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THE IMPACT OF TEACHER MORALE AND SCHOOL CULTURE ON STUDENT  
ACHIEVEMENT

By  
Meredith Bost

A Dissertation Submitted to the  
Gardner-Webb University School of Education  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Education

Gardner-Webb University  
2019

## Approval Page

This dissertation was submitted by Meredith Bost under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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## **Abstract**

IMPACT OF TEACHER MORALE AND SCHOOL CULTURE ON STUDENT ACHIEVEMENT. Bost, Meredith, 2019: Dissertation, Gardner-Webb University.

The purpose of this study was to examine the impact of teacher morale and school culture on student achievement. The setting for this research was a high school in a small, semi-urban school district in the Piedmont of North Carolina. For the purpose of this study, teacher morale and school culture were based on the opinion of English II and biology teachers at the study site. The study's methodology included surveying English II and biology teachers on teacher morale and school culture. To measure teacher morale, the Purdue Teacher Opinionnaire was given to each participant. To measure the school's culture, the School Culture Survey was given to each participant. A focus group was held to examine the results of teacher morale and school culture and to further exam the survey results. To measure student achievement, End-of-Course (EOC) exams scores for English II and biology were examined. Results from each participant's two surveys on morale and school culture were analyzed with their students' achievement data on the EOC exams. Data results on teacher morale reflected low teacher morale for each participant except one. Data results on school culture revealed positive school culture for all participants except one. Student achievement data for both English II and biology reflected scores above mastery for all participants except one. Correlations ran on teacher morale and student achievement as well as on school culture and student achievement revealed a positive correlation for both; however, neither correlation proved to be statistically significant.

*Keywords:* teacher morale, school culture, student achievement, teacher efficacy

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## **Chapter 1: Introduction**

The reform efforts of the last 30 years have failed to improve student achievement in schools because they failed to adequately address the importance of culture and teacher morale within schools (DuFour & Eaker, 1998). Over the past few decades, teacher professionalism and morale have declined as education has pushed high stakes testing and centralized control of education (Ward, 2015).

Beginning in the early 2000s, billions of dollars have been spent on school reforms such as No Child Left Behind, Race to the Top, and Common Core, all of which have been abandoned (Ward, 2015). On December 10, 2015, President Obama signed the Every Student Succeeds Act (ESSA) into law. The law includes provisions that will help to ensure success for students and schools. It works to advance equity by upholding critical protections for America's disadvantaged and high needs students; it requires that all students in America be taught to high academic standards that will prepare them to succeed in college and careers; and it ensures that vital information is provided to educators, families, students, and communities through annual statewide assessments that measure student progress toward those high standards (ESSA, 2015).

As a result of these reforms, teachers no longer control the curriculum, and commercial companies are now the ones controlling what is being taught in school and how teachers should teach (Ward, 2015). The result of these actions has caused more certified teachers to become disgruntled, for they see this as the educational field not being taken seriously (Deal & Peterson, 1998). A 2012 MetLife survey found that the number of teachers rating their job satisfaction levels as very satisfied declined from 62% in 2008 to 39% in 2012 (Ward, 2015). This teacher satisfaction rate was the lowest it had been in 25 years. The survey also showed that 51% of teachers reported being under



great stress several days a week (Ward, 2015).

With these statistics, it is not surprising that the number of people going into the field of education and staying in the field of education is declining. The School of Education at UNC-Chapel Hill saw a decline in enrollment of 40% between 2012 and 2013 (Clark, 2016). In addition to high stakes testing, Eaker-Rich, a senior dean at the university, stated that “pay is an issue for many would-be education students, but that students are also picking up on a negative public narrative about education” (Clark, 2016, p. 4). She referenced the decline in enrollment in schools of education in other states like California and New York, where teacher pay is much higher, as a reason why it is not only pay causing students to turn away from teaching (Clark, 2016). Eaker-Rich also referenced the A-F school grading systems as a deterrent for students to go into education. She stated that the A-F grading system makes many schools unsatisfactory but are often a poor measure of how good teachers are at their jobs (Clark, 2016). According to Ward (2015), a professor of sociology at Western Connecticut State University, “the key to effective schools does not reside in the interventionist strategies and think-tank polished ideas, but in the way teachers and schools are supported, both financially and publicly” (p. 3).

Schools and school districts are at the center of public attention and public policy on education reform. Performance-based teacher evaluation systems are a notable example of this. In order to compete for funding under the Obama administration’s \$4.3 billion Race to the Top program, state education departments began requiring their school districts put into place teacher evaluation systems that would rely heavily on student achievement on state tests. School districts were then being expected to link decisions on teacher tenure; promotion; contract extensions; and in some cases, salaries for individual

teachers to the student assessment scores (Chingos, Whitehurst, & Gallaher, 2013). The reforms were attempting to ignite change and reform on student achievement at the top levels of education rather than seeing that educational reform on student achievement takes place at the individual school level with teachers, curriculum, and culture (Chingos et al., 2013). Attempting to change school culture is a major challenge for schools as it requires a culture shift in the way we think about school. Too many schools are struggling to shake off the No Child Left Behind legacy of high stakes standardization before they can focus more on the skills that can foster social and emotional well-being of staff and students (Walker, 2016).

This study examined the current body of knowledge pertaining to the two variables of teacher morale and school culture and their relationship to student achievement as it pertains to EOC exams in high school English II and biology courses. Research on these constructs will act as the foundation for additional understanding of the relationship between these three variables in a high school located in Piedmont County (pseudonym), North Carolina. Chapter 1 of this study examines the background and context of the problem, highlighting the purpose for this study. In addition, the chapter describes the setting in which the study took place as well as key operational definitions that will be referred to throughout the study.

### **Statement of the Problem**

School districts, superintendents, and principals feel relentless pressure to raise student achievement (Kaplan & Owings, 2013); however, many reform endeavors fail because educators do not understand the complexity of change, consider a school's culture, or respect its capacity to derail even well-intentioned efforts (Kaplan & Owings, 2013). Attempts to improve schools have largely focused on imposing new rules and

practices, or restructuring the old ones, rather than reculturing them by making schools the kind of places that stimulate and support teachers to make meaningful changes from the inside (Kaplan & Owings, 2013). A continuous stream of seemingly superficial, unconnected “reforms” has convinced teachers that the system does not know what it is doing (Kaplan & Owings, 2013). Many teachers feel defensive due to external attacks. Others, often the most eager and idealistic, become burned out reformers (Kaplan & Owings, 2013). There are many factors that impact student achievement, one being teacher morale (Hirsch & Emerick, 2007).

With data showing that teacher morale is decreasing and, as a result, teachers are leaving the profession, the question of what impact teacher morale has on teaching and student achievement comes to the forefront. Attempts to improve schools have largely focused on imposing new rules and practices, rather than working to use what they already have and improve upon it to make schools the kind of places that stimulate and support teachers to make meaningful changes from the inside (Kaplan & Owings, 2013). By promoting a positive school climate, schools can allow greater equality in educational opportunities, decrease socioeconomic inequalities, and enable more social mobility (Walker, 2016).

Morale consists of the various feelings, a state of mind, mental attitude, and emotional attitude (Mendel, 1987). Teacher satisfaction consists of five critical components: administrative leadership, administrative concern, personal interaction, opportunity for input, and professional growth (Cook, 1979). Lumsden (1998) stated that the major contributing factor to declining teacher morale is that teachers are being stretched too thin. Lumsden noted the expectations placed on teachers are expanding at a rapid rate. Teachers are being asked to increase their role to encompass not only teaching

and mentoring students, but also functioning as a frontline social worker. When teacher morale is high, it can have a positive effect on student attitudes and learning. In addition, raising teacher morale can improve standardized test scores as well as improve the culture of the school (Miller, 1981).

According to the MetLife (2012) survey of the American teacher, 39% of teachers stated they were satisfied in their profession. This number was down from 62% in 2008. These data show that teacher morale has decreased 23% in 5 years. More than half of the teachers surveyed in the MetLife survey stated they felt a large amount of stress on a daily basis. In addition, the MetLife survey reported that the percentage of teachers who said they were very or fairly likely to leave the profession had increased from 17% in 2009 to 29% in 2013. In 2011, the National Center for Education Statistics reported that 33% of current public education teachers did not expect to still be teaching in public schools in 5 years (Aud et al., 2011). In addition, it was reported that 50% of new teachers would leave the profession within 5 years and that the average salary for teachers was \$55,350. A report by the Alliance for Excellent Education estimated that over 1 million teachers move in and out of schools annually and that between 40% and 50% quit within 5 years (Ward, 2015). It also revealed that 13% of the nation's 3.4 million teachers move schools or leave the profession every year (Ward, 2015). In addition, data from the United States Department of Education reflect that enrollments in university teacher preparation programs have decreased by 10% from 2004-2012 (Ward, 2015). Almost all of North Carolina's public universities are turning out fewer and fewer teachers. Enrollment in UNC schools of education and teacher preparation programs has dropped 30% in the last 5 years, in both master's and bachelor's degree programs (Clark, 2016). According to Barth (1990), public educators have not enjoyed highly revered

positions in American society. This is evident in the lack of public commitment and little confidence in the U.S. educational system and with educators in general.

School culture is another component that affects student achievement. In recent years, the emphasis on school culture has shifted from a management orientation to a focus on learning (Sergiovanni, 2001). School culture has a direct relationship with student academic performance and teacher productivity (Adeogun & Olisaemeka, 2011). A positive school culture is positively related to school success indicators, specifically standardized test scores (Destefano, Monrad, May, McGuiness, & Dickerson, 2007). According to Dr. Kent Peterson, a professor in the Department of Educational Administration at the University of Wisconsin-Madison and co-author of *Shaping School Culture: The Heart of Leadership*, the culture of a school consists primarily of underlying norms and values and beliefs that teachers and administrators hold about teaching and learning (Deal & Peterson, 1998). He further stated that culture is additionally composed of traditions and ceremonies schools hold to build community and reinforce their values (Deal & Peterson, 1998).

ESSA was signed by President Obama on December 10, 2015 (ESSA, 2015). The previous version of the law, the No Child Left Behind Act, was enacted in 2002 (ESSA, 2015). The bipartisan measure reauthorized the 50-year-old Elementary and Secondary Education Act (ESEA), which was the nation's national education law and longstanding commitment to equal opportunity for all students (ESSA, 2015). The new law builds on key areas of progress in recent years made possible by the efforts of educators, communities, parents, and students across the country (ESSA, 2015). One high point of ESSA is that it requires the inclusion of a "nonacademic" factor to be included in evaluating schools. The nonacademic factor is school climate, and it is required to be

included in the state accountability plan (ESSA, 2015).

MacNeil, Prater, and Busch (2009), in a study on school climate and culture, reported that strong school cultures have better motivated teachers, and highly motivated teachers have greater success in terms of student performance and student outcomes. School climate, if positive, can yield positive outcomes in student education and school personnel morale, with the inverse being true as well (Freiberg, 1998). A positive school climate increases academic performance, enhances social and emotional skills, and retains teachers (Keiser & Schulte, 2009). According to Demerath (2009), too often, schools are defined by demographic data and test scores. While measurable academic achievement is important, it is more important to understand how school culture can create an environment in which students are ready and motivated to learn. The lack of serious attention to school culture has stymied efforts to improve schools (Demerath, 2009). School climate and student achievement should never compete with each other (Walker, 2016).

While the past 40 years of research have prompted huge shifts in what is known about successful teaching and learning—and despite decades of school reform to advance all students' achievement—little progress is evident (Kaplan & Owings, 2013). Research strongly suggests that school improvement occurs when multiple elements are in place, including strong school leadership, a safe and stimulating learning climate, strong ethical and trusting relationships, increased teachers' professional capacity for instruction and leadership, student-centered instruction, and links to parents and the community (Kaplan & Owings, 2013). These features cannot occur without supportive, shared school culture norms (Kaplan & Owings, 2013). Watson (2001) warned that if culture is not hospitable to learning, student achievement can suffer. School

effectiveness research has shown that school culture is, in fact, related to student achievement (Sackney, 1998). A study by Sweetland and Hoy (2000) revealed that after socioeconomic status, school culture had a more powerful effect on student achievement than any other variable. When administrators and teachers have a shared belief and collectively work together, they can promote higher levels of academic progress (Bandura, 1997).

### **Theoretical Framework**

Teacher efficacy is believed to play a central role in student achievement. Perceived self-efficacy contributes to academic development through teacher beliefs in their personal efficacy to motivate and affect the learning environments that they create and through the level of academic achievement their students are able to reach. Teacher beliefs in their ability to motivate and create learning opportunities affect the learning environments they create and therefore student achievement (Bandura, 1993).

According to Miller (1981),

External and internal pressures to improve pupil social behavior and academic performance continues. Our major response has been to increase discipline and remediation, but the results have not been encouraging. Largely ignored is the considerable research that indicated another, perhaps more productive, route to facilitating student growth. There is evidence that the social climate of the school and the morale of the staff can have a positive effect on pupil attitudes and learning. Improving the climate and morale also makes teaching more pleasant. (p. 483)

Positioning teachers' views, values, norms, attitudes, and sources of morale and motivation in the broader inter-relational context of schools, communities, and wider

elements of educational discourse is advantageous when considering how to best go about school change (Bosso, 2017). For over 30 years, researchers have explored the link between teacher self-efficacy and student achievement (Hattie, 2012). Teacher efficacy is when a teacher believes in their own ability to guide their students to success. Empowering teachers to take on leadership roles gives educators a true stake in their school. When teachers have a role in making important school decisions, feel their voices are heard, and can actively participate in building school culture, efficacy is raised (Hattie, 2012). Top-down, overly evaluative leadership models can lower teacher self-efficacy and ultimately demoralize teachers, negatively impacting classroom achievement (Hattie, 2012). When teachers and leadership work together toward mutual goals, so grows a shared belief in the direction of the work and the ability to effect change with students (Hattie, 2012). Research suggests that teachers with a strong sense of self-efficacy tend to be better planners, more resilient through failure, and more open-minded and supportive with students (Hattie, 2012). If the students perceive that they are participants in a caring learning environment, they are more likely to be engaged in school. Higher levels of engagement produce increased attendance and higher test scores (Barkley, 2006).

School culture has also been reported to have a direct relationship with student academic performance and teacher productivity (Adeogun & Olisaemeka, 2011). The school culture pertains to the values and norms that direct how a school functions. Cohen, McCabe, Michelli, and Pickeral (2009) stated the culture of the school consists of five areas: safety, relationships, physical environment, shared vision, and participation. This study extended those constructs and focused school culture around the following six constructs as established on the School Culture Survey (Gruenert & Valentine, 1997):



collaborative leadership, teacher collaboration, professional development, unity of purpose, collegial support, and learning partnerships. In terms of teacher morale, the study utilized the Purdue Teacher Opinionnaire which centered around the constructs of teacher rapport with principal, satisfaction with teaching, rapport among teachers, teacher salary, teacher load, curriculum issues, teacher status, community support of education, school facilities and services, and community pressures.

Student achievement consists of the level of mastery achieved by students in academic areas. In order to analyze student achievement, high stakes testing, current educational policy, and assessment methods including current growth models must be examined. This study utilized EOC exam scores for English II and biology. The study examined the relationship between these three constructs and builds on this theoretical framework.

### **Background and Significance**

The focus of the majority of educational research in the last quarter of a century has been on increasing student achievement (Houchard, 2005). Student achievement is a major area of concern, and research demonstrates that there is a direct correlation between student achievement and teacher morale (Miller, 1981). More and more emphasis is being placed on teacher quality rather than on their working conditions; however, many researchers believe there is a relationship between the two (Houchard, 2005). Many states have changed or are in the process of changing their teacher evaluation tools to assess teachers based on student achievement rather than solely on administrator observations. A study by Berkowitz, Moore, Astor, and Benbenishty (2016) found of 78 studies pertaining to school climate and student achievement, all but one found a positive relationship between improved school climate and student

achievement.

North Carolina's educator effectiveness model is designed to support and enhance the overall outcome of what the state feels is effective teaching, and that is student learning and achievement (North Carolina Department of Public Instruction, 2012a).

