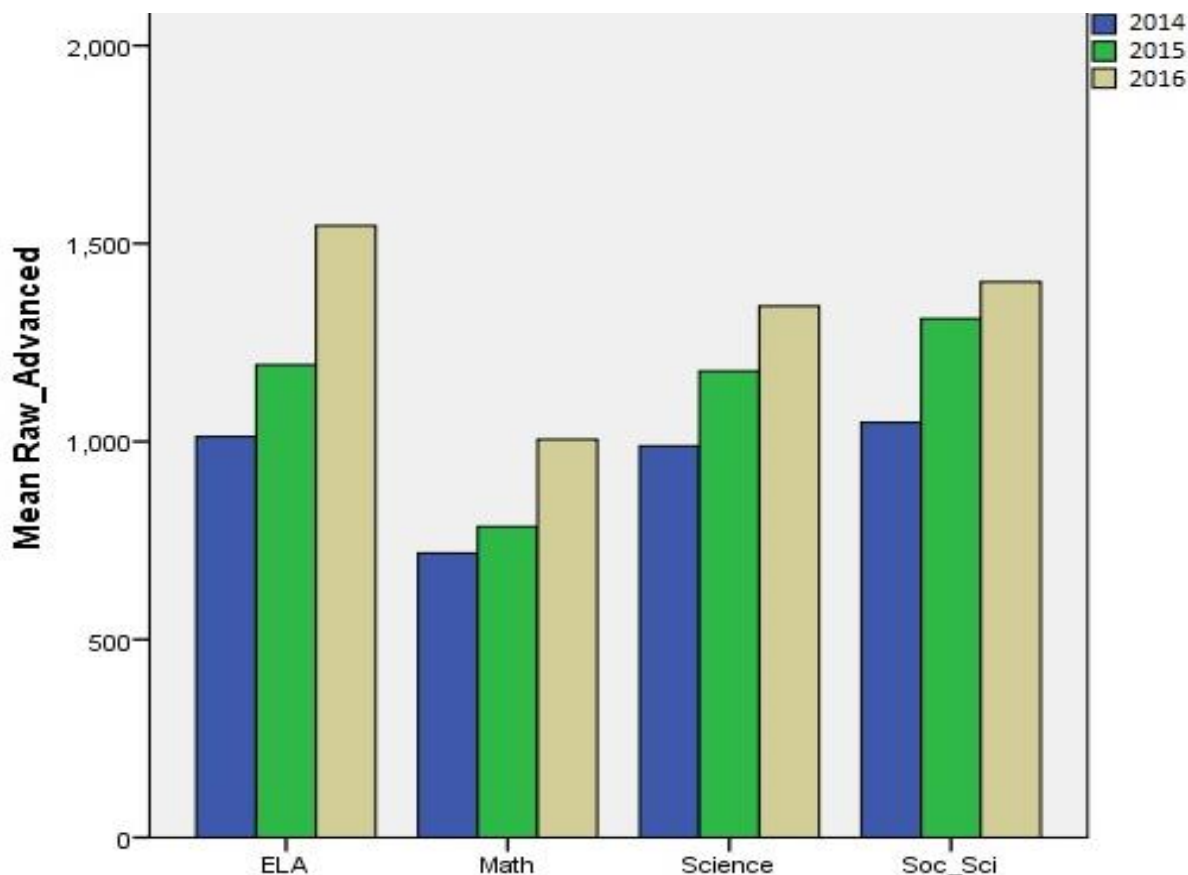


Figure 2. Number of Advanced Grades in Math, Science, English Language Arts, and Social Studies, for the years 2014, 2015, 2016

As Figure 2 indicates, the number of advanced grades increased steadily, in every subject area, from 2014 to 2016.

A chi-square test of independence indicated that there is not a significant relationship between math grades and year, $X^2(2, N = 5417) = 1.52, NS$. As shown in Table 1, the proportion

of basic and proficient grades *versus* advanced grades was not significantly different in 2014 versus 2016.

Table 1

The number of advanced versus basic / proficient grades in math, for 2014 versus 2016

	Basic / Proficient	Advanced	Row Totals
2014	1605 (69%)	718 (31%)	2323 (100%)
2016	2089 (66%)	1005 (34%)	3094 (100%)
Column Totals	3694	1723	5417

A chi-square test of independence indicated that there is not a significant relationship between science grades and year, $X^2 (2, N = 6328) = 3.33, NS$. As shown in Table 2, the proportion of basic and proficient grades *versus* advanced grades was not significantly different in 2014 versus 2016.

Table 2

The number of advanced versus basic / proficient grades in science, for 2014 versus 2016

	Basic / Proficient	Advanced	Row Totals
2014	1790 (64%)	989 (36%)	2779 (100%)
2016	2207 (62%)	1342 (38%)	3549 (100%)
Column Totals	3997	2331	6328

A chi-square test of independence indicated that there was a significant relationship between grades in English Language Arts and year, $X^2 (2, N = 6551) = 23.93, p < .001$. As shown in Table 3, the proportion of advanced grades was significantly higher in 2016 than it was in 2014.

Table 3

The number of advanced versus basic / proficient grades in English Language Arts, for 2014 versus 2016

	Basic / Proficient	Advanced	Row Totals
2014	1826 (64%)	1012 (36%)	2838 (100%)
2016	2168 (58%)	1545 (42%)	3713 (100%)
Column Totals	3994	2557	6551

A chi-square test of independence indicated that there is not a significant relationship between science grades and year, $X^2 (2, N = 5765) = 2.55, NS$. As shown in Table 4, the proportion of basic and proficient grades *versus* advanced grades was not significantly different in 2014 versus 2016.

Table 4

The number of advanced versus basic / proficient grades in social studies, for 2014 versus 2016

	Basic / Proficient	Advanced	Row Totals
2014	1487 (59%)	1048 (41%)	2535 (100%)
2016	1827 (57%)	1403 (43%)	3230 (100%)
Column Totals	3314	2451	5765

A chi-square test of independence indicated that there was a significant relationship between grades in all subjects combined and year, $X^2 (2, N = 24,059) = 22.72, p < .001$. As shown in Table 5, the proportion of advanced grades was significantly higher in 2016 than it was in 2014. However, it should be noted that although this result was statistically significant, it was of only modest size. In 2014, 36% of all grades were at the Advanced level; in 2016 that percentage had increased to 39%.

Table 5

The number of advanced versus basic / proficient grades in all subjects, for 2014 versus 2016

	Basic / Proficient	Advanced	Row Totals
2014	6708 (64%)	3767 (36%)	10475 (100%)
2016	8291 (61%)	5293 (39%)	13584 (100%)
Column Totals	14999	9060	24059

RQ2. How do administrators perceive the influence of school culture on grading after a new secondary school opened?

H₂. Administrators will identify the strong importance of instilling a school culture on grading that promotes student development.

Participant One. Participant One is the principal of Patriot North High School and has attained a Doctor of Education degree. He has been the principal at Patriot North High School since it opened, and prior to this was the principal at Patriot High School. Participant One has a practical conceptualization of school climate. The participant, thus, identifies the importance of school climate in the achievement of student outcomes, but does not provide a tight definition of school climate. Participant One stated:

The ideal school climate is one in which every student finds something that they can relate to and want to work at... find something that they find motivational. They have at least one thing that they come to school for every day they really are looking forward to, then I think there is an opportunity to have a pretty good climate. You need to make sure the school is well run from all the basics, everything from the physical types of things such as lunch and transportation, all that sort of thing. And then the relationships, are obviously the most important thing. If you can have good relationships, positive

relationships, typically between your staff and the students, that goes a long way in building a strong culture too. (Participant One, 2019)

By identifying building relationships as a specific factor, and in fact the primary factor, for school climate impacting student outcomes. Both school climate and school culture are identified as important for building the types of relationships that best facilitate student academic achievement.

Participant One also identifies the underlying primary motivation of the students at his school. Such motivation is to perform well academically. This motivation has been developed to be intrinsic rather than extrinsic, providing a stronger basis for motivating students to perform well academically and otherwise. Participant One stated the following:

I think most kids come to school because they want to or they're okay with it. So therefore, they want to succeed, which builds in an intrinsic motivation for most kids to succeed at whatever it is they need to, to work on with our classes. So, I think as long as the culture is strong and there's a feeling that, at least among the vast majority of students, that they have found something of relevance, works with them, then the grades will take care of themselves. In other words, they'll do well academically and strive to pass all their classes and, and maybe go way beyond that. I think our average GPA may be even over a 3.3 or 3.1. So, if that's your average, then that would say that the vast majority of kids are striving for A's, B's, and C's at the minimum... I think last semester we had about an eight and a half percent D-F rate. So that means that 91 point something percent of all grades given are A's, B's and C's. That would tell you that the vast majority, extremely high majority, of kids want to get what I would consider to be decent grades. (Participant One, 2019)

Such an interview response indicates not only the clear need to establish a school culture and climate that promotes the development of intrinsic motivation, but also specific data that supports this connection.

Participant One does not recognize major changes to occur during the first few years of the high school. Nevertheless, the participant does recognize that there have been some adjustments, suggesting that the initial school climate and culture promoted strong academic performance among students:

The feeling and attitude is probably pretty much same there. I don't know that we've done a whole lot culturally here to change the perception of that. We started out really small and we've grown so fast that it's a hard thing to quantify. There's a link between culture and perception and grades I think; the D-F rate is probably better than my last year or so at [Patriot] High. But that was when we had probably somewhere around 2100 kids in three grades. I don't know what that rate would be now. It could be very similar to ours. That was speaking to the idea that the perception of the teachers are probably pretty much even. The transfer teachers that came when we opened up, over the last three or four years as we've grown, are probably not all that different from the school they came from. We had a huge influx of middle school teachers in '13-'14 when we went from 900 kids to around 1400 kids in three months. (Participant One, 2019)

The major increase in the number of students enrolled in the school would seem to create significant challenges for the maintenance and adjustment of the school's culture and climate. However, it appears that Participant One identified the school's culture and climate as being significant factors in the school being able to maintain its high student grades. Participant One also identifies the required influx in new teachers as another challenge:

35 to 40% of our staff were new that year [2013-14]. Most of them coming from the middle level. So, they brought in [ideas] that helped a little bit with the push to think about allowing kids more time to get things done and maybe retest a little bit. However, the idea that a kid might be able to still make up an assignment from a month or two ago, I think that change, that's something that we'd been working on prior to that, but I think that move is probably what helped with that a little bit too. (Participant One, 2019)

The procedures and adjustments described above, such as allowing the students extra time to complete assignments, suggests a flexible and adaptive school climate and culture. As Participant One identifies the facilitation of relationships, both between administrators and teachers and teachers and students, as a primary factor in the importance of school climate and culture, the introduction of new teachers would seem to present major issues. However, Participant One identifies the climate and culture as being strong enough to facilitate the establishment of new strong relationships with new teachers. Participant One states:

The initial core that was here... had a real strong relationship among each other and with the students...it was pretty doable with a small group. We were trying to create our own culture with all the things that go into a new school. Everything from procedural things to mascots, to activities and how we celebrate things...like traditional times of the year with homecoming and everything else. (Participant One, 2019)

This suggests that Participant One recognizes the holistic nature of effective school climate and culture. In particular, Participant One identifies the use of cultural symbols, such as mascots, as helping to facilitate a culture and climate that promotes the development of strong relationships and intrinsic motivation to perform well academically.

On the topic of grading and assessment, Participant One begins to identify some of the potential sources of problems in the school system. With the influx of students, certain changes to procedures, especially to assessment and scheduling, may have created difficulties or been insufficiently effective at adjusting to the increasing number of students:

Assessing student work, and all that, probably didn't change a lot because it's something that we'd been working on quite a bit over the years. I think that if it made any marked change, it was probably more incremental than marked change, it was when we brought in the ninth-grade teachers. I don't think in terms of grades I'd probably separate that out from culture. I don't think that there was a big change with that because we were using the same curriculum that we have data teams that work together between the two schools for the first year or so. And then that just became too cumbersome. But there are people who had taught with [Patriot] teachers and did a lot of the same things, you know, just a year before that. I don't think there's a whole lot of difference there, but in terms of culture, we did work at it, trying to drive and develop a new and unique culture.

(Participant One, 2019)

Participant One goes on:

As far as participation you see our kids at athletic events and concerts and musicals and things like that. And you know, there are a lot of kids that were a lot of [Patriot] North gear every day. I think to a certain extent there's pretty solid participation. There are times when we'll have almost as many kids at an away game as the home school has at their own activity, so that part's been pretty good. There's a good amount of involvement, but we dropped from where we were in the first few; we've grown by, 1500 students in seven years. Wow! That's pretty massive! So some things we just haven't been able to

maintain like we used to and, maybe kind of an excuse, but it is reality with this new schedule and extra time. I'm hoping that they can really recapture some of that.