North Carolina uses multiple indicators to assess student learning. EOC tests, career and technical education state assessments, North Carolina final exams and analysis of student work are all considered when determining student achievement (North Carolina Department of Public Instruction, 2012a). In order to assess to what degree students are learning, North Carolina uses multiple assessments and processes for measuring student progress over time. The educator effectiveness system focuses on growth of students, not on their proficiency level (North Carolina Department of Public Instruction, 2012a).

Student proficiency is whether or not students have scored at a level that indicates that they consistently demonstrate mastery of the content standards and are well prepared for the next grade or course. On the EOC assessments, students are considered proficient if they score a level 3. Student growth is the amount of academic progress students make over the course of a grade or class. Students enter grades and courses at different places; some have struggled, while some have excelled. Regardless of how they enter a grade or course, students can make progress over the course of the school year (North Carolina Department of Public Instruction, 2012a).

Just as students are assessed by the state by their achievement, teachers are as well. In addition to the observations completed by administrators, teachers are also evaluated on their students' achievement using the state standardized tests. The Education Value-Added Assessment System (EVAAS) is the system used to assess teachers on student achievement. EVAAS provides North Carolina's educators with tools

to improve student learning as well as the ability to reflect on and improve their own effectiveness. Along with other sources of data, EVAAS plays a valuable role in the success of North Carolina's schools and students (EVAAS, n.d.).

According to the North Carolina Department of Public Instruction, the intent of the testing program is to challenge each student in North Carolina public schools with high expectations to learn, to achieve, and to fulfill his or her potential. To support this idea, the North Carolina General Assembly passed GCS 115C-174.10 that states the following purpose for the testing program:

(i) to assure that all high school graduates possess those minimum skills and that knowledge thought necessary to function as a member of society; (ii) to provide a means of identifying strengths and weaknesses in the education process in order to improve instructional delivery; and (iii) to establish additional means for making the education system at the State, local, and school levels accountable to the public for results. (“North Carolina Testing Program: Technical Information 2013-14 and Beyond,” n.d., para. 1)

Teachers who teach a subject area that has an EOC test, North Carolina final exam, or a common exam issued by the state are rated according to the growth students achieve on those particular tests (North Carolina Department of Public Instruction, 2012a). Teachers who teach subjects without common final exams are rated using their school's overall student growth score (North Carolina Department of Public Instruction, 2012a). There has been a shift away from focusing on student learning to teacher evaluation and mandated standardized testing to assess student achievement. This shift has created a culture of high stakes testing whereby too many teachers are evaluated based on student test scores and not the actual teaching they do in the classroom (Walker,

2014). A demand for higher standards and increased accountability in the American public school system has led to a national increase in high stakes testing (Amrein & Berliner, 2003), which has led to a decrease in teacher morale.

A study of 1,500 PreK-12 teachers conducted by the National Education Association in 2014 found that 72% of teachers surveyed felt moderate or extreme pressure to improve test scores; 42% of those surveyed reported that pressure to improve test scores had a negative impact on their classroom (Walker, 2014). Despite the fact that 75% of teachers were satisfied with their jobs, 45% have considered quitting the profession because of standardized testing (Walker, 2014). In addition, of the 1,500 teachers surveyed, 41% reported that emphasis on improving standardized test scores had a negative impact on their classroom, and 51% reported they had spent too much time on standardized testing (Walker, 2014).

Both the amount of standardized testing to assess student achievement and the high stakes associated with this testing have taken a toll on teacher morale and the overall school environment (Walker, 2014). Low teacher morale can lead to low performance in the classroom as well as low expectations for students and these low expectations can decrease achievement on standardized tests (Tanriogen & Ermece, 2008). Equipping school leaders with knowledge gained from this study will not only lead to insight into the current state of teacher morale and school culture but also into what impact teacher satisfaction and the overall school culture has on teaching and furthermore student learning and achievement. Principals can then work to balance their support for both high levels of student learning and achievement and also a positive school culture and high staff morale (Protheroe, 2006).

## Context of the Problem

In the 2014-2015 school year, North Carolina lawmakers passed standards for grading public schools which were passed amid concern from school leaders and teachers across the state (North Carolina Department of Public Instruction, 2012b). The letter grades were meant to give parents and administrators an at-a-glance reference to see whether or not a school was doing its job. Schools receiving a D or F were required to send a letter to parents informing them of their grade. Table 1 shows the School Report Card Data for X High School from the last several years.

Table 1

### *School Report Card for X High School*

School Year	Growth	School Performance Score	School Performance Grade	Graduation Rate
2014-2015	90.7	80	B	89.7%
2015-2016	95.6	81	B	90%
2016-2017	97.6	84	B	93.3%
2017-2018	91.3%	81	B	91.3%

Based on the results of the last three North Carolina School Issue Report Cards, X High School exceeded its predicted growth as measured by the state and continued to grow. In addition to consistently increasing the school's overall performance each year, X High School also saw an increase in the graduation rate for 3 of the past 4 years, with only a slight dip in 2017-2018.

Table 2 shows EOC test scores for X High School from the last several years.

Table 2

*EOC Test Scores for X High School*

Year	English	Biology
2012-2013	57.8%	62.6%
2013-2014	69.3%	81.3%
2014-2015	71.8%	73.5%
2015-2016	72.2%	69.6%
2016-2017	76.2%	72.89%
2017-2018	74.9%	69.6%

In 5 of the past 6 school years, from 2012 to 2018, X High School saw an increase in EOC test scores for biology and English II, with only a slight dip in 2017-2018.

Table 3 shows results for four major categories of the North Carolina Teacher Working Conditions Survey for X High School that directly relate to teacher morale and school culture.

Table 3

*North Carolina Teacher Working Conditions Survey Results*

Question	% Agree 2014	% Agree 2016	% Agree 2018
5.1 Managing Student Conduct	89.4%	85.8%	64.2%
6.1 Teacher Leadership	91.3%	89.7%	81.8%
7.1 School Leadership	94%	93%	81.3%
10.6: Overall, my school is a good place to work and learn	96.1%	94.3%	91.4%

Table 3 shows the comparison between the 2014, 2016, and 2018 results in four critical areas pertaining directly to teacher morale and school culture. Within the working conditions survey, teachers' overall feelings towards the school in the four major categories directly related to teacher perception declined in each category from 2014 to 2018.

X High School is consistently showing overall school growth every year as well as consistently showing growth in the EOC exam subject areas of biology and English II; however, it is showing a consistent decline in the North Carolina Working Conditions Survey, specifically the areas pertaining to teacher morale and school culture.

### **Purpose of the Study**

The purpose of this study was to determine the relationship between teacher morale, school culture, and student achievement as measured by the North Carolina high school biology and English II EOC exams. With an increased emphasis on student achievement and with teacher and school accountability being linked so heavily to it, research on these constructs will act as the foundation for additional understanding of the

current state of teacher morale and school culture at X High School as well as their impact on student achievement. Research states that schools with high teacher morale and positive school culture, show an increase in student achievement; however, X High School is showing data contrary to this. By identifying the current state of teacher morale and school culture at X High School and working to raise these two constructs, X High School could potentially see an even greater increase in student achievement. In addition, the study sought to identify the relationship between teacher morale, school culture, and student achievement. Further, the study sought to determine what can be done to better address these variables at the study site in order to increase student achievement.

### **Research Questions**

1. What is the current state of teacher morale for biology and English II teachers in X High School as measured by the Purdue Teacher Opinionnaire?
2. What is the current school culture in X High School as measured by the School Culture Survey?
3. What is the relationship between the variables of teacher morale, school culture, and student achievement as measured by the Purdue Teacher Opinionnaire, School Culture Survey, and EOC exams?

### **Setting**

The research took place in a semi-urban school district located just outside a major metropolitan area in the piedmont of North Carolina. In the school district, there are three elementary schools, two intermediate schools, one middle school, and one high school. X High School is classified as a regular school with a traditional schedule by the North Carolina Department of Public Instruction. Students attend school from August to



June. The school consists of approximately 1,900 students, with 52% being male and 48% being female. Within the student population of X High School, there are 510 seniors, 424 juniors, 482 sophomores, and 479 freshmen. X High School is a one-to-one laptop initiative school, where every student receives a laptop to use during their 4 years of high school. Table 4 reflects information on the teachers at X High School.

Table 4

*X High School Teacher Information*

Total Number	Full License	Nationally Board Certified	Advanced Degrees	0-3 Years of Experience	4-10 Years of Experience	10 Years of Experience
112	94.3%	15	21.6%	25%	25%	50%

In 2017-2018, X High School had 112 classroom teachers. Of those 112, 94.3% were fully licensed teachers. Fifteen were Nationally Board Certified, and 21.6% of the teaching staff had advanced degrees. In terms of experience, approximately 25% of the teachers had 0-3 years of experience, 25% had 4-10 years of experience, and 50% had 10 or more years of teaching experience. In addition, the teacher turnover rate in the school district was below the state average, at 12% of teachers leaving each year compared to the North Carolina state average of approximately 14%. The teacher turnover rate for X High School for the 2017-2018 school year was 11.5%, lower than the average for the school district and the state of North Carolina.

### **Definition of Terms**

For the purpose of this study, the terms teacher morale and teacher satisfaction were used synonymously as well as school culture and school climate. In addition, the following terms have been defined.

**Teacher morale.** The happiness, satisfaction, and feeling of worth teachers

experience within their field of work.

**School culture.** The quality and character of the school. It reflects the norms, goals, values, interpersonal relationships, and organizational structures within the school (National School Climate Center, 2007).

**Student achievement.** The percent of content mastery students demonstrate on standardized tests as determined by the North Carolina Department of Public Instruction.

**Accountability.** Refers to the use of testing to show student growth and achievement.

**EOC test.** The North Carolina EOC tests are used to sample a student's knowledge of subject-related concepts as specified in the North Carolina Standard Course of Study and to provide a global estimate of the student's mastery of the material in a particular content area. The North Carolina EOC tests were initiated in response to legislation passed by the North Carolina General Assembly in the North Carolina Elementary and Secondary Reform Act of 1984.

**English II EOC test.** Assessment given to students who have completed the English II course. The assessment is aligned to the Common Core State Standards. The EOC English II assessment has 50 multiple-choice, three constructed response items. The exam is given during the last 5 days of the semester in which the student completed the course. The North Carolina Department of Public Instruction estimates it will take 150 minutes for nearly all students to complete the EOC English II assessment. If more time is needed, students can have up to 240 minutes, except for students with documented special needs requiring accommodations ("North Carolina Testing Program: Technical Information 2013-14 and Beyond," n.d.).

**Biology EOC test.** Assessment given to students who have complete the biology

course. The EOC biology assessment has 60 multiple-choice questions. The exam is given during the last 5 days of the semester in which the student completed the course. Students have 150 minutes to complete the assessment. If more time is needed, students can have up to 240 minutes, unless additional time is required for students with special needs (“North Carolina Testing Program: Technical Information 2013-14 and Beyond,” n.d.).

**North Carolina final exams.** Considered standardized artifacts reflective of student growth for teachers and school growth for participants in the teacher evaluation process. Additionally, SBE policy GCS-A-016 requires public schools to use the course-specific operational assessments as the only final exams for specific courses (all science, math, English, and social studies courses that do not have an EOC required) and to use the results from all course-specific operational assessments as a minimum of 20% of the student's final grade for each respective course.

**School performance grade.** Eighty percent of the school performance grade is based on the school achievement score. The school achievement score is calculated using a composite method based on the points earned by a school on all of the tests measured for that school. Twenty percent of the school performance grade is based on academic growth. If a school has met expected growth and inclusion of the school's growth score reduces the school's performance score and grade, a school may choose to use the school achievement score solely to calculate the performance score and grade.

## **Summary**

According to Ellenberg (1972), schools where morale was high showed an increase in student achievement and were much better schools in comparison to schools with low teacher morale. In contrast, Watson (2001) stated that if the culture is not

hospitable to learning, student achievement can suffer. This study sought to determine what aspects of education influence teacher morale and school culture at X High School. In addition, the study worked to identify the relationship between teacher morale, school culture, and student achievement. Further, the study sought to determine what can be done to better address these variables at the study site in order to increase student achievement.

## **Chapter 2: Review of Related Literature**

### **Introduction**

The purpose of this study was to determine the impact of teacher morale and school culture on high school student achievement as measured by the North Carolina English II and biology EOC exams. School leaders must actively focus on increasing staff morale and school culture in order to positively impact student achievement in their schools (Penfold, 2011). When discussing teacher morale, school culture, and student achievement, there are many other variables that must be taken into consideration. Research and literature associated with each of these areas are discussed in detail below.

### **Teacher Morale**

There are approximately 14,000 school districts in the United States overseeing approximately 98,000 schools, which serve over 50 million students in grades kindergarten through 12<sup>th</sup> grade, and at the center of this massive system is the daily work of 3.5 million public school teachers (Snyder, de Brey, & Dillow, 2016). It is ultimately the teachers who are charged with the task of achieving the broad goals of public education (Senecha, Sober, & Hope, 2017); however, the current state of the teaching workforce does not provide an encouraging picture (Senecha et al., 2017). The MetLife (2012) survey of the American teacher found that teacher job satisfaction nationally fell 23% between 2008 and 2012 – its lowest level in 25 years. The survey also found that over half of teachers felt “under great stress several days a week” – an increase of 15% since the mid-1980s (Santos, 2012).

For decades, researchers have been interested in identifying the effects of job satisfaction and morale of workers on overall productivity. Initially, these studies began in the business and corporate arenas and have recently become an area of research in

education (Mendel, 1987); however, defining teacher morale has proved to be a difficult process due mainly to the fact that there are so many components that comprise it. The MetLife (2012) teacher survey revealed that teacher satisfaction decreased from 62% in 2008 to 39% in 2012. According to a study by the United States Department of Education in 2001, it is reported that of those individuals leaving the teaching profession, 27% were leaving due to retirement, while 49% left because of job dissatisfaction or a desire to pursue other careers (Graves, 2001).

Many aspects of education that affect teacher morale have been discussed over the years. Areas such as salaries, workload, student behavior, and school leadership all have an impact on teacher morale (Mackenzie, 2007). When teacher morale is high in a school and the school culture is healthy, teachers feel good about coming to work and about the job they are doing. This, in turn, impacts student morale and student achievement; however, low morale for teachers can lead to decreased productivity, most notably low student achievement (Mackenzie, 2007). Low staff morale results from professional lives that have little meaning, frustration, the inability to change what is happening, muddled goals, and demands that stretch resources (Koerner, 1990). Lumsden (1998) cited Mendel and stated that low levels of teacher morale could possibly lead to a decrease in productivity by the teacher, a loss of concern for the subject or the students, alienation from colleagues, depression, increased rate of sickness with missed workdays, general fatigue, and burnout. Dinham (1994) found that low morale was affected by many extrinsic factors such as changes to educational policies and procedures, schools having to deal with social problems, a declining status of teachers in society, poor supervision, and an increase in administrative workloads. In addition, Evans (1998) reported that perception of low status, low pay, and a lack of professional autonomy were three leading

factors to low teacher morale. A study by Barth (1990) found similar results pertaining to low teacher morale. His study revealed that teachers felt unappreciated, overworked, and not respected as professionals (Barth, 1990). Further, teachers reported to have distrust for administration, the public, or even themselves in some cases. Many of the teachers in the study reported that they were separated from one another or compartmentalized too often and were powerless to effect any real change (Barth, 1990). They also noted that they were frustrated by the non-teaching demands placed on them (Barth, 1990).

Rosenholtz (1985) summed it up best when he contended that it is hard to recruit new teachers and retrain those already in the profession because the rewards of teaching do not outweigh the frustrations.