(Participant One, 2019)

Again, Participant One is identifying culture and climate as being important factors for the school maintaining its strong academic performance despite the identified issues, including issues in assessment and scheduling. The participant also identified the student attitudes towards academics remaining stable, if not improving slightly in the past few years. Table 6, below, displays the thematic analysis results of Participant One

Table 6

Thematic Analysis Results of Participant One

	Results
Connecting academic AND non-academic goals with school culture and/or climate	X
Recognition of the facilitation of non-academic goals as part of the development of the school culture and/or climate.	X
Recognition of the importance of basic health care as part of the development of the school culture and/or climate.	
Recognition of the facilitation of academic goals as part of the development of the school culture and/or climate.	X
Recognition of the importance of transportation needs as part of the development of the school culture and/or climate.	
Recognition of the importance of basic nutritional needs as part of the development of the school culture and/or climate.	
Identifying the importance of school culture and/or climate on grades and other important student outcomes.	X
The clear definition or conceptualization of school culture and/or climate.	X
The implicit recognition that school culture and/or climate is important for the desired grades or other educational outcomes.	X
The explicit recognition that school culture and/or climate is important for the desired grades or other educational outcomes.	X
The implicit recognition that school culture and/or climate is important for the achievement of important non-academic outcomes.	X
The explicit recognition that school culture and/or climate is important for the achievement of important non-academic outcomes.	X
Significant school cultural or climate changes have been identified as sources of improvement for the grades or other academic outcomes of students.	X
School cultural or climate changes have been directly attributed to the improvement of the grades or other academic outcomes of students.	X
School cultural or climate changes have been indirectly attributed to the improvement of the grades or other academic outcomes of students.	X
Specific cultural or climate changes are connected to improved grades or other academic outcomes of students.	X

Participant Two. Participant Two is an assistant administrator at Patriot North High School. She earned her Doctor of Education, has nineteen years of experience in education, and

fifteen years experience in administration. Participant Two will be the next principal of Patriot North High School. Like Participant One, Participant Two recognizes academics as a priority, including in the motivations of students:

[The perception] students and parents have towards academics is that it is a priority and that is extremely important. I think sometimes what's missing is the 'why'. It's almost like a checklist [for students]. 'Just tell me what I have to do to get the A', but they really sometimes can't tell you what they're learning. They can't tell you why they're learning it. They can't tell you how they'll know that they've mastered the material or how they'll be successful; why things are important, or maybe how they interconnect with real world experiences or life... So, the grades in itself, the attitude and the perception about academics, is that they're very important. But I think what's missing from there is the overall learning component. And those are two very different things in my opinion.

(Participant Two, 2019)

Here, Participant Two indicates that the students at the high school are motivated by grades and the perception of strong academic performance. However, Participant Two also recognizes non-academic goals, even more so than Participant One. These include practical accomplishments, such as connecting educational outcomes to practical real-life results. School climate and culture are identified as establishing relationships as well, as indicated below in Participant Two's interview response;

School climate to me is about the feel of the building. Is there camaraderie? Is there a feeling of a sense of belonging? Is there a sense of pride? Is there a sense of passion about where you go? What you do every day for that goes with school climate to me, what is the overall feel and tone of the building and how does that make people feel when

they're here, when they enter our building? That's kind of an overall summation for me.

(Participant Two, 2019)

Participant Two also recognizes, here, the role of school climate facilitating feelings of belonging and motivations to be constructive at school. This is not a precise definition, but it does provide the grounds for understanding how Participant Two views school culture and climate as facilitating positive academic outcomes.

When prompted on potential connections between school culture and grading, Participant Two recognized the importance of the school culture on student motivation, which inherently improves the performance of grading structures. Participant Two states the following:

I don't know about the connection with grading, but I do think that there's a connection with learning if the school culture isn't healthy. If students don't have an opportunity to thrive, then I don't think that they really want to be here and that could impact their grading because they don't do as well. I do think that there's some correlation between what the school climate is and volunteerism, if you will, for students that really want to be here. That would have an impact on grading for sure. If you want to be here you most likely would want to do better than if you don't like your school community and if you don't want to be here, you don't come and that has an adverse effect on your grades.

(Participant Two, 2019)

Here, Participant Two identified the connection between the volunteer nature of high school and grades. In particular, a strong school culture can prompt strong volunteering behaviors, which improve student performance. Participant Two goes on:

It is important to make sure that every kid has a sense of belonging, so we have various clubs and organizations; something that appeals to every student and we always try to do

activities and things during lunch to mix things up. We have multiple activities with student council to try to incorporate climate. We have a lot of PBL projects that go on in our classrooms. The interaction and the cooperation and the teamwork that it takes to really get a project done helps for students to be able to connect with others that they might not otherwise do that with or have conversations or be paired with and this sometimes makes them step out of their box to work with people that they, otherwise may not. There are a lot of things that I do personally, and that we do as a school collectively, to try to promote a healthy school community or culture. (Participant Two, 2019)

The response here indicates that Participant Two views a holistic approach to developing a school culture and climate as essential. This includes multiple ways of fostering the school culture and climate in an effort to maintain high levels of motivation and strong relationship-building. This includes both personnel and environmental components, as Participant Two identifies:

Everybody feels like we have a beautiful facility and that we have a great campus. Our kids have great resources. They [stakeholders, others] might equate that to a very healthy school climate, and that perception would be that...kids are learning and the grades are high, but that perception is not always accurate. (Participant Two, 2019)

Moreover, Participant Two names several events and occasions that are viewed as facilitating culture and climate development, improving the motivation of students.

We have a lot of spirit days, we have different clubs and different organizations. We have a lot of extracurricular activities and we have a lot of athletic clubs. So there's a lot of different ways that kids are able to be a part of the school climate.
(Participant Two, 2019)

Finally, Participant Two recognizes that the cultural and climate shifts are present, but not major. This aligns closely with the account provided by Participant One. Participant Two stated the following:

I think that we're starting to make a shift. Right now we're very fortunate in that we have kids that come to school and they're ready to "play" school every day. The expectation at home is that they come to school and they play school and do school and do that well, every day. But, I think that there's been a long time that our athletics has overshadowed the academics. When we have things hanging on the walls they are from athletic clubs. But our walls and our hallways did not speak academics and so we're trying to change that. We're trying to celebrate kids who score well on the ACT. We're trying to be more cognizant and intentional about making sure student work is up and celebrating, not just kids that have done exceptionally well, but even students that are showing growth over a period of time. I think that we are starting to make that shift, but I think for a long time academics wasn't celebrated, because our kids were just kind of expected to come here and do well, but we just really missed the opportunity to highlight and celebrate those moments. (Participant Two, 2019)

Such a shift is intended to promote both academic and non-academic outcomes.

Table 7

Thematic Analysis Results of Participant Two

	Results
Connecting academic AND non-academic goals with school culture and/or climate	X
Recognition of the facilitation of non-academic goals as part of the development of the school culture and/or climate.	X
Recognition of the importance of basic health care as part of the development of the school culture and/or climate.	X
Recognition of the facilitation of academic goals as part of the development of the school culture and/or climate.	X
Recognition of the importance of transportation needs as part of the development of the school culture and/or climate.	X
Recognition of the importance of basic nutritional needs as part of the development of the school culture and/or climate.	X
Identifying the importance of school culture and/or climate on grades and other important student outcomes.	X
The clear definition or conceptualization of school culture and/or climate.	X
The implicit recognition that school culture and/or climate is important for the desired grades or other educational outcomes.	X
The explicit recognition that school culture and/or climate is important for the desired grades or other educational outcomes.	X
The implicit recognition that school culture and/or climate is important for the achievement of important non-academic outcomes.	X
The explicit recognition that school culture and/or climate is important for the achievement of important non-academic outcomes.	X
Significant school cultural or climate changes have been identified as sources of improvement for the grades or other academic outcomes of students.	X
School cultural or climate changes have been directly attributed to the improvement of the grades or other academic outcomes of students.	X
School cultural or climate changes have been indirectly attributed to the improvement of the grades or other academic outcomes of students.	X
Specific cultural or climate changes are connected to improved grades or other academic outcomes of students.	X

Participant Three. Participant Three is an assistant principal at Patriot High School, the long established district secondary school. She has recently started a Doctorate program and has previously completed a Master of Arts in Teaching degree. She has worked in education for

more than ten years and administration for three years. Unlike the previous two participants, Participant Three has adopted a very specific approach to understanding school culture. Specifically, Participant Three takes the position of Whitaker on how school cultures develop and can be reshaped, as evinced by Participant Three's response below:

I like Todd Whitaker's work in *School Culture Rewired*. He describes culture as personality, and climate as attitude. I think his ideas that climate is ever-changing and can flux with the day, month, events, etc. is on point and explains what makes culture and climate always important for school leaders to be considering. I suppose that grading is one key action we take that influences how people feel about the culture and climate of our school. (Participant Three, 2019)

Participant Three also recognized a holistic approach to establishing school climate and culture, in an effort to promote both academic and non-academic goals:

There are many factors that influence the perceptions of grading. In our school, departments establish consistent grading standards. If students feel the school climate and culture is one focused on growth and learning, students should also feel grades are a representation of those things. (Participant Three, 2019)

Participant Three also recognizes the importance of structures and policies play in establishing and maintaining organizational cultures and climates. In particular, policies and other structures can counteract cultural and climate changes in a school: "Policies should ultimately allow the values of the school to be upheld and fulfilled" (Participant Three, 2019).

Finally, Participant Three recognizes the connections between culture, climate, and motivation. The participant, like the previous two participants, recognizes that both climate and culture facilitates the incentivization of students. However, such incentivization suggests a

stronger commitment to extrinsic sources of motivation, rather than intrinsic, which were more favored by the first two participants. Participant Three stated:

There are so many awesome opportunities to be part of the school climate and culture here. We have looping advisories that meet weekly. We have a [Patriot] Hour time each day where students can participate in clubs and get tutoring. We have a variety of active student leadership groups that really create the student involvement in school activities. We do honor academics in a variety of ways (Academic Letters, grad cords, val/sal, etc.). These achievements do create ‘incentive’ for some students to strive for excellence and have a positive impact on the culture. At times, it can create unhealthy competition or pursuing excellence for the sake of an award, rather than for learning. (Participant Three, 2019)

Table 8 on the following page depicts the results of the thematic analysis for Participant Three.

Table 8

Thematic Analysis Results of Participant Three

	Results
Connecting academic AND non-academic goals with school culture and/or climate	X
Recognition of the facilitation of non-academic goals as part of the development of the school culture and/or climate.	X
Recognition of the importance of basic health care as part of the development of the school culture and/or climate.	
Recognition of the facilitation of academic goals as part of the development of the school culture and/or climate.	X
Recognition of the importance of transportation needs as part of the development of the school culture and/or climate.	
Recognition of the importance of basic nutritional needs as part of the development of the school culture and/or climate.	
Identifying the importance of school culture and/or climate on grades and other important student outcomes.	X
The clear definition or conceptualization of school culture and/or climate.	X
The implicit recognition that school culture and/or climate is important for the desired grades or other educational outcomes.	X
The explicit recognition that school culture and/or climate is important for the desired grades or other educational outcomes.	X
The implicit recognition that school culture and/or climate is important for the achievement of important non-academic outcomes.	X
The explicit recognition that school culture and/or climate is important for the achievement of important non-academic outcomes.	X
Significant school cultural or climate changes have been identified as sources of improvement for the grades or other academic outcomes of students.	X
School cultural or climate changes have been directly attributed to the improvement of the grades or other academic outcomes of students.	X
School cultural or climate changes have been indirectly attributed to the improvement of the grades or other academic outcomes of students.	X
Specific cultural or climate changes are connected to improved grades or other academic outcomes of students.	X

Summary

There are strong connections between the two research questions. In particular, the first research question is intended to determine recent patterns in grades. It appears that there has

been a significant improvement in grades in the target school district. Meanwhile, the second research question focuses on the potential connections between school climate, school culture, and grades. Table 9, below, depicts a summary of the thematic analysis for all participants.

Table 9

Summary of the Thematic Analysis Results for All Participants

	Participant One	Participant Two	Participant Three
Connecting non-academic goals with school culture and/or climate	X	X	X
Recognition of the facilitation of non-academic goals as part of the development of the school culture and/or climate.	X	X	X
Recognition of the importance of basic health care as part of the development of the school culture and/or climate.		X	
Recognition of the facilitation of academic goals as part of the development of the school culture and/or climate.	X	X	X
Recognition of the importance of transportation needs as part of the development of the school culture and/or climate.		X	
Recognition of the importance of basic nutritional needs as part of the development of the school culture and/or climate.		X	
Identifying the importance of school culture and/or climate on grades and other important student outcomes.	X	X	X
The clear definition or conceptualization of school culture and/or climate.	X	X	X
The implicit recognition that school culture and/or climate is important for the desired grades or other educational outcomes.	X	X	X
The explicit recognition that school culture and/or climate is important for the desired grades or other educational outcomes.	X	X	X
The implicit recognition that school culture and/or climate is important for the achievement of important non-academic outcomes.	X	X	X
The explicit recognition that school culture and/or climate is important for the achievement of important non-academic outcomes.	X	X	X
Significant school cultural or climate changes have been identified as sources of improvement for the grades or other academic outcomes of students.	X	X	X
School cultural or climate changes have been directly attributed to the improvement of the grades or other	X	X	X

academic outcomes of students.			
School cultural or climate changes have been indirectly attributed to the improvement of the grades or other academic outcomes of students.	X	X	X
Specific cultural or climate changes are connected to improved grades or other academic outcomes of students.	X	X	X

The combined results for both research questions strongly support significant climate and cultural changes being made to promote student outcomes. It should be noted that the school district faced the challenge of an increasing student enrollment. Despite such a challenge, the grades improved. This suggests that a strong climate and culture had been established and was both maintained and developed during this time. Additional findings include:

- both environmental and personnel factors contribute to the facilitation of the school climate and culture
- motivation, both intrinsic and extrinsic, is a major goal of administrators implementing a specific school culture and climate
- building strong and effective relationships is another major goal of administrators implementing a specific school culture and climate

Chapter 5

Interpretation and Recommendations

Study Summary

Overview of the problem. The identified problem here is the potential for poor school climates and cultures to contribute to poor student performance, including grades. It is important, then, for school administrators to ensure that their schools' climates and cultures facilitate the learning process and those factors that contribute to strong student performance.