Low teacher morale is not just isolated to the United States. Chen and Miller (1997) conducted an international review of 67 studies on teacher stress and found that there are two categories of school factors that affect teacher stress, organizational characteristics and individual characteristics. They stated that in terms of organizational factors, U.S. teachers and other teachers worldwide feel especially burdened by time constraints which manifest into exhaustion and low job satisfaction (Chen & Miller, 1997). The review also noted that other pressures teachers report include excessive workload, low salaries, insufficient classroom resources, class size, administrative bureaucracy, lack of involvement in decision-making, lack of collegiality and a sense of school community, inappropriate handling of student discipline, and few opportunities for advancement (Chen & Miller, 1997). Chen and Miller stated that U.S. teachers and teachers from other countries show similar patterns in terms of individual characteristics as well. Younger and less experienced teachers feel more alienated and powerless and thus experience more stress (Chen & Miller, 1997). Female teachers tend to feel more

satisfied with their jobs than male teachers, and elementary teachers report less stress than secondary teachers (Chen & Miller, 1997).

When discussing teacher morale, salary is an area that has significant impact. In 2009, the average beginning salary for a first-year teacher in the United States was \$55,350 (Aud et al., 2011). By 2011, that amount had dropped to \$39,000 (Aud et al., 2011). In the same study, it was reported that 45% of teachers surveyed were not satisfied with their current salary (Aud et al., 2011). Further, in a comparison study of the weekly wages of teachers with those of workers with similar education and experience revealed that since 1993, salaries of male teachers were 12.5% less than other workers, while female teachers were 13% less. Overall, teacher wages since 1979 have fallen 13.1% when compared to the salaries of similar workers (Allegretto & Mishel, 2016). Financial stress is not limited to just teacher salaries. Schools that have reported having a decrease in their budget had teachers who were less satisfied with their job than teachers in schools that did not report budgetary decreases (MetLife, 2012).

With teacher salaries decreasing, coupled with the budgetary restraints that are plaguing education, increase in workload is one area that has a large impact on teacher morale. While teachers are employed to teach, their job extends far beyond the face-to-face teaching. Schools are demanding more and more from their teachers, with little to no increase in compensation (Mackenzie, 2007). Extra duties such as curriculum design and development, school planning, marketing, community relations, information technology, workplace health and safety, resource management, student welfare, and extracurricular supervision are all common requirements of today's teachers (Mackenzie, 2007). Mackenzie (2007) found that teachers were generally in agreement regarding the relationships between workload, working conditions, and low morale. Eighty-eight



percent of teachers surveyed stated that their teaching job currently was harder than it had been when they first entered the profession (Mackenzie, 2007). “The problem for teachers is not so much the teaching itself, but coping with the paperwork and pressure associated with increased accountability and transparency that makes the job seem more difficult” (Mackenzie, 2007, p. 96); however, based on the 2006 North Carolina Teacher Working Conditions Survey, 53% of teachers, up from 40% in 2004, stated that they were protected from duties that interfere with teaching (Hirsch & Emerick, 2007).

Recent work by Kraft and Papay (2014) found that teachers who work in more supportive environments became more effective at raising student achievement on standardized tests over time than teachers who worked in less supportive environments, after controlling for student characteristics, prior test scores, and teacher and school characteristics. They found that teachers in schools that had the most positive teaching conditions were 38% more effective after a decade than teachers in schools with low teaching conditions (Kraft & Papay, 2014). In addition, they reported that in over 2 years, teachers were 11% more effective if they worked in schools with positive teaching conditions (Kraft & Papay, 2014).

The 2016 North Carolina Teacher Working Conditions Survey found that working conditions are strongly associated with overall school performance grade scores. The student achievement analyses revealed a statistically significant, positive relationship between the overall teaching conditions composite and school performance grade scores even after controlling for student, teacher, and school-level variables (Hirsch & Emerick, 2007). Teachers also stated that more efforts were being made to reduce routine paperwork (Hirsch & Emerick, 2007). Hirsch and Emerick (2007) indicated that school and district leaders are seeing the impact workload has on teacher morale and are taking

steps to alleviate many of the extra responsibilities teachers have been required to have in order to get teachers back to teaching.

A 2006 study of North Carolina Working Conditions Survey completed by teachers revealed that school leadership was one of the most important factors of teacher morale (Hirsch & Emerick, 2006). Teachers reported that they value a school where they were encouraged to collaborate with school leaders (Hirsch & Emerick, 2006). This echoed a report conducted by the Public Education Network in 2003 that found that new teachers working in a school led by an accessible, supportive, and visible principal had a much easier transition into teaching and were much more successful (“Leadership Matters,” 2013).

“There are many additional stressors, including larger class sizes, more behavioral challenges, and decreased funding and resources, that impact the school climate and teacher job satisfaction” (Penfold, 2011, p. 25). These are areas of concern for today’s teachers due to the changing face of education in the United States. Many of these are areas that you will constantly hear from teachers as areas where they are unhappy, unsatisfied, or frustrated. When teacher morale is high, students typically show high achievement (Black, 2001); however, when teacher morale is low, achievement drops and other problems begin to surface (Black, 2001). Low teacher morale usually leads to indifference toward others, cynical attitudes toward students, little initiative when it comes to lesson preparation, increased use of sick days, and contemplation of leaving the teaching profession (Black, 2001). Disaffected teachers distance themselves emotionally from their students and have lower expectations (Skaalvik & Skaalvik, 2011). They also have higher rates of absenteeism which disrupts daily routines, is correlated with student absenteeism, and undermines school climate (Kronholz, 2013). There is evidence that

teacher disengagement has negative effects on student achievement and student growth (Damle, 2009). Teachers with an unhealthy attitude are often a symptom of an unhealthy school (Black, 2001). In a study conducted by Henderson and Henderson (1996), it was reported that nearly 44% of the Texas teachers surveyed were “seriously considering” leaving the profession. One third of these teachers contributed their decision to poor working conditions, while one-fifth stated it was due to low salaries (Henderson & Henderson, 1996). Most of the reviewed literature revealed that low teacher morale is credited to extrinsic factors.

Mendel’s (1987) study of teacher morale in Guam focused on which work site conditions and teacher characteristics most affected teacher morale. The study used the areas of principal relationships, teaching environment, relationships with colleagues, salary, workload, curriculum issues, teacher status, community support, school facilities, and community pressure in order to determine what affects teacher morale and satisfaction (Mendel, 1987). Satisfied employees are more productive and given that productivity of public schools is based on student achievement, this has important implications for school leaders (Mendel, 1987). These findings support Ellenberg (1972), whose study found that “schools that reported high morale also showed an increase in student achievement” (p. 76).

When school environments are healthy and teacher morale is high, not only do teachers feel good about themselves and others, but they also possess a sense of accomplishment from their jobs (Hoy & Miskel, 1987). High teacher morale also leads to pupil achievement, teacher achievement, positive changes in pupil attitudes and behaviors, mastery, self-growth, and positive relationships (Dinham, 1994). A study conducted by Napier (1966) found that high teacher morale was associated with nine

characteristics:

1. The teacher being appreciated as an individual by administration.
2. Confidence from administration in the teacher's ability.
3. Administrative support when dealing with student discipline.
4. Teacher input in the development of school policies.
5. Adequate supplies and facilities.
6. Appropriate teaching loads and assignments.
7. Equal distribution of extracurricular workloads.
8. Meaningful in-service training and staff development.
9. Job security.

To add, Clough (1989) contended that high staff morale was associated with feelings of belongingness, togetherness, achievement, and high self-esteem and group esteem.

According to Dinham (1994), high teacher morale is credited with intrinsic rewards. As further stated by Goddard, Hoy, and Hoy (2000), high teacher efficacy within a school reflects the beliefs of its teachers that they will have a positive effect on students.

Goddard and Skrla (2006) looked at school characteristics reported by 1,981 teachers and correlated them with teachers' reported levels of efficacy. Goddard and Skral found that less than half the difference in efficacy could be accounted for by factors such as the school's socioeconomic status level, student achievement level, and faculty experience. Based on this, they suggested that principals have the opportunity to build collective efficacy through the experiences they provide for teachers (Goddard & Skrla, 2006).

According to Miller (1981), "the morale of the staff can have a positive effect on pupil attitude and learning" (p. 193). The article utilized two inner city schools in New York. The schools had nearly identical facilities, similar staff characteristics, and almost

the same number of low-income students enrolled. The school that reported having teacher leadership and collaboration between stakeholders scored higher in reading than the other school (Miller, 1981). Miller (1981) stated that “the importance and intervention of staff morale, school climate and education productivity to pupil learning and effective performance cannot be denied” (p. 4). While staff morale has a measurable effect on student performance in multiple ways, a positive school climate is beneficial for both students and staff members (Penfold, 2011). Teachers who have high morale tend to be those who relate well with parents and students (Ellenberg, 1972).

While salary is an important factor pertaining to teacher morale, researchers have found that teachers tend to be motivated more by intrinsic rewards such as self-respect, responsibility, and sense of accomplishment (Black, 2001). Ma and MacMillan (1999) identified the different effects that two types of schools have on teacher morale. Traditional, rigid, bureaucratically administered schools typically result in low teacher morale and job satisfaction; however, progressive, flexible schools that use collaboration to solve problems actually raise teacher morale (Ma & MacMillan, 1999). Schools where teachers believe they can contribute to positive change and their voice and contributions matter tend to have higher teacher morale (Ma & MacMillan, 1999). Teachers who are satisfied and happy with their jobs report that their administrators respect and value their input as well as work to keep the paperwork and extra duties to a minimum (Ma & MacMillan, 1999). Ma and MacMillan also concluded that principals spearhead their school’s climate and culture. In addition, they noted that teachers have more job satisfaction and higher morale in schools where the environment is open and collegial. In contrast, schools where the environment is tense and teachers feel isolated tend to see a lower job satisfaction and lower teacher morale (Ma & MacMillan, 1999). Ellenberg

(1972) summarized the importance of high teacher morale by stating,

Morale affects more than just productivity or student achievement. It assists in establishing the character of a school. It is one of the factors which may determine whether a school functions at its best, demanding and receiving the utmost from its students, or whether the school plods along happy, just to see the passing of another day. (p. 37)

While morale is something easy to overlook, one must never forget that it can, and for the most part does, make a school stand ahead of the rest (Von Burg, 1966).

### **School Culture**

According to MacNeil et al. (2009), most of the literature and studies on school culture have focused mainly on teachers, leader-teacher relations, and subsequent issues of job satisfaction in relation to school culture and student achievement. Many state that teachers have the greatest impact on student achievement; however, teachers are only one component in the complex schooling environment (Tonissen, 2015). Miller (1993, as cited in MacNeil et al., 2009), stated that school culture has rarely been studied in relation to its effect on student achievement. Miller (1981) also suggested that school climates can be open or closed depending on the school. School culture has been shown to be a major component of success at the school, teacher, and student levels (Creemers & Kyriakides, 2010). A closed school climate is one that has a confining, concealing, and/or restricting atmosphere (Miller, 1981). Staff in this type of environment feel apathetic, and students tend to learn in isolation. On the contrary, schools with an open climate lend themselves to be accepting, honest, and balanced between task achievement and social interaction. Miller (1981) continued his definition of school culture by stating that a positive school climate is one that creates a cohesiveness between students and

staff; embodies high faculty and student morale; and emphasizes mutual respect, trust, and caring for others (Miller, 1981). This idea is supported by Keiser and Schulte (2009), as they stated that a positive school climate increases student achievement, promotes social and emotional skills, and creates an environment where teachers want to return to year after year. At its core, school culture is the quality and character of the school. It is based on patterns of school experiences for those who work and learn there (National School Climate Center, 2007). It reflects norms, goals, values, interpersonal relationships, and organizational structures (National School Climate Center, 2007).

A study conducted by Berkowitz et al. (2016) revealed a positive relationship between school culture and student achievement. After reviewing 78 studies on school climate and student achievement, conducted between 2000 and 2015, all but one showed a relationship between school culture and student achievement (Berkowitz et al., 2016). They reported that schools where students feel safe, engaged, and connected to their teachers are also schools that have narrower achievement gaps between low-income children and their wealthier peers (Berkowitz et al., 2016). A research analysis found correlations between improved school climates and narrower achievement gaps between students in different socioeconomic groups. Their findings suggested that by promoting a positive climate, schools can allow greater equality in educational opportunities, decrease socioeconomic inequalities, and enable more social mobility (Berkowitz et al., 2016). In the same study, researchers detected no correlation between school climate and a school's socioeconomic levels. This suggests that positive school climates are possible, even in schools with high-need, low-income student populations (Berkowitz et al., 2016).

There are many aspects of school culture that must be considered when attempting to define it or improve it. Ultimately, school culture is cultivated by the

school principal (MacNeil et al., 2009). Leithwood (1992) classified principals as agents of change and implied that they have the most impact on changing and altering the school culture. Principals are the leading influence when determining the culture of a school. Cohen et al. (2009) described school culture as pertaining to five key aspects: safety, relationships, physical environment, shared vision, and participation. This description of school culture further promotes the idea that the principal is the central figure in determining a school's culture due to the fact that all five areas are directly under the principal's supervision and control. This raises the question to current and aspiring school leaders: How important is the development of a positive school culture? The school culture must be one where open communication is constant among all, conflicts are dealt with, differences are appreciated, and individual voices are fostered and developed. Leadership and ownership need to be encouraged by all (Koerner, 1990).

The results of a study conducted by Asby and Roebuck (1974) revealed that the climate established by teachers in the classroom has a very significant impact on student attitudes about learning and on the overall classroom morale. The data additionally indicated that a teacher who provided a positive classroom culture enhanced student growth and achievement (Asby & Roebuck, 1974). Fyans and Maehr (1990) studied the effects of five dimensions of school culture (academic challenges, comparative achievement, recognition for achievement, school community, and perception of school goals) and found that students are more motivated to learn in schools with strong cultures. To add, Chang (1993) found that stronger school cultures had better motivated teachers, and better motivated teachers lead to more motivated students. Taylor and Williams (2001) argued that as accountability through tests has become a threat, schools need to work on long-term cultural goals in order to strengthen the learning environment.



In comparison, Wyncott-Kyle and Bogotch (1997) examined school reform attempts through a reculturing model rather than a restructuring one. They reported in their findings that real and sustained change is more readily achieved by first changing the culture of the school, rather than by changing the structure of the way the school operates. This focus on changing the school culture in order to raise student achievement was reinforced by a study conducted by Wang, Haertel, and Walberg (1997) which found that school culture is among one of the top influences in improving student achievement. In addition, this study found that state and local policies, school organization, and student demographics carried the least influence on student learning (Wang et al., 1997).

The health of a school's culture has a direct impact on the overall achievement of teachers and students (Hoy & Tarter, 1997). Hoy and Tarter (1997) stated that unhealthy schools are deterred in their missions and goals by parental and public demands.

Unhealthy schools lack effective leadership, and teachers are generally unhappy with their jobs and colleagues. Further, teachers nor students are academically motivated in unhealthy schools and academic achievement is not highly valued (Hoy & Tarter, 1997). Collie, Shapka, and Perry (2012) found that a positive school climate, one that includes good student relations, greater collaboration among teachers, and input on decision making, resulted in greater teacher commitment. Further, it was reported that teachers who feel greater well-being in their teaching have greater commitment to the profession (Collie et al., 2012).

In contrast, Rouk (1979) reported that while a negative classroom environment did not yield high student growth, there was no evidence that proved that a positive classroom environment alone increased student achievement. Regardless, there is growing evidence that suggests that school climate can affect student achievement and

student behavior (Flay, 2000). Hoy and Hannum (1997) found that the most important aspects of school climate that influenced student achievement were positive learning environments, committed teachers, and resources. Strong school cultures have more motivated teachers, and motivated teachers have greater student achievement (MacNeil et al., 2009). “School climate is a powerful determinant of teacher and student outcomes. Decades’ worth of research supports the importance of a positive school climate for both students and teachers” (Collie et al., 2012, p. 1191).