Purpose statement and research questions. The purpose of this study was the analysis of grade distribution and administrators' perception of the impacts of school culture at the building level among ninth through twelfth grades in core classes at Patriot School District. The following research questions were developed for the current project:

RQ1. To what extent is there a change over three academic years, 2013-2016, in grading (advanced, proficient, basic/below basic) at a newly established school?

RQ2. How do administrators perceive the influence of school culture on grading after a new secondary school opened?

Review of the methodology. The current study utilized a mixed-method design in which both quantitative and qualitative research models are used in order to provide data and research that more fully provides knowledge that could not otherwise be achieved independently. The dependent variable for this study was measured as the attainment of PSD archival course grading data for Patriot School District. The independent variables were the interview responses from selected administrators at Patriot and Patriot North High Schools.

Major findings. The major findings of the current study were the following:

- Advanced grades in the school district increased during the analyzed time period

- Holistic approaches, which include both environmental- and personnel-based factors, to school culture and climate may be favored by school administrators
- Both academic and non-academic goals are the foci of implementing or changing a school's culture and climate
- School administrators may view school culture and climate as contributing to grades by promoting the following:
 - Extrinsic motivation
 - Intrinsic motivation
 - Strong relationships

Findings Related to the Literature

Research reveals that different schools may require different types and characteristics of school climate and culture for success (Barrows et al., 2016). Based on the results of the current study, ideal school cultures and climates may be holistic and highly adaptive to variable student populations. Such cultures and climates must also be adaptable by new teachers, as demonstrated in the influx of new students and teachers in the Patriot school district. This finding is supported by prior research (Siegel-Hawley et al., 2017; Sirer et al., 2015). Grading systems and distributions may impact the culture and climate by how they impact perceive competitiveness, confidence, and encouragement. School cultures and climates should also establish a specific set of values and aims to be shared by administrators, teachers, and students (Carpenter, 2015). This is also supported by the results of the current study, as the results reveal that grade increases may correspond to a consistent and positive school culture.

Conclusions

Implications for action.

The major implications for action of the current study include the following:

- Grading systems and distribution patterns may have significant relationships with a school's culture and climate
- A school's culture and climate should reflect its core values and facilitate the congruent focus on such values by all stakeholders
- Administrators should be mindful of the factors of motivation and relationship-building when designing and improving school climates and cultures

Recommendations for future research. The findings from the data analysis and hypothesis testing respond to the research questions in the study and help in achieving its goal, which are to identify the extent of change in grading over three academic years, between 2013-2014 and 2015-2016, after a new secondary school opens; determine the perception of the effect of building culture in grading after a school district opens a new secondary school to accommodate the increasing number of students. Notably, the findings have numerous implications for all stakeholders in the Patriot School District. Particularly, the findings will enable the school administration to understand the functions within their professional community. On the other hand, district families will also benefit from the findings of this study as it directly correlates with their education environment. As such, the findings can be used as references for future research, especially when conducting a study on the effect of new schools within a district on key stakeholders.

The following recommendations for future research will be based on the limitations on this study. Moreover, the recommendations for future research will allow expansion and replication of the study to other schools and districts

1. Replicate this study to expand the knowledge on teaching experience of each course educator.
2. Replicate this study at classroom level while adding the teaching methodologies and strategies used by individual educators. Although the study acknowledged that teaching patterns have great impact on students' performance, future research should focus more on the benefits of the different methodologies and strategies in teaching that can be implemented in new schools.
3. Replicate this study in various schools while elaborating on departmental collaboration as a school/district.
4. Conduct a follow-up study to determine if there is change in grading after a new school opens within a particular time frame.
5. Expand the sample group of schools studied, to include other case studies of the same nature so that they may be compared to one another to get a broad consensus.

Concluding remarks. The current study was intended to develop an understanding of grade distribution patterns and the perceptions of school administrators on school culture and climate. The importance of school culture and climate is evident based on the responses of the administrators, who recognized that school culture and climate contribute to grading distribution patterns, student grades, and the achievement of both academic and non-academic student outcomes. Further research may reveal additional patterns in grade distributions on newly-

opened high schools and how school climate and culture are interrelated with such grade distribution patterns.

References

- Allen, I. E., & Seaman, J. (2014). Grade change. *Tracking Online Education in the United States. Babson Survey Research Group and Quahog Research Group, LLC.*
- Álvarez, B. (2014, November 10). How Would Educators Change School Structure? Retrieved from <http://neatoday.org/2014/02/03/how-would-educators-change-school-structure/>
- Anderson, J. (2017, August 18). The case for eliminating letter grades, according to a school with too many straight-A students. Retrieved from <https://qz.com/1038258/one-schools-strategy-to-raise-empathetic-and-self-motivated-citizens-ditch-grades/>
- Ballou, D., & Springer, M. G. (2015). Using student test scores to measure teacher performance: Some problems in the design and implementation of evaluation systems. *Educational Researcher*, 44(2), 77-86.
- Barrows, S., Henderson, M., Peterson, P. E., & West, M. R. (2016). Relative performance information and perceptions of public service quality: Evidence from American school districts. *Journal of Public Administration Research and Theory*, 26(3), 571-583.
- Borghans, L., Golsteyn, B. H., Heckman, J. J., & Humphries, J. E. (2016). What grades and achievement tests measure. *Proceedings of the National Academy of Sciences*, 113(47), 13354-13359.
- Brookhart, S. M., Guskey, T. R., Bowers, A. J., McMillan, J. H., Smith, J. K., Smith, L. F., ... & Welsh, M. E. (2016). A century of grading research: Meaning and value in the most common educational measure. *Review of Educational Research*, 86(4), 803-848.
- Büttner, B., & Thomsen, S. L. (2015). Are we spending too many years in school? Causal evidence of the impact of shortening secondary school duration. *German Economic Review*, 16(1), 65-86.

- Bygren, M. (2016). Ability grouping's effects on grades and the attainment of higher education: A natural experiment. *Sociology of Education*, 89(2), 118-136.
- Carlson, D., & Cowen, J. M. (2015). Student neighborhoods, schools, and test score growth: Evidence from Milwaukee, Wisconsin. *Sociology of Education*, 88(1), 38-55.
- Carpenter, D. (2015). School culture and leadership of professional learning communities. *International Journal of Educational Management*, 29(5), 682-694.
- Chakrabarti, R., & Roy, J. (2015). Housing markets and residential segregation: Impacts of the Michigan school finance reform on inter-and intra-district sorting. *Journal of Public Economics*, 122, 110-132.
- Christofides, L. N., Hoy, M., Milla, J., & Stengos, T. (2015). Grades, aspirations and post-secondary education outcomes.
- Clarida, M. (2013). The Harvard Crimson. Retrieved from <https://www.thecrimson.com/article/2013/12/6/faculty-defend-grade-inflation/>
- Conley, D. (2015). A new era for educational assessment. *Education Policy Analysis Archives*, 23, 8-24.
- Cresswell, J. W., & Plano Clark, V. L. (2007). Designing and conducting mixed-methods research. Thousand Oaks, CA: Sage Publication, Inc.
- Daviduke, N. (2017). *A District Divided: Analyzing Policy Responses to Racial Isolation in US Schools* (Doctoral dissertation).
- Deming, D. J., Cohodes, S., Jennings, J., & Jencks, C. (2016). School accountability, postsecondary attainment, and earnings. *Review of Economics and Statistics*, 98(5), 848-862.

- Domina, T., Penner, A., & Penner, E. (2017). Categorical inequality: Schools as sorting machines. *Annual review of sociology*, 43, 311-330.
- Dufrene, G. E. (2018). Moving On: A Phenomenological Study on the Experiences of Migrating Teachers in Disadvantaged School Districts.
- Enrollment Trends. (2018). Retrieved October 18, 2018, from <https://nces.ed.gov/fastfacts/display.asp?id=65>
- Goldhaber, D., Lavery, L., & Theobald, R. (2015). Uneven playing field? Assessing the teacher quality gap between advantaged and disadvantaged students. *Educational Researcher*, 44(5), 293-307.
- Hafen, C. A., Hamre, B. K., Allen, J. P., Bell, C. A., Gitomer, D. H., & Pianta, R. C. (2015). Teaching through interactions in secondary school classrooms: Revisiting the factor structure and practical application of the Classroom Assessment Scoring System—Secondary. *The Journal of early adolescence*, 35(5-6), 651-680.
- Hernández, M. M., Robins, R. W., Widaman, K. F., & Conger, R. D. (2016). School Belonging, Generational Status, and Socioeconomic Effects on Mexican- Origin Children's Later Academic Competence and Expectations. *Journal of Research on Adolescence*, 26(2), 241-256.
- Hong, K., Zimmer, R., & Engberg, J. (2015, February). How does grade configuration impact student achievement? Geographic regression discontinuity evidence from school closures. In *Association for Education Finance and Policy 40th Annual Conference, Washington, DC*.

- Humann, C., Palaich, R., Fermanich, M., & Griffin, S. S. (2015). Final school size study report: Impact of smaller schools. *Report*) Retrieved from the Maryland Public Schools website.
- Jabbar, H. (2015). How Do School Leaders Respond To Competition? *Education Research Alliance for New Orleans*, March, 26.
- Jesse. (2018). Developing a Grading Policy for your School or District. Retrieved from <https://support.jumpro.pe/hc/en-us/articles/205019094-Developing-a-Grading-Policy-for-your-School-or-District>
- Jin, H. (2017). *Spatial Optimization Methods and System for Redistricting Problems* (Doctoral dissertation, University of South Carolina).
- Johnson, W. (2017). *State Takeovers of School Districts: A Review of a Case District* (Doctoral dissertation).
- Kovacik, K. A. (2015). *Organizing for Improvement in an Urban School District: Shifting From a Culture of Compliance to a Culture of Collective Responsibility* (Doctoral dissertation).
- Latham, B. (2019, February 20). School Infrastructure Is in Big Trouble. Building New Schools Isn't the Answer. Retrieved from <https://www.edweek.org/ew/articles/2018/10/16/school-infrastructure-is-in-big-trouble-building.html>
- Long, C. (2017, March 14). Are Letter Grades Failing Our Students? Retrieved from <http://neatoday.org/2015/08/19/are-letter-grades-failing-our-students/>
- MacNeil, A. J., Prater, D. L., & Busch, S. (2009). The effects of school culture and climate on student achievement. *International Journal of Leadership in Education*, 12(1), 73-84.

- Mead, S., Mitchel, A. L., & Rotherham, A. J. (2015). The state of the charter school movement. *Bellweather Education Partners, September*.
- Maxwell, L. A. (2014). US school enrollment hits majority-minority milestone. *Education Week, 34*(1), 1.
- “Missouri Assessment Program Grade-Level Assessment.” *Missouri Department of Elementary and Secondary Education*, Missouri Department of Elementary and Secondary Education, May 2017. Retrieved March 6, 2019 from dese.mo.gov/sites/default/files/asmt-gl-gir-spring-2017.pdf
- National School Climate Council. (2007b). What is School Climate? Retrieved March 6, 2019 from <https://www.schoolclimate.org/about/our-approach/what-is-school-climate>
- Neilson, C. A., & Zimmerman, S. D. (2014). The effect of school construction on test scores, school enrollment, and home prices. *Journal of Public Economics, 120*, 18-31.
- Ost, B., & Schiman, J. C. (2015). Grade-specific experience, grade reassignments, and teacher turnover. *Economics of Education Review, 46*, 112-126.
- Owens, A., Reardon, S. F., & Jencks, C. (2016). Income segregation between schools and school districts. *American Educational Research Journal, 53*(4), 1159-1197.
- Paino, M., Renzulli, L. A., Boylan, R. L., & Bradley, C. L. (2014). For grades or money? Charter school failure in North Carolina. *Educational Administration Quarterly, 50*(3), 500-536.
- Parker, T. W. (2015). Understanding the Private School Choice Decision Process: A Q-Methodology Study.

- Porter, H. (2015). *Transition to a new high school: Teachers' perception regarding secondary school reorganization* (Doctoral dissertation, University of Missouri--Columbia).
- Ravitch, D. (2016). *The death and life of the great American school system: How testing and choice are undermining education*. Basic Books.
- Reyes, A., & Garcia, A. (2014). Turnaround policy and practice: A case study of turning around a failing school with English-language-learners. *The Urban Review*, 46(3), 349-371.
- Richards, M. P. (2014). The gerrymandering of school attendance zones and the segregation of public schools: A geospatial analysis. *American Educational Research Journal*, 51(6), 1119-1157.
- Roth, B., Becker, N., Romeyke, S., Schäfer, S., Domnick, F., & Spinath, F. M. (2015). Intelligence and school grades: A meta-analysis. *Intelligence*, 53, 118-137.
- Sáenz, K. P., & Combs, J. P. (2015). Experiences, perceived challenges, and support systems of early college high school students. *Administrative Issues Journal*, 5(1), 9.
- Saporito, S., & Van Riper, D. (2016). Do irregularly shaped school attendance zones contribute to racial segregation or integration? *Social currents*, 3(1), 64-83.
- Schanzenbach, D. W. (2014). Does class size matter?
- School Culture and Climate. (n.d.). Retrieved March 6, 2019, from <http://www.ascd.org/research-a-topic/school-culture-and-climate-resources.aspx>