According to the Center for Comprehensive School Reform and Improvement (2009),

School leaders are often placed on the “hot seat” when negative images of the school, its staff, or its students appear in the local media. Such reports can strongly affect a school’s public image and, in turn, impact the climate both in the community and within the school itself. Sometimes these perceptions are not based on fact; however, they could suggest that the school climate should be examined closely. (p. 1)

Examining school culture is not an easy task. It can require a review of multiple data sources from multiple stakeholders (Center for Comprehensive School Reform and Improvement, 2009). Items such as perception surveys must be given to staff, students, parents, and the community in order to get an accurate understanding of how people truly view the school environment (Center for Comprehensive School Reform and Improvement, 2009). Examining student discipline records can also shine light to the true climate of the school. These data can reveal information on the number of students referred for discipline issues, if one subgroup of students is referred more often than another, and the rules that are broken most often. Along with these data, attendance

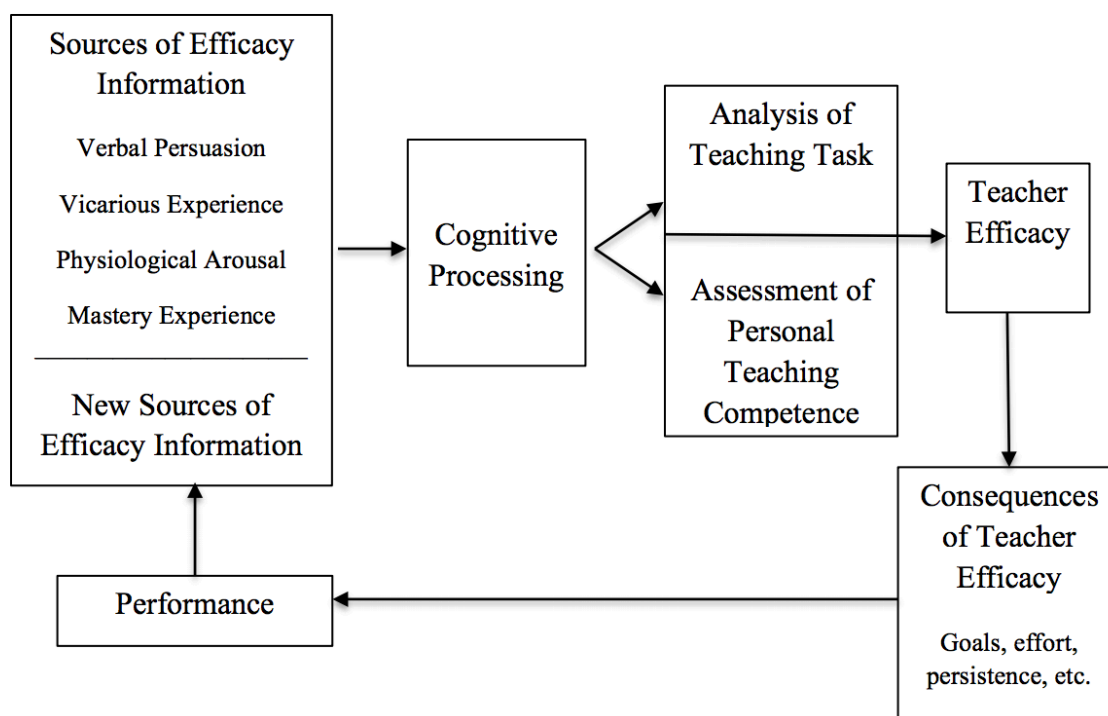
records and extracurricular participation records are also areas that should be reviewed when studying the culture of the school (Center for Comprehensive School Reform and Improvement, 2009). Once a true definition of school culture has been established, school leaders and staff can begin to reform or improve upon the culture of the school. While principals are leading the movement to transform school culture, creating a positive school climate takes the work and commitment of the entire school community (Center for Comprehensive School Reform and Improvement, 2009).

## Teacher Efficacy

Self-efficacy is the belief in one's abilities to be effective and to have agency in given situations, thereby influencing "how people think, feel, motivate themselves, and act" (Bandura, 1997, p. 2). Teachers' beliefs that they are capable of motivating their students may be one of the main pathways by which they influence students' academic and cognitive development (Bandura, 1997). For teachers, self-efficacy is an important feature of their professional identities and correspondingly their morale and motivation. Teacher efficacy beliefs are typically associated with their skills related to student engagement and performance (Tschannen-Moran & Woolfolk Hoy, 2001).

Bandura (1997) identified four sources of self-efficacy information. They include mastery experiences/performance accomplishments, physiological and emotional arousal, vicarious experience, and social/verbal persuasion. According to Tschannen-Moran, Hoy and Hoy (1998) mastery experience combined with physiological arousal as a result of the experience is most critical to creating one's self perception of teaching competence. Emotional or physiological arousal as an outcome of the teaching experience adds to self-perceptions of competence; the level of stimulation received can increase attention and energy to the task (Tschannen-Moran et al., 1998). Vicarious experiences such as observations of others teaching can impact self-efficacy through forming successful images, beliefs, and related capabilities; social (verbal) persuasion can provide positive feedback and thereby provide encouragement for continuation of the teaching task; or it can provide negative feedback and lower self-perceptions of teaching competence (Tschannen-Moran et al., 1998). Overall, it is the cognitive interpretation of each of the sources that combine to generate and influence teacher self-efficacy. Figure 1 illustrates the cyclical nature of teacher efficacy. As shown in the figure, the proficiency of a performance

creates a new mastery experience, which provides new information that will be processed to shape future efficacy beliefs. Greater efficacy leads to greater effort, which leads to greater performance, which in turn, links back to greater efficacy (Tschannen-Moran et al., 1998). In turn, the reverse is also true, if one has low self-efficacy in regards to a performance or ability, this can cause one to be anxious, despondent, and futile about entering into a situation and therefore can create less successful performance outcomes (Bandura, 1982).



*Figure 1: The cyclical nature of teacher efficacy (Tschannen-Moran et al., 1998, p. 228)*

It is important to point out, however, that teacher interactions with the many aspects of the school environment, relationships with colleagues, views of external mandates, attitudes toward teachers and schools, and any number of related dynamics certainly influence efficacy beliefs as well (Bosso, 2017). Over the course of their careers, teacher perceptions of their own abilities and efficacy fluctuate and affect their

performance (Bosso, 2017). When a teacher's sense of efficacy is threatened, it can negatively impact the workplace environment and individuals with whom they work, thus potentially damaging the performance of the organization as a whole. Teacher resilience, however, can mitigate the impact of policy changes, workplace demands, and other attendant stresses (Bosso, 2017). Generally, teachers who believe strongly in their ability to bring about student learning have higher expectations which in turn produce higher student achievement (Freeman, 2008).

Collective teacher efficacy is related to the perceptions of the teaching faculty to increase student achievement. Similar to the relationship of individual teacher efficacy on student achievement, schools with higher collective teacher efficacy have higher student achievement (Freeman, 2008). Since collective efficacy influences how educators feel, think, motivate themselves, and behave, it is a major contributor to the tenor of a school's culture (Bandura, 1997). When educators share a sense of collective efficacy, school cultures tend to be characterized by beliefs that reflect high expectations for student success. A shared language that represents a focus on student learning as opposed to instructional compliance often emerges. Teachers and leaders believe that it is their fundamental task to evaluate the effectiveness of their practice on student progress and achievement. They also believe that success and failure in student learning is more about what they did or did not do, and they place value in solving problems of practice together (Hattie & Zierer, 2018). When efficacy is present in a school culture, educator efforts are enhanced—especially when they are faced with difficult challenges. Since expectations for success are high, teachers and leaders approach their work with an intensified persistence and strong resolve (Donohoo, Hattie, & Eells, 2018). Conversely, if educator perceptions are filtered through the belief that there is very little they can do to influence student

achievement, negative beliefs pervade the school culture. When educators lack a sense of collective efficacy, they do not pursue certain courses of action because they feel they or their students lack the capabilities to achieve positive outcomes (Donohoo et al., 2018).

Teachers' sense of efficacy relies on their self-perception of their own individual pedagogical skills, content knowledge, interactions with students, perceived levels of autonomy, and other environmental dynamics; and it remains an important element of their morale, motivation, and professional identity (Bogler & Nir, 2012). Importantly, teacher empowerment as related to self-efficacy is the most significant determinant of intrinsic satisfaction (Bogler & Nir, 2012). Teachers' professional identities are multifaceted, complex, and dynamic; and educational policies and the broader educational climate are salient forces in teachers' lives (Bosso, 2017). When teachers are intrinsically motivated, perceive themselves as competent professionals, feel trusted and respected, pursue meaningful professional growth endeavors, and believe they are working toward larger goals, their passion and sense of purpose are reinforced and cultivated (Bosso, 2017). Teacher efficacy and resilience extend beyond mere pedagogical effectiveness. For many teachers, their sense of efficacy is strongly connected to their professional identity, and the resilience they possess is correlated with their overall morale, motivation, and sense of moral purpose toward their work. Resilient teachers who have experienced higher levels of professional efficacy, often as the result of support and professional validation, may be better able to navigate the many challenges resulting from change (Bosso, 2017).

Principals who choose to utilize the transformational leadership style are able to establish environments in which teachers feel satisfied with the leader/teacher relationship and are willing to invest more time, effort, and commitment to the success of

the entire school and community (Ross & Gray, 2006). In such schools, teacher commitment to mission, goals, values, and community is driven by high teacher efficacy, which results in increased student achievement (Freeman, 2008). Ross and Gray (2006) linked teacher efficacy to principal behavior. Principals influence the interpretation and implication of student achievement by their definition of what represents success. Under transformational leadership, principals look for opportunities to build teacher efficacy through inspirational messages in order to confront the low expectations of staff and students (Freeman, 2008). In professional learning communities, which emerge from the use of transformational leadership, it is predicted that there will be higher teacher efficacy with higher commitment to (a) school mission, (b) higher parental involvement and, (c) contribution of effort to the community (Ross & Gray, 2006). Within this environment, teachers who are sufficiently confident about their abilities invite colleagues to help them problem solve areas of needed personal growth. In these collaborative efforts, they can develop new teaching strategies which further teacher effectiveness and thereby increase teacher efficacy (Freeman, 2008).

When significant policy changes occur, teachers may be forced to reexamine their views and abilities, causing higher degrees of stress and self-doubt that often manifest as lower morale and greater job dissatisfaction (Dworkin, 2009). Often, teacher resilience is fortified by an ability to limit the dissonance between the moral purpose of their work and external demands that are perceived to be in conflict with that mission (Bosso, 2017). Teacher beliefs in their ability to nurture student growth as well as their sense of duty to do so also appear to be important contributing factors (Bosso, 2017). Teachers may feel that the moral purpose of what they do is in conflict, or does not align, with the goals and values of the changes taking place. Their intrinsic motivation and sense of efficacy may



be threatened, and they may become increasingly demoralized (Bosso, 2017).

Furthermore, many teachers, especially those with a number of years of experience, often have difficulty confronting the challenges and demands of educational change. This is even more pronounced when teacher expertise and values are challenged by those outside of the profession (Hargreaves, 2001; van den Berg, 2002). Lower morale and a weakened or uncertain sense of efficacy may result, and teachers often experience a sense of vulnerability in the face of change (Bosso, 2017).

### **Student Achievement**

Over the past couple of decades, the public has pushed for greater accountability of schools in order to ensure that the educational system is meeting the needs of all students; however, improving student achievement does not necessarily mean spending more on education (Improving Student Achievement, n.d.). No Child Left Behind required that all students have a qualified teacher in their classroom. For this reason, student achievement is more closely assessed through accountability systems that measure the teachers, not just the students (No Child Left Behind, 2001). In order to address this, new legislation has been adopted that requires annual testing and reporting on educational achievement of all students (Decker & Bolt, 2008). Student test performance is now a part of statewide accountability programs in an attempt to improve student achievement (Decker & Bolt, 2008). Student achievement assessments were originally developed to measure more specific types of learning academically; however, political and public accountability needs have transformed them into high stakes tests (Sabin, 2012). When assessing student achievement, there are multiple measures used that range from formal, summative high stakes tests to continuous formative assessments (Ediger, 2003). While legislation such as No Child Left Behind has mandated measuring

student learning through the use of standardized testing (Sabin, 2012), there are still arguments for and against the use of standardized testing in education (Decker & Bolt, 2008).

From a positive stance, standardized tests are tested for validity and reliability, making them more attractive as a method of universally testing student achievement (Noddings, 2004). The fact that standardized tests provide educators with student data that can be standard based, or norm referenced, is also seen as a reason to favor standardized testing (Anderson, Medrich, & Fowler, 2007). The format of standardized achievement tests is objective when measuring student achievement on a large scale (Committee on Incentives and Test-Based Accountability in Public Education, National Research Council, 2009), makes grading more efficient, and creates a broad picture of overall achievement (International Reading Association, 1999). According to Noddings (2004), standardized tests are constructed to measure specific kinds of learning and supply educators and researchers with data regarding the overall achievement of their students.

Negatively, standardized assessments increase pressure on students, teachers, schools, and states to improve performance on these tests (Sabin, 2012). According to Campbell's law, achievement tests may well be valuable indicators of general school achievement under conditions of normal teaching aimed at general competence (Nichols, 2012); but when test scores become the goal of the teaching process, they both lose their value as indicators of educational status and distort the educational system they were meant to measure (Nichols, 2012). Due to the frequent changing of assessments, making it difficult to make any type of longitudinal comparisons, many researchers are against the use of standardized test scores (Love & Kruger, 2005). Many find that standardized

tests are an indirect measure of learning due to the fact that many aspects of learning cannot be assessed through them (Marzano, 2003). In addition, these tests have been shown to have a negative impact on the morale of teachers and students (Decker & Bolt, 2008). Continued use of these tests for high stakes purposes is leading to issues such as teaching a narrowed curriculum, loss of instructional time to testing, and moving decision-making power away from the local level (International Reading Association, 1999). This focus on student achievement based on these tests has created a situation where educators are focusing more on the students who are close to proficient (Committee on Incentives and Test-Based Accountability in Public Education, National Research Council, 2011).

Dossett and Munoz (2003) cited three main factors that have been shown to influence student achievement: school-related factors, student-related factors, and teacher-related factors. According to Berliner (2009), Regents Professor of Education at Arizona State University, out-of-school factors related to poverty are the major cause of achievement gaps experienced by students in low-income communities. Factors such as family income, race, and ethnicity separate students in school. Any effort to improve student achievement through test-based accountability is unlikely to succeed unless it is combined with efforts to address these outside factors that negatively impact students (Berliner, 2009). As new standards for student achievement have been introduced, greater attention has been placed on the role teacher quality plays in student achievement (National Commission on Teaching and America's Future, 1996). According to Goldhaber (2004), teacher quality is the largest aspect of teacher-related factors that affect student achievement. A study of teacher effects at the classroom level using the Tennessee Value-Added Assessment System found that differential teacher effectiveness

is a strong determinant of differences in student learning, far outweighing the effects of differences in class size and heterogeneity (Jordan, Mendro, & Weerasinghe, 1997; Sanders & Rivers, 1996; Wright, Horn, & Sanders, 1997).

The consequences educators and educational systems attach to the test scores can range from low stakes to high stakes. Low stakes testing would be classified as testing that does not directly affect the individual involved. High stakes testing would be testing where the consequences have a significant impact on the individual and their life (Huebert & Hauser, 1999). While high stakes testing has huge impacts on the lives and careers of many school employees, the major goal of the federal and state high stakes testing programs is to improve schools (Nichols, Glass, & Berliner, 2012). The theory behind these high stakes testing programs is that by attaching negative consequences to standardized test performances, teachers and students work harder, thus improving student achievement (Nichols et al., 2012). Roderick, Jacob, and Bryk (2002) illustrated the link between the use of high stakes testing and student achievement. The study found that after the Chicago Public School System implemented a testing policy stating that all third, sixth, and ninth graders had to meet a minimum score on the reading and math test to be promoted to the next grade level, test scores improved significantly. In contrast, Amrein and Berliner (2002) conducted a study of 18 states with the highest stakes associated with their K-12 testing program to determine if their programs were indeed affecting student learning. They used four standardized tests: Advanced Placement tests, American College Test, NAEP, and Scholastic Achievement Tests. Amrein and Berliner's (2002) findings concluded that student learning was at the same level as it was before the implementation of the testing program or that it decreased.