- Schueler, B. E., Goodman, J. S., & Deming, D. J. (2017). Can states take over and turn around school districts? Evidence from Lawrence, Massachusetts. *Educational Evaluation and Policy Analysis*, 39(2), 311-332.
- Siegel-Hawley, G., Bridges, K., & Shields, T. J. (2017). Solidifying segregation or promoting diversity? School closure and rezoning in an urban district. *Educational Administration Quarterly*, 53(1), 107-141.
- Sirer, M. I., Maroulis, S., Guimera, R., Wilensky, U., & Amaral, L. A. N. (2015). The currents beneath the “rising tide” of school choice: An analysis of student enrollment flows in the Chicago public schools. *Journal of Policy Analysis and Management*, 34(2), 358-377.
- Spencer, K. (2017, August 11). A New Kind of Classroom: No Grades, No Failing, No Hurry. Retrieved from <https://www.nytimes.com/2017/08/11/nyregion/mastery-based-learning-no-grades.html>
- Stake, R. (1995). The art of case study research. London, England: Sage Publication Ltd.
- Strauss, V. (2011, October 20). Why schools should not grade character traits. Retrieved from https://www.washingtonpost.com/blogs/answer-sheet/post/why-schools-should-not-grade-character-traits/2011/10/20/gIQAJuoUOL_blog.html?noredirect=on&utm_term=.3dec45ac9725
- Toner, M. (2017). Better Together: Ensuring Quality District Schools in Times of Charter Growth and Declining Enrollment. *Center on Reinventing Public Education*.
- Vogels, J. (2018, September 04). Grade Inflation - One of Four Significant Issues Facing Secondary Education in the Immediate Future. Retrieved from <https://www.coloradoacademy.org/page/ca-news?pk=963544&fromId=164614>

- Waldron, N. L., & McLeskey, J. (2010). Establishing a collaborative school culture through comprehensive school reform. *Journal of Educational and Psychological Consultation*, 20(1), 58-74.
- Waters, S. K., Lester, L., & Cross, D. (2014). Transition to secondary school: Expectation versus experience. *Australian Journal of Education*, 58(2), 153-166.
- Wheeler, W. C. (2016). Adaptive schools: investigating impact, continuity, and change in one school district.
- Woessmann, L. (2016). The importance of school systems: Evidence from international differences in student achievement. *Journal of Economic Perspectives*, 30(3), 3–32.
- Yeager, D. S., Romero, C., Paunesku, D., Hulleman, C. S., Schneider, B., Hinojosa, C., ... & Trott, J. (2016). Using design thinking to improve psychological interventions: The case of the growth mindset during the transition to high school. *Journal of Educational Psychology*, 108(3), 374-391.
- Yin, R.K. (1989). Case study research: Design and methods. Newbury Park, CA: Sage.

Appendices

Appendix A: Consent to Conduct Research

Application to Conduct Research in [REDACTED]

Name Lisa V. Lauck	Organization Baker University	Department Education
Address 8600 NE 99th Street	City Kansas City	State MO
Phone Number (816) 500-4109	Fax Number n/a	Zip Code 64157
		E-mail lsuck.lisa@gmail.com

I have read and understand the process of application to conduct research in [REDACTED] Public Schools. I also verify that the information provided in this application is accurate to the best of my knowledge.

Lisa Lauck
2-18-15

Signature

Date

Is this study part of your work for a degree?

☒ Yes ☐ No

If Yes, complete the following:

☐ Ph.D. ☒ Ed.D. ☐ M.A./M.S.

☐ Undergraduate ☐ Other

University or

College Baker University

Date of IRB Approval (or date of application if pending) Please see attached letter from advisor

Advisor's

Name Dr. Harold Frye

Advisor's Telephone

Number (913) 522-7773

Attach a concise, yet thorough, response to each of the following items.

Letter including all requested information is attached

1) **Title and purpose of study**

2) **Timeline**

When do you plan to start your study? What is the estimated total length of time?

3) **Benefits to the district**

How will this study benefit the [REDACTED] Public Schools?

4) **Research Design Summary**

Give specific information on the methods to be used during the course of the study. Please include your research questions, instruments, sampling and data collection methodologies, and proposed analyses. Samples of instruments may include survey questions, observation forms, and interview questions. Finally, describe any tasks students or staff will be asked to complete. Describe procedures you will use to secure and acknowledge informed consent of all participants, including active or passive consent. If passive, please provide a rationale. Please attach copies of any letters. Outline how subjects will be identified and criteria used for recruitment, the person(s) that will make the initial contact with subjects, and whether or not inducements will be used to secure participation.

5) **Assurance of anonymity of [REDACTED] Public Schools students & staff**

How will the anonymity of [REDACTED] Public Schools students and staff be protected?

6) **Risks of the research**

List any known risks of the proposed investigation to students, staff, or the district.

7) **District involvement**

What request are you making of [REDACTED] Public Schools and the Director of Assessment, Evaluation and Testing?

Specify numbers of students and staff to be involved, length of time, and time line for completion of

PUBLIC SCHOOLS

CBT

Research Checklist and Approval

Date: February 18, 2015

Submitted to: [REDACTED] - Director of Assessment, Evaluation, and Testing

Submitted by: Lisa V. Lauck

Research Proposal Title: "Factors Affecting Grade Distribution and Equity among Multi-High School Districts"

Principal Investigator(s): Lisa V. Lauck

Checklist

- ☐ Completed "Application to Conduct Research in [REDACTED] Public Schools"
- ☐ Copy of "Informed consent" letter to study population/parents
- ☐ Copies of measurement instruments
- ☐ Approval from university human subjects committee (IRB) if applicable
- ☐ Three (3) copies of your complete application package

Approval of this research is contingent on adherence to district procedures as outlined in the document entitled "Application to Conduct Research" and the information provided with the application. The district must be notified of any substantive changes to the information contained in the application. The district reserves the right to withdraw approval of research if the research is deemed to no longer be in the best interests of the [REDACTED] Public Schools students, staff, or the district.

Research Application: ☒ Approved ☐ Denied Date: 3/2/15

Signatures

Christopher B. Hill
Director of Assessment, Evaluation, and Testing

X N/A
Principal

X N/A
Principal

PUBLIC SCHOOLS

CSH

Appendix B: Baker University Approval to Conduct Research

Baker University Institutional Review Board

March 28th, 2019

Dear Lisa Lauck and Harold Frye,

The Baker University IRB has reviewed your project application and approved this project under Expedited Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

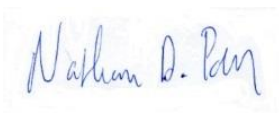
Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.

If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.