More recently, many states are creating their own standardized tests in order to

reflect their curriculum standards (Marzano, 2003). While Marzano (2003) stated that these tests are significantly better than the off-the-shelf, one-size-fits-all tests that have been previously used, they still do not reflect a true and accurate view of student achievement. In 2001, the National Research Council echoed this by stating that while state tests based on standards do have their place in education, they should not be the primary measure of student learning and achievement (Hout & Elliot, 2011). For assessment tools to have any type of validity, they must take into consideration changes in student performance (Elliot & Fuchs, 1997). There are a variety of outside factors that can influence student performance on tests and thus skew the results. These factors include things such as the number of the students with disabilities and non-native English-speaking students taking the test as well as student population changes that have occurred in the school that would result in students testing for the first time at that particular school (Decker & Bolt, 2008). As stated earlier, many states are changing their standardized tests to reflect their new curriculum (Decker & Bolt, 2008). This is also a factor that needs to be considered when analyzing test scores to see student achievement. When tests are changed or revised, the scores cannot be compared to earlier tests that attempted to measure student achievement (Decker & Bolt, 2008). “Therefore, it is questionable whether changes in test scores from year to year represent changes in student learning that are because of instructional effectiveness” (Decker & Bolt, 2008, p. 46).

The passing of No Child Left Behind created the most intrusive use of tests for influencing how and what teachers would teach and how and what students would learn ever in American education (Nichols et al., 2012). Decisions about student promotion, teacher ratings, sanctions, and school funding increasingly are being tied to performance

on student achievement tests, making them high stakes tests (Nichols, Glass, & Berliner, 2005). Even though literature continues to support the fact that high stakes testing has had a negative impact on student achievement, policy makers continue to argue that it is effective in increasing student achievement (Nichols et al., 2012).

### **Summary**

This literature review provides information about the three constructs being discussed in this study. While teachers are employed to teach, teachers are engaged in a wide variety of tasks which are additional to face-to-face teaching (Mackenzie, 2007). Areas such as leadership, workload, status, salary, media perception, and student behavior all have an impact on teacher morale (Mackenzie, 2007). Teachers have a huge impact on student learning and thus the health of the teacher and health of the organization must be taken into account (Mendel, 1987). School culture has been reported to have a direct relationship with student performance and teacher morale (Adeogun & Olisaemeka, 2011). The traditions, morals, values, and beliefs that create the school environment have a huge impact on how teachers feel about their job and thus how they teach. Student achievement is the most important aspect of the educational system. The first major purpose of a school is to create and provide a culture that is hospitable to human learning (Barth, 1990). Structural changes made to improve schools without addressing the culture, health, and overall organization of schools have not been successful (Sarason, 1996). In the public school's current environment of high stakes testing and accountability, school leaders must make the effort to find the balance between pushing teachers to achieve higher and higher levels of student learning and showing teachers appreciation for what they do (Protheroe, 2006).

## **Chapter 3: Methodology**

### **Introduction**

This study examined the relationship among teacher morale, school culture, and student achievement as measured by the high school biology and English II EOC exams at X High School in North Carolina. This chapter describes the methodology used to answer the following research questions:

1. What is the current state of teacher morale for biology and English II teachers in X High School as measured by the Purdue Teacher Opinionnaire?
2. What is the current school culture in X High School as measured by the School Culture Survey?
3. What is the relationship between the variables of teacher morale, school culture, and student achievement as measured by the Purdue Teacher Opinionnaire, School Culture Survey, and EOC exams?

The study used a four phase, mixed methods explanatory sequential design. The two-phase mixed methods design begins with the collection and analysis of quantitative data, followed by the subsequent collection and analysis of qualitative data (Creswell, 2012). The second, qualitative phase of the study is designed so that it follows from or connects to the results of the first quantitative phase (Creswell, 2012).

Phase 1 of the study consisted of all biology and English II teachers at X High School completing the Purdue Teacher Opinionnaire (Appendix A) to measure teacher morale. Phase 2 consisted of all biology and English II teachers at X High School completing the School Culture Survey (Appendix B) to measure school culture at X High School. Phase 3 consisted of a focus group where the results of the Purdue Teacher Opinionnaire and the School Culture Survey were discussed (Appendix C). Phase 4

consisted of gathering EOC test results for all biology and English II students at X High School from the school district's testing and accountability office. A summary of the research process is displayed in Table 5.

Table 5

*Research Process*

Phase	Instrument	Data Type	Analysis
1	Purdue Teacher Opinionnaire	Quantitative	Pearson's $r$
2	School Culture Survey	Quantitative	Pearson's $r$
3	Interview Protocol Questions	Qualitative	Sequential Explanatory Design
4	EOC Exam	Quantitative	Pearson's $r$

**Participants**

The target population for this study consisted of three English II teachers and four biology teachers from X High School during the fall 2018 school year. In addition to the teachers, the student achievement component of this study was based on student scale and proficiency scores on the EOC exams the students enrolled in these classes took in January 2019. The school district in which the study took place is small, consisting of three elementary schools, two intermediate schools, one middle school, and one high school. The study took place at the one high school in the district.

**Teachers.** For the fall 2018 school year, X High School had four biology teachers and three English II teachers (N=7). Six sections of biology were included in the study. Three of the sections were regular college prep level classes and three were honors level classes. Table 6 provides demographics of the biology teachers.



Table 6

*Biology Teacher Demographics*

Gender	Race	Years of Experience	Classes Taught
Male	White	3	3 Regular Sections
Female	Black	15+	1 Honors Section
Female	White	15+	1 Honors Section
Female	White	1	1 Honors Section

There were nine sections of English II classes included in the study. Two of the sections were regular college prep level classes. Three of the sections were inclusion classes. These classes typically have a high number of children who are part of the Exceptional Children program and typically have Individual Education Plans (IEPs) to support them academically. The final four classes for English II were honors level classes. Table 7 provides demographics of the English teachers.

Table 7

*English Teacher Demographics*

Gender	Race	Years of Experience	Classes Taught
Female	White	10+	1 Honors, 2 Inclusion Sections
Female	White	5	2 Honors Sections, 1 Regular Section
Male	White	10+	1 Honors, 1 Inclusion, 1 Regular Section

**Demographic information of study site.** X High School has approximately 1,900 students, with approximately 52% being male and 48% being female. Student demographics in X High School are 70% White, 15% Black, 10% Hispanic, 1% American Indian/Alaskan Native, 1% Asian/Pacific Islander, and 4% Multi-Racial. X High School has approximately 28% of their students on free or reduced lunch and 13% of students belong to the Exceptional Children's program.

The student achievement data used in this study were based on the EOC exam performance of the students enrolled in biology and English II for the fall 2018 semester,

August 2018 through January 2019. The students enrolled in English II were predominately sophomores. The students enrolled in biology were a combination of freshmen, sophomores, and juniors. The study looked at 164 biology and 225 English II student EOC scores, for a total of 389 student scores. Student demographic data for each subject area are illustrated in Table 8.

Table 8

*Student Demographic Information per EOC*

Subject	Males	Females	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade	Total
Biology	91	73	2	153	8	1	164
English	137	118	4	218	2	1	225

### **Instruments**

To quantify teacher morale and other measures pertaining to feelings toward the teaching profession, researchers use attitudinal measures (Creswell, 2012). To do this, researchers find an instrument or create their own instrument that contains unbiased questions that measure what they want to know. For this study, the Purdue Teacher Opinionnaire was used to quantify teacher morale. In order to quantify school culture, this study used the School Culture Survey. Student achievement was quantified by the use of the EOC scale scores for all students enrolled in English II and biology.

**Purdue Teacher Opinionnaire.** For this study, in order to measure and quantify teacher morale, the participants were asked to complete the Purdue Teacher Opinionnaire. The researcher contacted Purdue University to receive permission to use the instrument for this study. Due to copyright expiration, permission for the instrument was not needed (see Appendix D). The instrument breaks down teacher morale into 10 specific dimensions and is designed to estimate individual, school, and system morale. The 10 factors to be included in the opinionnaire described by Bentley and Rempel

(1980) are defined in Table 9.

Table 9

*Factors of the Purdue Teacher Opinionnaire*

Factor	Description	Definition
1	Teacher rapport with principal	Teacher's feelings about the principal, his professional competency, his interest in teachers and their work, his ability to communicate, and his skill in human relations
2	Satisfaction with teaching	Teacher relationships with students and feelings and satisfaction with teaching
3	Rapport among teachers	Teacher's relationship with other teachers focusing on preparation, ethics, influence, interests, and competency of peers
4	Teacher salary	Teacher's feelings about salaries and salary policies
5	Teacher load	Matters such as record-keeping, clerical work, community demands on teacher time, extracurricular load, and keeping up to date professionally
6	Curriculum issues	Teacher reactions to the adequacy of the school program in meeting student needs, in providing for individual differences, and in preparing students for effective citizenship
7	Teacher status	Feelings about prestige, security, and benefits afforded by teaching
8	Community support of education	The extent to which the community understands and is willing to support a sound educational program
9	School facilities and services	The adequacy of facilities, supplies, and equipment and the efficiency of the procedures for obtaining materials and services
10	Community pressures	Community expectations with respect to the teacher's personal standards, their participation in outside school activities, and their freedom to discuss controversial issues in the classroom

*Source.* Bentley and Rempel (1980).

Each of the 100 items on the Purdue Teacher Opinionnaire use a 4-point Likert scale to measure the degree of agreement with the statement given: (1) disagree, (2) probably disagree, (3) probably agree, (4) agree. For the purpose of this study, questions where a "disagreement" answer represented a high degree of teacher morale have been reverse coded so that a 1 represented low morale and a 4 represented high morale for all 100 questions (Bentley & Rempel, 1980). By adding the numeric responses to all items for a given factor, it was possible to create scores for each of the 10 dimensions (Bentley

& Rempel, 1980).

The 100 items of the Purdue Teacher Opinionnaire are divided into each of the 10 teacher morale factors as shown in Table 10.

Table 10

*Purdue Teacher Opinionnaire Division of Questions into 10 Categories*

Factor	Description	Items
1	Teacher Rapport with Principal	2, 3, 5, 7, 12, 33, 38, 41, 43, 44, 61, 62, 69, 70, 72, 73, 74, 92, 93, 95
2	Satisfaction with Teaching	19, 24, 26, 27, 29, 30, 46, 47, 50, 51, 56, 58, 60, 76, 78, 82, 83, 86, 89, 100
3	Rapport Among Teachers	18, 22, 23, 28, 48, 52, 53, 54, 55, 77, 80, 84, 87, 90
4	Teacher Salary	4, 9, 32, 36, 39, 65, 75
5	Teacher Load	1, 6, 8, 10, 11, 14, 31, 34, 40, 42, 45
6	Curriculum Issues	17, 20, 25, 79, 88
7	Teacher Status	13, 15, 35, 37, 63, 64, 68, 71
8	Community Support of Education	66, 67, 94, 96, 97
9	School Facilities and Services	16, 21, 49, 57, 59
10	Community Pressures	81, 85, 91, 98, 99

*Source.* Gruenert (1998).

**Reliability of Purdue Teacher Opinionnaire.** Bentley and Rempel (1968)

reported that the test-retest correlation for the total score was .87 with the correlations for the 10 subscales ranging from .62 to .88; however, nine of the 10 subscales had test-retest

correlations greater than .75, with the weakest correlation of .62 for the community pressure subscale (Bentley & Rempel, 1968). The survey took 40 minutes for participants to complete.

**School Culture Survey.** The School Culture Survey was developed by Gruenert and Valentine (1997) for the Middle Level Leadership Center at the University of Missouri. The survey provides insight about the shared values and beliefs as well as the patterns of behavior and the relationships in the school environment (Gruenert & Valentine, 1997). Each factor measures a unique aspect of the school's collaborative culture (Gruenert & Valentine, 1997). Table 11 lists and defines each factor of the survey.

Table 11

*Factors of School Culture Survey*

Factor	Factor	Definition
1	Collaborative Leadership	Measures the degree to which the school leaders can establish and maintain various collaborative relationships with school staff
2	Teacher Collaboration	Measures the degree to which teachers engage in constructive dialogue that furthers the educational vision of the school
3	Professional Development	Measures the degree to which teachers value continuous personal development and school-wide improvement
4	Collegial Support	Measures the degree to which teachers work toward a common mission for the school
5	Unity of Purpose	Measures the degree to which teachers work toward a common mission for the school
6	Learning Partnerships	Measures the degree to which teachers, parents, and students work together for the common good of the student

*Source.* Gruenert (1998).

The School Culture Survey is composed of 35 items that are used to measure six aspects of school culture (Gruenert & Valentine, 1997). The instrument is composed of six categories (Gruenert & Valentine, 1997). The categories and definitions are listed in Table 12.

Table 12

*School Culture Survey Division of Questions into Six Categories*

Factor	Description	Items
1	Collaborative Leadership	2, 7, 11, 14, 18, 20, 22, 26, 28, 32
2	Teacher Collaboration	3, 8, 15, 23, 29, 33
3	Professional Development	1, 9, 16, 24, 30
4	Collegial Support	4, 10, 17, 25
5	Unity of Purpose	5, 12, 19, 27, 31
6	Learning Partnership	6, 13, 21, 35

*Source.* Gruenert (1998).

To complete phase 2 of this study, the School Culture Survey was used to quantify the culture of X High School in this study. The researcher contacted Dr. Gruenert and Dr. Valentine via email to gain permission to use the instrument for this study. After submitting the framework to them, permission was granted for the researcher to utilize the instrument for this study (see Appendix E).

Participants were asked to rate the degree that the 35 items posed described the condition of their school. Each was rated using the following Likert scale: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree (Gruenert & Valentine, 1997). The survey took 20 minutes for participants to complete.

**Reliability of the School Culture Survey.** Cronbach's alpha is a measure of internal consistency or how closely related a set of items are as a group and is considered to be a measure of scale. A reliability coefficient of .70 or higher is considered desirable in most research situations (Cronbach's Alpha, 2018). Cronbach's alpha reliability coefficients for the school culture subscales are (a) collaborative leadership .910, (b) teacher collaboration .834, (c) professional development .867, (d) collegial support .796,

(e) unity of purpose .821, and (f) learning partnerships .658 (Gruenert & Valentine, 1997).

**Reliability of biology and English II EOC exams.** To measure student achievement, the researcher used the proficiency scores from students on the biology and English II EOC exams. For the purpose of this study, student achievement level and scale score were used to determine proficient student achievement. A level 3 on the EOC indicated student mastery of the content. For the biology EOC, a scale score of 250 or higher indicated mastery. For the English II EOC, a scale score of 148 or higher indicated mastery.

Three broad categories of reliability coefficients are recognized as appropriate indices for establishing reliability in tests: (a) coefficients derived from the administration of parallel forms in independent testing sessions (alternate-form coefficients); (b) coefficients obtained by administration of the same instrument on separate occasions (test-retest coefficients); and (c) coefficients based on the relationships among scores derived from individual items or subsets of the items within a test, all data accruing from a single administration of the test (internal consistency coefficients; Accountability Services, n.d.). The internal consistency coefficient is the statistic used to quantify reliability for the EOC assessments of English II and biology. These assessments were administered operationally for the first time during the 2012-2013 school year (Accountability Services, n.d.).

Internal-consistency reliability estimates examine the extent to which items on a test are related. One procedure for determining the internal consistency of a test is coefficient alpha ( $\alpha$ ). Coefficient alpha estimates reliability of test scores constructed in terms of the domain sampling model. Test scores must be reliable if any valid inferences



are to be made on examinees' performances (Accountability Services, n.d.). The North Carolina Statewide Testing Program meets or exceeds industry norms for reliability. The indices below are measures of internal consistency as calculated by Cronbach's Coefficient Alpha.

The biology and English II EOCs consist of six different forms: A, B, C, M, N, and O. The reliability for both tests and their corresponding forms are shown in Table 13.

Table 13

*English II EOC Test Reliabilities*

EOC	Form A	Form B	Form C	Form M	Form N	Form O
English II	0.89	0.89	0.89	0.89	0.90	0.89

*Source.* Reliability of the North Carolina End-of-Grade and End-of Course Assessments (2014).

As shown in Table 13, each form of the test is similar in reliability. The reliability for the biology EOC test is shown in Table 14.