Please inform this Committee or myself when this project is terminated or completed. As noted above, you must also provide IRB with an annual status report and receive approval for maintaining your status. If you have any questions, please contact me at npoell@bakeru.edu or 785.594.4582.

Sincerely,



Nathan Poell, MA
Chair, Baker University IRB

Baker University IRB Committee
Scott Crenshaw
Jamin Perry, PhD
Susan Rogers, PhD
Joe Watson, PhD

Appendix C: Participant Consent Form

**Consent Form for Participation in a Research Study
Baker University**

**Grade Distribution and Perception of School Culture and Climate
in a New Secondary School**

Description of the research and your participation

You are invited to participate in a doctoral research study conducted by Lisa V. Lauck. The purpose of this research is to study grade distribution over a three year period of a new secondary school opening and how perceptions of school culture and climate may affect those grades. Your participation will involve a seven question interview conducted by phone, in-person interview, or electronic response.

Risks and discomforts

There are no known risks associated with this research.

Potential benefits

There are no known direct benefits to you that would result from your participation in this research. This research may help us to understand better how perceptions of school culture and climate affect grading in the initial years of opening a new school where previously no climate or culture existed.

Protection of confidentiality

All individual's names, and the name of the school and district, have been changed and/or redacted in this study. Your identity will not be revealed in any publication resulting from this study.

Voluntary participation

Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study.

Contact information

If you have any questions or concerns about this study or if any problems arise, please contact myself, Lisa Lauck, at (816) 500-4109 or email, lauck.lisa@gmail.com.

Consent

**I have read this consent form and have been given the opportunity to ask questions.
I give my consent to participate in this study.**

Participant's signature _____ Date: _____

Appendix D: Interview Questions for Principal

School culture refers to the beliefs, perceptions and attitudes, both perceived and realized, that influences all aspects of how a school functions. "Perceptions of grading may almost be as important as the grades themselves when parents and students develop ideas of what they believe grading should entail and if the reality fits their perception or if it is very different from what is expected. These issues require significant consideration because they emphasize the importance of a culture that affects teaching and learning on many levels and influences how grading patterns are conducted. (Quoted from my Chapter 2)"

RQ1 - To what extent is there a change over three academic years, 2013-2016, in grading (advanced, proficient, basic/below basic) at a newly established school?

RQ2 -How do administrators perceive the influence of school culture on grading after a new secondary school opened?

Interview questions addressing RQ2:

NAME:


TITLE:

SCHOOL:

1. What is your educational background (i.e. degree(s), years teaching, years administrating, years in district)? How long were you principal of [REDACTED] High School? How long have you served as principal of [REDACTED] North High School?

2. Can you describe the attitude teachers, students and parents have towards academics at [REDACTED] North High School? How is that is similar or different from [REDACTED] High School?

3. Would you describe what your description is of *school climate*? How do you see school culture and climate interacting with grading?

4. Can you describe how school climate and culture affects *perceptions* of grading?
5. As a lead administrator in an a newly established secondary school, how do you set policy and establish a rich school culture where there previously had been none?
6. In what ways do students at your school demonstrate that they are part of the school climate and culture (i.e. wearing school colors, part of clubs/activities/athletics, etc.)? Can you describe how school climate and culture affect student perceptions of grading?
7. Did the perceived attitude towards academics change over time or remain the same as  North progressed in age?

THANK YOU FOR TAKING THE TIME TO HELP ME COMPLETE MY RESEARCH!

Appendix E: Interview Questions for Assistant Principal Patriot HS

School culture refers to the beliefs, perceptions and attitudes, both perceived and realized, that influences all aspects of how a school functions. "Perceptions of grading may almost be as important as the grades themselves when parents and students develop ideas of what they believe grading should entail and if the reality fits their perception or if it is very different from what is expected. These issues require significant consideration because they emphasize the importance of a culture that affects teaching and learning on many levels and influences how grading patterns are conducted. (Quoted from my Chapter 2)"

RQ1 - To what extent is there a change over three academic years, 2013-2016, in grading (advanced, proficient, basic/below basic) at a newly established school?

RQ2 -How do administrators perceive the influence of school culture on grading after a new secondary school opened?

Interview questions addressing RQ2:

NAME:


TITLE:

SCHOOL:

1. What is your educational background (i.e. degree(s), years teaching, years administrating, years in district)? How long have you been an administrator? How long have you served as an assistant administrator of [REDACTED] High School?

2. Can you describe the attitude teachers, students and parents have towards academics at [REDACTED] High School? How is that is similar or different from [REDACTED] North?

3. Would you describe what your description is of *school climate*? How do you see school culture and climate interacting with grading?

4. Can you describe how school climate and culture affects *perceptions* of grading?
5. As an assistant administrator in an established secondary school, how do you assist in creating policy and maintaining a rich school culture?
6. In what ways do students at your school demonstrate that they are part of the school climate and culture (i.e. wearing school colors, part of clubs/activities/athletics, etc.)? Can you describe how school climate and culture affect student perceptions of grading?
7. How has the attitude towards academics changed over time or remained the same at  High School?

THANK YOU FOR TAKING THE TIME TO HELP ME COMPLETE MY RESEARCH!

Appendix F: Interview Questions for Assistant Principal Patriot North HS

School culture refers to the beliefs, perceptions and attitudes, both perceived and realized, that influences all aspects of how a school functions. "Perceptions of grading may almost be as important as the grades themselves when parents and students develop ideas of what they believe grading should entail and if the reality fits their perception or if it is very different from what is expected. These issues require significant consideration because they emphasize the importance of a culture that affects teaching and learning on many levels and influences how grading patterns are conducted. (Quoted from my Chapter 2)"

RQ1 - To what extent is there a change over three academic years, 2013-2016, in grading (advanced, proficient, basic/below basic) at a newly established school?

RQ2 -How do administrators perceive the influence of school culture on grading after a new secondary school opened?

Interview questions addressing RQ2:

NAME:


TITLE:

SCHOOL:

1. What is your educational background (i.e. degree(s), years teaching, years administrating, years in district)? How long have you been an administrator? How long have you served as an assistant administrator of [REDACTED] North High School?

2. Can you describe the attitude teachers, students and parents have towards academics at [REDACTED] North High School? How is that is similar or different from [REDACTED] High School?

3. Would you describe what your description is of *school climate*? How do you see school culture and climate interacting with grading?

4. Can you describe how school climate and culture affects *perceptions* of grading?
5. As an assistant administrator in an a newly established secondary school, how do you assist in creating policy and establishing a rich school culture?
6. In what ways do students at your school demonstrate that they are part of the school climate and culture (i.e. wearing school colors, part of clubs/activities/athletics, etc.)? Can you describe how school climate and culture affect student perceptions of grading?
7. How has the attitude towards academics changed over time or remained the same at  North High School?

THANK YOU FOR TAKING THE TIME TO HELP ME COMPLETE MY RESEARCH!