Table 14

*Biology EOC Test Reliabilities*

EOC	Form A	Form B	Form C	Form M	Form N	Form O
Biology	0.92	0.92	0.92	0.92	0.92	0.92

*Source.* Reliability of the North Carolina End-of-Grade and End-of Course Assessments (2014).

As shown in Table 14, all forms of the biology EOC test have equal reliability scores.

## Procedures

This study used quantitative data to analyze the relationship between the variables of teacher morale, school culture, and student achievement. Additionally, this study used qualitative data through the use of a sequential explanatory design to assist in explaining

the reasons for the current state of teacher morale and school culture at X High School. Phase 1 focused on teacher morale. The Purdue Teacher Opinionnaire was given to all teachers teaching English II and biology. The School Culture Survey was given to all teachers teaching English II and biology during the 2018 fall Semester. English II and biology EOC student scale scores were gathered and recorded in January 2019, at the end of the 2018 fall semester, in order to measure student achievement.

All teachers who taught biology and English II in X High School were contacted via email about possible participation in the study (Appendix F). An informational meeting was held at X High School in January 2019 in order to discuss the details of the study as well as to answer any questions or concerns the potential participants may have had pertaining to the study. The response rate for this study was 100%. Due to the limitation of the researcher being an administrator at the study site, a proxy was used in order to collect the data and hold the focus group. This proxy was a teacher leader within the school who had rapport with the faculty. This process created a nonbiased, nonevaluative environment for the collection of data.

Consent forms were provided to the participants in order to grant formal permission to use their information for the purpose of the study (see Appendix G). The consent form discussed the purpose and benefits of the study. The Purdue Teacher Opinionnaire was given to each participant once the consent forms for participation in the study had been signed by the participant and received by the researcher. Each survey was precoded with a different participant ID number, known only to the proxy. The opinionnaire was given to the participating teachers by the proxy in paper copy format with a sealed envelope for the completed survey to be placed in, providing complete anonymity for the participants. The participants had 7 days to complete the survey. A

follow-up reminder email was sent out to all participants 5 days after the initial distribution of the opinionnaire. All results were returned to the proxy who gathered the data and gave them to the researcher. The completed and sealed surveys remained locked in a file cabinet in the researcher's home until time to input the data into IBM's Statistical Package for Social Sciences (SPSS). The data were inputted using the ID numbers assigned by the proxy; no names or identifying traits were used. The data were password protected once entered into SPSS. The researcher obtained 100% participation of the English II and biology teachers in X High School. This completed phase 1 of the study.

Phase 2 focused on school culture. The School Culture Survey was given to participants 1 week after The Purdue Teacher Questionnaire had been completed. The survey was given to the participating teachers by the proxy in paper copy format with a sealed envelope for the completed the survey to be placed in. The proxy assigned the same ID number from the Purdue Teacher Opinionnaire to each survey providing complete anonymity for the participants. The participants had 7 days to complete the survey. A follow-up reminder email was sent out to all participants 5 days after the initial distribution of the opinionnaire. All results were returned to the proxy who gathered the data and gave them to the researcher. The completed and sealed surveys remained locked in a file cabinet in the researcher's home until time to input the data into SPSS. The data were inputted using the ID numbers assigned by the proxy; no names or identifying traits were used. The data were password protected once entered in to SPSS. The researcher obtained 100% participation of the English II and biology teachers in X High School. This completed phase 2 of the study.

Phase 3 was a qualitative component consisting of a focus group in January 2019 to discuss further the responses from the Purdue Teacher Opinionnaire and the School

Culture Survey. The proxy facilitated the focus groups 1 week after phase 2 had been completed. The proxy conducted an interview protocol with the participants in a focus group format. The proxy led the focus group discussion utilizing a script of questions given by the researcher to ensure consistency. The focus group discussion was voice recorded to ensure consistency and accuracy. All participants, including the proxy, signed a consent form in order for the voice recording of responses and discussions to take place. The script dove deeper into the results and responses from the Purdue Teacher Opinionnaire and School Culture Survey completed by the teachers prior to the focus group. The voice recordings were passcode protected and were scripted by the proxy before being given to the researcher to provide complete anonymity to the participants.

Phase 4 focused on student achievement. The collection of English II and biology EOC scores took place at the end of the 2018-2019 school year during the fall semester, in January 2019. This phase had to be conducted after the scores were verified and approved by the North Carolina Department of Public Instruction in January 2019. All students enrolled in English II and biology during the fall semester of 2018 were required to complete the EOC test in English II and biology due to state regulations. The actual exam was given in January 2019 and scores were available 1 week after the completion of the tests. For the purpose of this study, student achievement levels and scale scores were used to determine appropriate student mastery. On both EOCs, a level 3 indicated student mastery of the content. For the biology EOC, a scale score of 250 or higher was reflective of a level 3 and indicated mastery. For the English II EOC, a scale score of 148 or higher was reflective of a level 3 and indicated mastery. Student scale scores were collected by the school district's accountability specialist. The proxy gave the participant

ID numbers to the director of accountability to ensure that all scores were coded without using identifying names and would remain unknown to the researcher. The data were given to the researcher with all names and identifying markers removed. The data were divided into the two subject areas, but no student or teacher names were associated with the scores. This ensured anonymity for students and participants. This step completed phase 4 of the study.

### **Research Design**

A correlational research design is used to see if two or more variables influence each other, further allowing the researcher to determine the relationship among the variables (Creswell, 2012). More specifically, an explanatory research design is used to analyze to what extent two variables co-vary (Creswell, 2012), meaning to what extent does a change in one variable cause a change in another variable (Creswell, 2012). A sequential explanatory design uses qualitative results to further explain and interpret the findings from the quantitative phase (Creswell, 2003). This study sought to examine the relationship among the three variables of teacher morale, school culture, and student achievement. Each variable was quantified using a separate measure to allow a cross-sectional correlational analysis to be conducted.

In an explanatory correlational design, the researcher is not concerned with past or future performance, rather the researcher is only interested in gathering data from one point in time (Creswell, 2012). This study measured each of the three variables from one semester within the school calendar. Each participant had a quantitative score for each variable: teacher morale, school culture, and student achievement. Finally, the scores were used to run correlation statistical tests, and the researcher interpreted and drew conclusions from the statistical results (Creswell, 2012).

To analyze the qualitative data from the focus group, the researcher conducted a sequential explanatory design. This method is a 2-phase design where the quantitative data are collected first, followed by qualitative data collection (Creswell, 2003). The purpose is to use the qualitative results to further explain and interpret the findings from the quantitative phase (Creswell, 2003).

### **Data Analysis**

For Research Question 1, the analysis of the data began with examining the first variable, teacher morale. To analyze the data collected from the distribution of the Purdue Teacher Opinionnaire, the mean of each of the 10 subscales was calculated with mean scores between 1.0 and 2.9 indicating low teacher morale and mean scores between 3.0 and 4.0 indicating high teacher morale. The data were analyzed by individual participant and were compared to their responses on the School Culture Survey as well as their students' performance on the EOC exams. To analyze the data from the study, the researcher ran Pearson's  $r$ . The Pearson product-moment correlation was used to determine the strength and direction of a linear relationship between two continuous variables ("Laerd Statistics," n.d.). The test generated a coefficient called the Pearson correlation coefficient, denoted as  $r$ . This coefficient measured the strength and direction of a linear relationship between two continuous variables ("Laerd Statistics," n.d.). The values ranged from -1 in a perfect negative linear relationship to +1 in a perfect positive linear relationship. A value of 0 indicated no relationship between the two variables ("Laerd Statistics," n.d.). The dependent variable in the study was student achievement, while the independent variables were teacher morale and school culture. Scatter plot graphs were created using SPSS. These scatter plots and Pearson's  $r$  correlations completed Research Question 3 and allowed the researcher to determine if a relationship

existed between teacher morale and student achievement and school culture and student achievement.

For Research Question 2, the analysis of the data began with examining the second variable, school culture. To analyze the data collected from the distribution of the School Culture Survey, the mean of each of the subscales was calculated with mean scores between 1.0 and 3.5 indicating negative school culture and mean scores between 3.51 and 5.0 indicating positive school culture. The data were analyzed for each individual participant and were compared to their responses on the Purdue Teacher Opinionnaire as well as with their student's performance on the EOC exams. To analyze these data, the researcher ran Pearson's  $r$ . The Pearson product-moment correlation was used to determine the strength and direction of a linear relationship between two continuous variables ("Laerd Statistics," n.d.). The test generated a coefficient called the Pearson correlation coefficient, denoted as  $r$ . This coefficient measured the strength and direction of a linear relationship between two continuous variables ("Laerd Statistics," n.d.). The values ranged from -1 in a perfect negative linear relationship to +1 in a perfect positive linear relationship. A value of 0 indicated no relationship between the two ("Laerd Statistics," n.d.). The dependent variable in the study was student achievement, while the independent variables were teacher morale and school culture. Scatter plot graphs were created using SPSS. These scatter plots and Pearson's  $r$  correlations completed Research Question 3 and allowed the researcher to determine if a relationship existed between teacher morale and student achievement and school culture and student achievement.

To further collect information for Research Questions 1 and 2, participants took part in a focus group facilitated by the proxy. The focus group was conducted in order to

gain additional information on teacher morale and school culture and sought to collect additional information and reasons for the current state of teacher morale and school culture at X High School as reported on the surveys. The focus group was scripted to ensure consistency and voice recorded to ensure accuracy. The script of discussion questions was based on the results from the Purdue Teacher Opinionnaire and the School Culture Survey and geared specifically to the participants' responses. The purpose is to use the qualitative results to further explain and interpret the findings from the quantitative phase (Creswell, 2003). After phases 1 and 2 collected the quantitative data from the Purdue Teacher Opinionnaire measuring teacher morale and the School Culture Survey measuring school culture, the focus group was held to further explain reasons for the results on the two quantitative surveys.

Data from the English II and biology EOCs were collected for Research Question 3. Student scale scores as well as teacher overall proficiency were calculated and reported. In order to run correlational statistics, each variable was quantitatively defined. For student achievement, in terms of EOC score, the average of student scores for each teacher was calculated, providing a single score for each teacher. Student achievement data were analyzed by calculating basic descriptive statistics to determine the mean score for each teacher. This allowed for a correlational analysis to be run on all three variables for each teacher. The researcher compared teacher morale and student achievement as well as school culture and student achievement for each individual participant.

Scatter plot graphs were created using SPSS. These scatter plots and Pearson's  $r$  correlations completed Research Question 3 and allowed the researcher to determine if a relationship existed between teacher morale and student achievement and school culture and student achievement.



### **Limitations and Delimitations**

Limitations in this study include that the researcher was an assistant principal at the study site, resulting in the use of a proxy to create a nonthreatening, nonbias situation for the participants. The study consisted of a small sample size, with only two subject areas being utilized. In order to measure teacher morale and school culture, the researcher used surveys assuming the participants would answer honestly. The study also took place during a small section of time which could reflect only the feelings at that current moment rather than overall feelings. Additionally, X High School experienced a principal change during the 2017-2018 school year. A final limitation consisted of Math I EOC scores not being included due to the state's decision to hold all math EOC scores until the summer of 2019. The study also only utilized results from one school. Only EOC teachers and scores were used in the collection of data for this study. The researcher only looked at the overall measure of school culture and teacher morale and did not investigate further the reasons for the current measures. Chapter 4 presents in detail the data results, analysis of the data collected, and relevant findings from the data.

## **Chapter 4: Results**

### **Introduction**

This study examined the current body of knowledge pertaining to the two variables of teacher morale and school culture and their relationship to student achievement as it pertains to EOC exams in high school English II and biology courses. Teacher morale was measured using the Purdue Teacher Opinionnaire, school culture was measured using the School Culture Survey, and student achievement was determined by student mastery on the EOC exams in English II and biology. Chapter 4 presents the data and findings collected by these instruments during this study.

### **Findings**

**Research Question 1: What is the current state of teacher morale for biology and English II teachers in X High School as measured by the Purdue Teacher Opinionnaire?** In this study, the Purdue Teacher Opinionnaire was used to quantify teacher morale in X High School. Survey data were collected from seven of the possible seven participants in the target population. Participation by all seven participants resulted in a 100% participation rate. The surveys in this study were given to participants via a proxy in paper form and returned to the proxy before being given to the researcher. Teacher names were changed to ID numbers known only to the proxy and not shared with researcher. Each of the 100 items on the Purdue Teacher Opinionnaire used a 4-point Likert scale that measured the degree of agreement with the statement given: (1) disagree, (2) probably disagree, (3) probably agree, (4) agree.

Teacher morale scores were calculated based on teacher responses to the 100 questions on the survey. The 100 questions were grouped into 10 specific teacher morale areas or constructs. The 10 constructs to be included in the opinionnaire and their

definitions described by Bentley and Rempel (1980) are included in Table 15.

Table 15

*Constructs of Purdue Teacher Opinionnaire*

Factor	Definition
1	Teacher's feelings about the principal, his professional competency, his interest in teachers and their work, his ability to communicate, and his skill in human relations
2	Teacher relationships with students and feelings and satisfaction with teaching
3	Teacher's relationship with other teachers focusing on preparation, ethics, influence, interests, and competency of peers
4	Teacher's feelings about salaries and salary policies
5	Matters such as record-keeping, clerical work, community demands on teacher time, extracurricular load, and keeping up to date professionally
6	Teacher reactions to the adequacy of the school program in meeting student needs, in providing for individual differences, and in preparing students for effective citizenship
7	Feelings about prestige, security, and benefits afforded by teaching
8	The extent to which the community understands and is willing to support a sound educational program
9	The adequacy of facilities, supplies, and equipment and the efficiency of the procedures for obtaining materials and services
10	Community expectations with respect to the teacher's personal standards, their participation in outside school activities and their freedom to discuss controversial issues in the classroom

*Source.* Bentley and Rempel (1980).

Table 16 shows the number of questions in each construct as well as the specific questions that were included in each.

Table 16

*Breakdown of Questions for the Purdue Teacher Opinionnaire*

Construct	Number of Questions	Questions Included
1	20	2, 3, 5, 7, 12, 33, 38, 41, 43, 44, 61, 62, 69, 70, 72, 73, 74, 92, 93, 95
2	20	19, 24, 26, 27, 29, 30, 46, 47, 50, 51, 56, 58, 60, 76, 78, 82, 83, 86, 89, 100
3	14	18, 22, 23, 28, 48, 52, 53, 54, 55, 77, 80, 84, 87, 90
4	7	4, 9, 32, 36, 39, 65, 75
5	11	1, 6, 8, 10, 11, 14, 31, 34, 40, 42, 45
6	5	17, 20, 25, 79, 88
7	8	13, 15, 35, 37, 63, 64, 68, 71
8	5	66, 67, 94, 96, 97
9	5	16, 21, 49, 57, 59
10	5	81, 85, 91, 98, 99

For the purpose of this study, questions where a “disagreement” answer represents a high degree of teacher morale, the answers have been reverse coded so that a 1 represents low morale and a 4 represents high morale for all 100 questions (Bentley & Rempel, 1980). By adding the numeric responses to all items for a given factor, it is possible to create scores for each of the 10 dimensions (Bentley & Rempel, 1980). To analyze the data collected from the distribution of the Purdue Teacher Opinionnaire, the mean of each of the 10 subscales was calculated with mean scores between 1.0 and 2.9

indicating low teacher morale and mean scores between 3.0 and 4.0 indicating high teacher morale. Table 17 shows the participant responses for each of the 10 constructs on the Purdue Teacher Opinionnaire.

Table 17

*Individual Participant Results for 10 Constructs of the Purdue Teacher Opinionnaire*

Participant	Construct										Overall	High/Low
	1	2	3	4	5	6	7	8	9	10		
101	2.8	2.8	3.6	1.6	2.5	2.8	2.0	3.8	3.8	2.8	2.8	Low
102	3.2	3.2	3.3	2.0	2.1	3.0	2.8	3.2	3.4	2.4	2.9	Low
103	3.6	3.0	3.6	3.1	1.5	3.0	2.5	3.6	4.0	1.6	3.0	High
104	3.4	3.4	3.4	1.4	2.3	2.8	1.8	2.8	3.8	2.2	2.7	Low
201	2.9	3.3	2.9	1.6	1.9	2.8	2.3	3.0	2.8	1.6	2.5	Low
202	2.4	2.6	2.6	1.3	3.2	2.2	1.8	2.5	2.2	2.8	2.4	Low
203	3.2	2.9	3.2	2.4	2.0	2.6	2.6	3.6	3.2	2.6	2.8	Low

The results from Table 17 indicate a low teacher morale for all but one participant. This demonstrates concern for the overall state of teacher morale at X High School. Based on these data, the overall sense of teacher morale at X High School is low.

Table 18 reflects the overall teacher morale of each participant and whether the score resulted in a low or high level of teacher morale.

Table 18

*Overall Teacher Morale Score by Participant*

Participant ID	Teacher Morale	High/Low
101	2.8	Low
102	2.9	Low
103	3.0	High
104	2.7	Low
201	2.5	Low
202	2.4	Low
203	2.8	Low

The results in Table 18 reveal that six of the seven participants reported a low level of teacher morale, with only participant 103 reporting high teacher morale.

Table 19 identifies specifically which constructs are contributing positively to overall teacher morale and which are contributing negatively to overall teacher morale.

Table 19

*Overall Results for 10 Constructs of the Purdue Teacher Opinionnaire*

Construct	Keyword	Numerical Score	High/Low
1	Relationship with Principal	3.1	High
2	Relationship with Students	3.0	High
3	Relationship with Teachers	3.2	High
4	Salary	1.8	Low
5	Paperwork	2.2	Low
6	School Programs	2.7	Low
7	Prestige	2.3	Low
8	Community Support	3.2	High
9	Facilities	3.3	High
10	Community Expectations	2.1	Low
Overall		2.7	Low

Constructs 1, 2, 3, 8, and 9 all reported high or positive levels of teacher morale. These areas consist of teacher rapport with principal, satisfaction with teaching, rapport among teachers, community support of education, and school facilities and resources. Of these areas, construct 9, school facilities and services, was reported to be the highest at 3.3. According to the follow-up focus group responses from participants, they feel as though they are given the tools and resources they need to be successful.

Additionally, the participant focus group reported that they trust the principal and his abilities, which aligned with construct 1; however, due to the change in principal leadership during the 2017-2018 school year, they reported they felt as though the change in leadership did affect the morale of the staff. It was stated that the change in principal created a new normal for the staff and that those types of changes can create uncertainty, which can sometimes result in low morale. It was also discussed that teachers would like

to see administrators in their rooms on a more regular basis and to verbalize to teachers that they are doing a good job.

Constructs 4, 5, 6, 7, and 10 all reported to be low or negative in terms of teacher morale. These areas consist of teacher salary, teacher load, curriculum issues, teacher status, and community pressures, with the lowest construct being teacher salary. In terms of teacher salary, construct 4, the focus group reported that this is a huge area of concern for teachers. It was stated that due to the low teacher salary for teachers in North Carolina, this does in fact create low teacher morale. One participant reported that while they understand that the school and district do not set teacher pay, perhaps working on raising the local supplement for the district could help to raise teacher morale. In addition, it was stated in the focus group as many teachers leave X High School for higher supplement pay in neighboring districts, it does appear that those teachers are leaving because they are unhappy. X High School's teacher turnover rate was 11.5% during the 2017-2018 school year. This turnover rate led to a discussion of why construct 7 was reported as low. Participants stated that due to low pay and low supplements, the feeling of prestige and benefits to teaching are lowered. While participants reported that they have positive relationships with their students and colleagues and feel positive about teaching, constructs 2 and 3, the lack of pay and low prestige and benefits awarded to teachers lowers morale.

It was also reported in the focus group that teacher load, construct 5, and the amount of work teachers are required to do creates low teacher morale. The participants reported that the number of forms, meetings, and paperwork they are asked and required to fill out creates a low sense of morale for teachers. Participants stated that many tasks that are given to teachers are done so without being explained and thus can create a



negative perception of the situation.

**Research Question 2: What is the current school culture in X High School as measured by the School Culture Survey?** The School Culture Survey was used to quantify the culture of X High School in this study. Survey data were collected from seven of the possible seven participants in the target population. Participation by all seven participants resulted in a 100% participation rate. The surveys in this study were given to participants via a proxy in paper form and returned to the proxy before being given to the researcher. Teacher names were changed to ID numbers known only to the proxy and not shared with researcher. The survey provides insight about the shared values and beliefs as well as the patterns of behavior and the relationships in the school environment (Gruenert & Valentine, 1997). Each factor measures a unique aspect of the school's collaborative culture (Gruenert & Valentine, 1997).

The School Culture Survey is composed of 35 items that are used to measure six aspects of school culture (Gruenert & Valentine, 1997). The instrument is composed of the six categories including collaborative leadership, teacher collaboration, professional development, collegial support, unity of purpose, and learning partnerships, which are defined in Table 20.

Table 20

*Constructs of School Culture Survey*

Factor	Factor	Definition
1	Collaborative Leadership	Measures the degree to which the school leaders can establish and maintain various collaborative relationships with school staff
2	Teacher Collaboration	Measures the degree to which teachers engage in constructive dialogue that furthers the educational vision of the school
3	Professional Development	Measures the degree to which teachers value continuous personal development and school-wide improvement
4	Collegial Support	Measures the degree to which teachers work toward a common mission for the school
5	Unity of Purpose	Measures the degree to which teachers work toward a common mission for the school
6	Learning Partnerships	Measures the degree to which teachers, parents, and students work together for the common good of the student

*Source.* Gruenert and Valentine (1997).

Table 21 shows the number of questions in each construct as well as the specific questions that were included in each.

Table 21

*Breakdown of Questions for the School Culture Survey*

Construct	Number of Questions	Questions Included
1	10	2, 7, 11, 14, 18, 20, 22, 26, 28, 32
2	6	3, 8, 15, 23, 29, 33
3	5	1, 9, 16, 24, 30
4	4	4, 10, 17, 25
5	5	5, 12, 19, 27, 31
6	4	6, 13, 21, 35

*Source.* Gruenert and Valentine (1997).

Participants were asked to rate the degree that the 35 items posed described the condition of their school. Each statement was rated using the following Likert scale: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree (Gruenert & Valentine, 1997). To analyze the data collected from the distribution of the School Culture Survey, the mean of each of the subscales was calculated with mean scores between 1.0 and 3.0 indicating negative school culture and mean scores between 3.1 and 5.0 indicating positive school culture. Table 22 shows the participant responses for the six constructs on the School Culture Survey.

Table 22

*Individual Participant Results for the Six Constructs of the School Culture Survey*

Participant	Construct						Overall	Positive/Negative
	1	2	3	4	5	6		
101	4.0	3.3	4.4	4.0	4.6	2.8	3.9	Positive
102	3.9	3.3	4.0	4.0	2.8	3.5	3.6	Positive
103	3.9	3.5	4.2	4.5	4.8	4.3	4.2	Positive
104	4.7	4.3	4.8	5.0	4.8	3.5	4.5	Positive
201	3.2	2.8	3.6	4.0	3.8	3.5	3.5	Positive
202	2.2	3.0	3.6	4.3	2.8	2.0	3.0	Negative
203	4.3	4.7	4.0	4.3	5.0	3.8	4.4	Positive

The results from Table 22 indicate that school culture is reported to be positive for all participants except one. While Participant 202's score did indicate a negative school culture, the score of 3.0 is the highest score within the negative range, with 3.1 reflecting a positive school culture. The results of the study pertaining to overall school culture by participant are shown in Table 23.

Table 23

*Overall School Culture Score by Participant*

Participant ID	School Culture	Positive/Negative
101	3.9	Positive
102	3.6	Positive
103	4.2	Positive
104	4.5	Positive
201	3.5	Positive
202	3.0	Negative
203	4.4	Positive

The study found that based on the views of the seven teachers surveyed, school culture was high at X High School with all teachers except Participant 202, who reported a negative school culture.

Table 24 reflects the overall scores for school culture in each of the six constructs. The results reported an overall positive rating in all six constructs of school culture.

Table 24

*Overall Results for the Six Constructs of the School Culture Survey*

Construct	Keyword	Numerical Score	Positive/Negative
1	Collaborative Leadership	3.7	Positive
2	Teacher Collaboration	3.6	Positive
3	Professional Development	4.1	Positive
4	Collegial Support	4.3	Positive
5	Unity of Purpose	4.1	Positive
6	Learning Partnerships	3.3	Negative
Overall		3.9	Positive

The results indicated that construct 4 was the highest in terms of school culture with an average score of 4.3. Construct 4 pertained to collegial support and measured the degree to which teachers work towards a common mission for the school. Participants reported in the focus group that they did feel as though the staff of X High School supported each other and worked together well; however, they did feel as though the mission of the school could be revamped to reflect the new staff and new goals. The participants also felt as though administration and staff needed to do a better job of being aware of the mission and purpose of the school. This statement was mirrored in construct 5, unity of purpose. The group stated that an updated mission statement that reflected the current staff, goals, and student needs would help to raise this construct.

All constructs did reflect a positive school culture except for one. The construct with the negative score was construct 6. This construct pertained to learning partnerships and measured the degree to which teachers, parents, and students work together for the

common good of the student. The group discussed how students who have graduated return to school to visit with their teachers. They stated as though they feel students genuinely like their teachers and the school. Within the focus group, the participants discussed how the school could improve upon parent, teacher, and student relationships and ways to improve the commitment of parents to X High School. Ways to increase parent attendance at open houses were discussed as a way to raise the level of learning partnership as well as a need for increased support of elective courses.

Construct 2, teacher collaboration, was discussed in terms of why it scored second lowest of the school culture constructs. Participants discussed that they felt as though collaboration is improving with the reintroduction of PLCs and the reboot that is taking place to get back to the basics; however, they felt as though successful collaboration is concentrated in different pockets throughout the school, where some same content area teachers work very well with one another, while others choose to work more independently.

When asked about construct 1, collaborative leadership, participants discussed how they did not feel automatically supported by administrators. While the score reported a positive sense of collaborative leadership, it was the third lowest of the six constructs. The focus group reported that this feeling could be the result of fear among staff members of being wrong and that if they make a mistake, they will not be supported; however, they reported that they felt very supported by administration in terms of sharing ideas and being supported to try new strategies.

Construct 3, professional development, and construct 5, unity of purpose, both reported a score of 4.1, the second highest mean score. In terms of professional development, the focus group felt as though they were given continuous opportunities for

professional development and were encouraged and supported in attending workshops. While the mean score was high, it was documented by the focus group that unity of purpose could be improved upon by updating the school mission and working to make it more reflective of students, staff, and current education. In addition, the focus group felt that more of an emphasis could be placed on making the mission statement more visible throughout the staff, students, and community so that all stakeholders would be on the same page and working towards the same goal.

**Research Question 3: What is the relationship between the variables of teacher morale, school culture, and student achievement as measured by the Purdue Teacher Opinionnaire, School Culture Survey, and EOC exams?** The mean score from the Purdue Teacher Opinionnaire was used as the quantitative measure of teacher morale. The mean score from the School Culture Survey was used as the quantitative measure of school culture.

To measure student achievement, the researcher used the proficiency scores from students on the biology and English II EOC exams. Survey data were collected from seven of the possible seven participants in the target population. Receiving surveys from all seven participants resulted in a 100% participation rate. For the purpose of this study, student achievement levels and scale scores were used to determine appropriate student mastery. On both EOCs, a level 3 indicated student mastery of the content. For the biology EOC, a scale score of 250 or higher was reflective of a level 3 and indicated mastery. For the English II EOC, a scale score of 148 or higher was reflective of a level 3 and indicated mastery. The proxy gave all participant ID numbers to the district's director of accountability. EOC score data were then coded by ID number and given to the researcher. The use of ID numbers was to ensure no student or teacher identification

was known to the researcher.

Table 25 reflects the average biology student scale score for each participant who taught biology and whether that score reflects below mastery or mastery student achievement.



Table 25

*Biology Student Achievement Results*

Participant Number	Number of students tested	Student Scale Score Mean Average	Below Mastery/Mastery
101	86	247	Below
102	20	255	Mastery
103	32	253	Mastery
104	26	255	Mastery

Table 25 illustrates that three of the four participants teaching biology had an average student scale score above 250, resulting in mastery student achievement. One participant had an average student scale score of below 250, which reflects below mastery.

Table 26 reflects the average English II student scale score for each participant who taught English II and whether that score reflects below mastery or mastery student achievement.

Table 26

*English Student Achievement Results*

Participant Number	Number of students tested	Student Scale Score Mean Average	Below Mastery/Mastery
201	84	147	Below Mastery
202	71	151	Mastery
203	66	154	Mastery

The data in Table 26 illustrates that two of the three participants teaching English II had an average student scale score of above 148, resulting in mastery student achievement. One participant had an average student scale score of 147, which reflects

below mastery student achievement. It should be noted that this student achievement score is one point away from an overall average score of mastery.

### **Correlational Analysis of Teacher Morale, School Culture, and Student Achievement**

Participants in the study had a calculated score for each variable: teacher morale, school culture, and student achievement. Table 27 illustrates the three variables of teacher morale, school culture, and student achievement for each participant.

Table 27

#### *Individual Participant Results for All Three Variables*

Participant ID	Teacher Morale	School Culture	Student Achievement
101	2.8 (low)	3.9 (positive)	247 (below mastery)
102	2.9 (low)	3.6 (positive)	255 (mastery)
103	3.0 (high)	4.2 (positive)	253 (mastery)
104	2.7 (low)	4.5 (positive)	255 (mastery)
201	2.5 (low)	3.5 (positive)	147 (below mastery)
202	2.4 (low)	3.0 (negative)	151 (mastery)
203	2.8 (low)	4.4 (positive)	154 (mastery)

Participant 101 reported low teacher morale and positive school culture. Their student EOC mean score was 247, which is below the 250 needed to reflect student mastery for the biology EOC. Participant 102 reported low teacher morale and positive school culture. Their student EOC mean score was 255, which is above the 250 needed to reflect student mastery for the biology EOC. Participant 103 reported high teacher morale and high school culture. Their student EOC mean score was 253, which is above the 250 needed to reflect student mastery for the biology EOC. Participant 104 reported low teacher morale and positive school culture. Their student EOC mean score was 255, which is above the 250 needed to reflect student mastery for the biology EOC.

Participant 201 reported low teacher morale and positive school culture. Their student EOC mean score was 147, which is below the 148 needed to reflect student mastery for the English II EOC. Participant 202 reported low teacher morale and negative school culture. Their student EOC mean score was 151, which is above the 148 needed to reflect student mastery for the English II EOC. Participant 203 reported low teacher morale and positive school culture. Their student EOC mean score was 154, which is above the 148 needed to reflect student mastery for the English II EOC.

The results illustrated that of the participants who scored mastery in student achievement, one reported both high teacher morale and positive school culture, one reported low teacher morale and negative school culture, and three reported low teacher morale but high school culture. Participants who scored below mastery in student achievement both reported low teacher morale and high school culture.

The single score for each variable was used to determine if a correlation existed among the variables. Figure 2 provides the Pearson correlation coefficients for the variable pairing of teacher morale and student achievement.

### Correlations

		Teacher Morale	Student Achievement
Teacher Morale	Pearson Correlation	1	.724
	Sig. (2-tailed)		.066
	N	7	7
Student Achievement	Pearson Correlation	.724	1
	Sig. (2-tailed)	.066	
	N	7	7

*Figure 2.* Pearson Correlation Teacher Morale and Student Achievement.

Based on the results of the Pearson's  $r$  correlation that was run using the data on teacher morale and student achievement, a positive correlation of 0.724 exists between the variables of teacher morale and student achievement. Since this number falls between -1 and 1, this does indicate a positive linear correlation between the variables of teacher morale and student achievement at X High School within the sample studied; however, based on the  $p$  value of 0.066, which is just slightly greater than 0.05, there is not enough evidence to definitively suggest that this positive correlation is statistically significant throughout the entire population of X High School.

Figure 3 provides a visual representation of the data for the data collected on teacher morale and student achievement. While the positive correlation can be observed in the data points ascending up the line, the fact that the points are not directly on the line reflects the lack of significance.

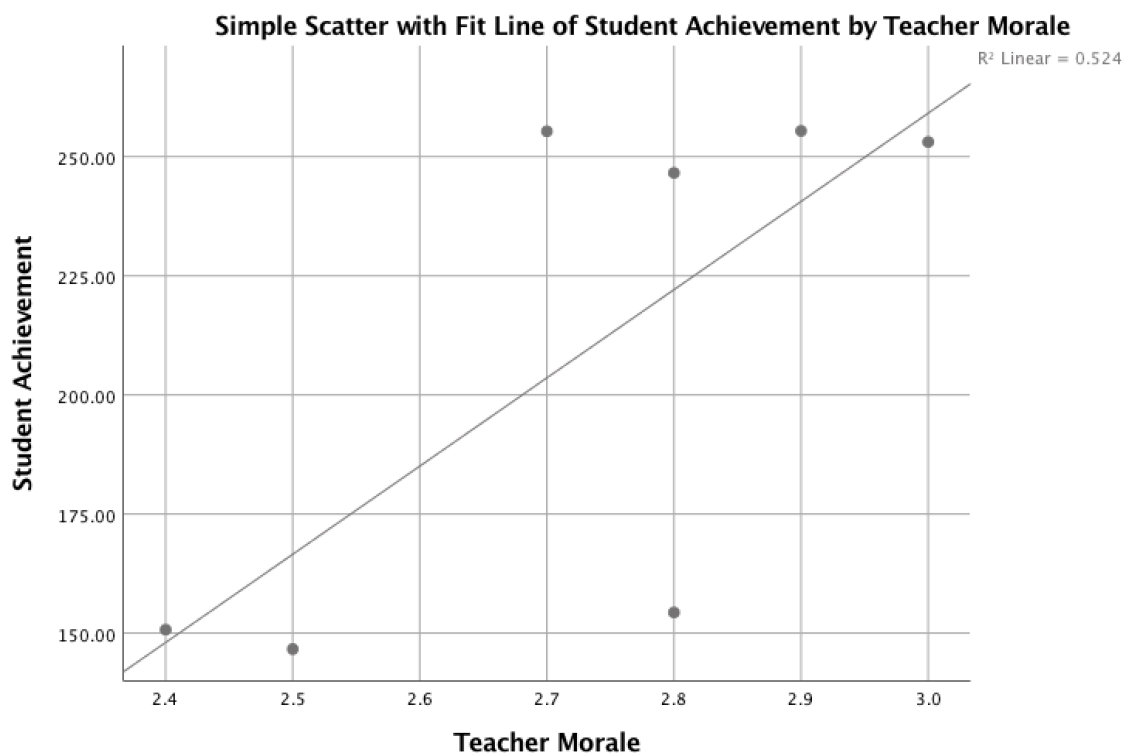


Figure 3. Teacher Morale and Student Achievement Scatterplot.

Figure 4 provides the Pearson correlation coefficients for the variable pairing of school culture and student achievement.

### Correlations

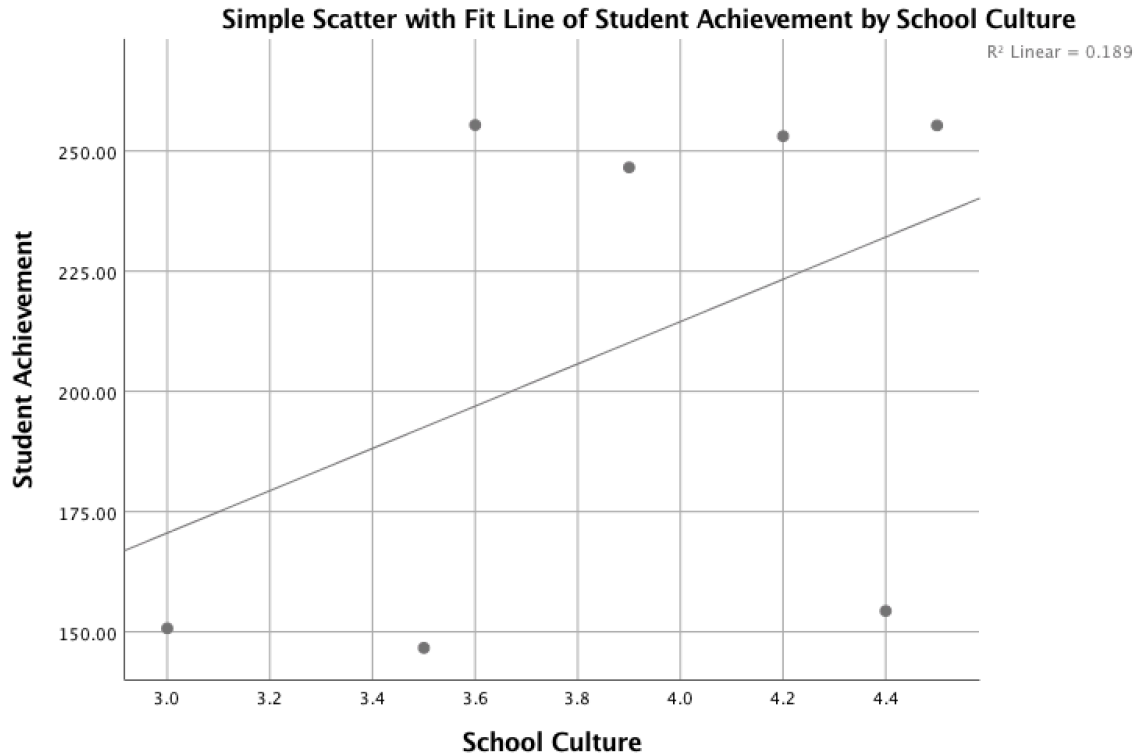
		Student Achievement	School Culture
Student Achievement	Pearson Correlation	1	.435
	Sig. (2-tailed)		.329
	N	7	7
School Culture	Pearson Correlation	.435	1
	Sig. (2-tailed)	.329	
	N	7	7

Figure 4. Pearson Correlation School Culture and Student Achievement.

Based on the results of the Pearson's  $r$  correlation that was run using the data on

school culture and student achievement, a positive correlation of 0.435 exists between the variables of school culture and student achievement. Since this number falls between -1 and 1, this does indicate a positive linear correlation between the variables of school culture and student achievement at X High School within the sample studied; however, based on the  $p$  value of 0.329, which is greater than 0.05, there is not enough statistical evidence to suggest that the positive correlation between school culture and student achievement is significant within the entire population of X High School. While there is a positive correlation that exists within the sample group, there is not enough data to definitively suggest that this correlation is reflective of the entire population of X High School.

Figure 5 provides a visual representation of the data for the data collected on school culture and student achievement. While the positive correlation can be observed in the data points ascending up the line, the fact that the points are not directly on the line reflects the lack of significance.



*Figure 5.* School Culture and Student Achievement Scatterplot.

Chapter 4 has provided the data and results of this research study. There was a positive correlation between teacher morale and student achievement as well as between school culture and student achievement; however, given that the  $p$  value was greater than 0.05 in each correlation, neither correlation is statistically significant. Chapter 5 discusses the results of this study in detail and provides implications for future study.

## **Chapter 5: Discussion**

### **Introduction**

This study examined the relationship between the variables of teacher morale, school culture, and student achievement. Chapter 5 draws conclusions from the data found in the study and discusses the implications in education and for further research surrounding the three variables. According to Mackenzie (2007), when teacher morale is high in a school and the culture is healthy, teachers feel good about coming to work and about the job they are doing. In turn, this feeling has an effect on student morale and student achievement. In contrast, low morale for teachers can lead to decreased productivity, most notably low student achievement. Hoy and Miskel (1987) reported that when school environments are healthy and teacher morale is high, not only do teachers feel good about themselves and others, but they also possess a sense of accomplishment from their jobs. While the results of this study mirror Mackenzie and Hoy and Miskel's studies in that it revealed overall high school culture at X High School with overall high student achievement in both biology and English II, teacher morale in X High School is low, with only one participant reporting high teacher morale. As stated by Penfold (2011), school leaders must actively focus on increasing staff morale and school culture in order to positively impact student achievement in their schools. Data from this study provide information about the current state of teacher morale and school culture at X High School as measured by student achievement on biology and English II EOC exams.

This chapter uses the data reported in Chapter 4 to answer each of the research questions.

1. What is the current state of teacher morale for biology and English II teachers



in X High School as measured by the Purdue Teacher Opinionnaire?

2. What is the current school culture in X High School as measured by the School Culture Survey?
3. What is the relationship between the variables of teacher morale, school culture, and student achievement as measured by the Purdue Teacher Opinionnaire, School Culture Survey, and EOC exams?

### **Teacher Morale**

Black (2001) stated that when teacher morale is high, students typically show high achievement; and in contrast, when teacher morale is low, achievement drops and other problems begin to surface. The first research question in the study focused specifically on the current state of teacher morale among biology and English II teachers at X High School. The study used the Purdue Teacher Opinionnaire to measure the current state of teacher morale among the participating teachers. The survey was administered in January 2019. Scores for the Purdue Teacher Opinionnaire range between 1 and 4, with 1 reflecting low teacher morale and 4 reflecting high teacher morale. The mean score of the results from the survey were calculated for each participant. The study found that among the seven teachers surveyed, teacher morale was low with all teachers except participant 103, who reported a high degree of teacher morale. The overall mean score of X High School for teacher morale as measured by the Purdue Teacher Opinionnaire was 2.7. This mean score reflects low teacher morale among the teachers surveyed in this study.

The Purdue Teacher Opinionnaire consisted of 100 questions centering around the 10 constructs of teacher rapport with principal, satisfaction with teaching, rapport among teachers, teacher salary, teacher load, curriculum issues, teacher status, community

support of education, school facilities/services, and community pressures. Of the 10 constructs, construct 4 was the lowest, with an average quantitative score of 1.8.

Construct 4 was defined as teacher salary and explained as the teacher's feelings about salaries and salary policies. The low score on this construct reflects the dissatisfaction teachers feel in regard to teaching and is reflected in several studies referenced in Chapter 2. The National Center for Education Statistics reported in 2011 that 45% of teachers were not satisfied with their current salary (Aud et al., 2011). The study stated that teacher salary was the area that had the highest impact on teacher morale. Results of this study mirror those results in that the construct pertaining to teacher salary was the lowest scoring construct measuring teacher morale. Participants in the focus group reported that teacher salary is a huge factor in determining their overall sense of morale, although they understood that it is not the decision of the school district or X High School. They felt as though X High School did a good job of rewarding them in different ways; however, they did discuss the issue of the school district looking into trying to raise the supplement for teachers in the district as a way to raise morale and keep teachers.

The next lowest construct, construct 10, centered around community pressures, which had a mean score of 2.1. This construct was defined as the extent to which the community understands and is willing to support a sound educational program. The next lowest scoring constructs were construct 5, teacher load, with a median score of 2.2 and construct 7, teacher status, with a mean score of 2.3. Teacher load was defined as feelings about prestige, security, and benefits afforded by teaching, while teacher load was defined as matters such as record-keeping, clerical work, community demands on teacher time, extracurricular load, and keeping up to date professionally. These data are consistent with a study by Evans (1998) which revealed that perception of low status, low

pay, and lack of professional autonomy were the three leading factors to low morale. Further, a study by Barth (1990) reported that teachers were frustrated by the non-teaching demands placed on them. Based on the data presented in this study, the areas reported by Evans (1998) and Barth (1990) to have the greatest impact on teacher morale are still at the top in terms of factors that affect teacher morale. In this study, the constructs pertaining to these three areas were the lowest scoring constructs. Focus group data revealed that participants felt that many tasks given to teachers are confusing, overwhelming, and time consuming and do not seem to be worthwhile or to directly relate to their main job of teaching. They reported that while administration says they want to decrease these tasks, participants do not see that occurring. The data from these constructs links back to the theoretical framework on teacher efficacy, specially the area of physiological arousal. The stress that the increased amount of paperwork creates does lower teacher efficacy and thus teacher morale.

The highest scoring construct was construct 9. Construct 9 dealt with school facilities and resources and was defined as the adequacy of facilities, supplies, and equipment as well as the efficiency of the procedures for obtaining materials and services. X High School underwent a \$40 million improvement project from 2015-2018, which, in addition to additional classrooms and overall classroom improvements, also included the construction of a new gymnasium and performing arts center. After school facilities and resources, the next highest scoring constructs were constructs 3 and 8, both having mean score of 3.2. Construct 3 pertained to rapport among teachers and was defined as teacher relationship with other teachers focusing on preparation, ethics, influence, interests, and competency of peers. This construct links back to the area of vicarious experiences in that as teachers see their peers being successful, they too are

given a boost in teacher efficacy, resulting in a higher level of morale. Construct 8 centered around community support of education and was defined as the extent to which the community understands and is willing to support a sound educational program.

Construct 1, rapport with the principal, registered a mean score of 3.1 among the participant group. This construct was defined as teacher's feelings about the principal, including professional competency, interest in teachers and their work, ability to communicate, and skill in human relations. It should be noted that X High School underwent a principal change during the 2017-2018 school year. This change was reported as a factor within the focus group pertaining to the impact of principal leadership on teacher morale. As discussed by the participants in the focus group, while the staff feels confident in the principal's ability, the change component and creating a new normal for the school has had a significant impact on the overall morale of the school. Similarly, Hirsch and Emerick (2006) reported that school leadership was one of the most important factors of teacher morale. In addition to the change in leadership, it was also noted by the participants in the focus group that having administration be more visible would be an area to focus on in order to raise teacher morale. This point was mirrored by the Public Education Network's study "Leadership Matters" (2013), which found that teachers working in a school led by an accessible, supportive, and visible principal were much more successful. In addition, this discussion point links back to the theoretical framework on teacher efficacy in the area of verbal persuasion. Teachers stating that more verbal praise and encouragement would help to raise teacher efficacy and thus teacher morale.

Construct 2, satisfaction with teaching, had a mean score of 3. Construct 2 centered around teacher relationships with students and feelings and satisfaction with

teaching. While a Metlife (2012) survey revealed that teacher satisfaction was decreasing, from 62% in 2008 to 39% in 2012, participants at X High School reported a relatively high level of satisfaction with teaching. The focus group participants stated that they loved their job and truly enjoyed teaching. They reported that they gained a great deal of satisfaction working with students. These statements corresponded with Bosso (2017) who stated that teachers have a sense of moral purpose, an obligation toward students, dedication to their profession, and overall passion related to their work. Further, Donohoo et al. (2018) reported that strong collective efficacy is when a staff of teachers believe that together, they can inspire growth and change in their students.

Construct 6, curriculum issues, had a mean score of 2.7 and fell in the middle of the construct ranking. It was defined as teacher reactions to the adequacy of the school program in meeting student needs, in providing for individual differences, and in preparing students for effective citizenship. The low score of this construct coincides with Mackenzie (2007) when he stated that while teachers are employed to teach, their job extends beyond the face-to-face teaching. He discussed the extra duties, such as curriculum design and development, as an area where teachers are feeling stressed and working beyond what they were hired to do (Mackenzie, 2007). In his study, 88% of those teachers surveyed reported that their job was harder than it was when they first became a teacher based on changes in curriculum. The problem is not with the teaching itself but with the increased accountability and transparency that makes the job seem more difficult (Mackenzie, 2007). The low score on this construct mirrors the area of physiological arousal as part of teacher efficacy. Feelings of being overwhelmed and the fact the job includes more than just face to face teaching creates stress for teachers, resulting in lower efficacy and morale.

Based on the results of this study, teacher morale at X High School is low, while student achievement in the subject areas of biology and English II remain above mastery. While Miller (1981) stated that research demonstrates that there is a direct correlation between student achievement and teacher morale, the results of this study are not reflective of this correlation. The results of this study on teacher morale are shown to reflect the findings of Rouk (1979). He reported that while a negative classroom environment did not yield high student growth, there was no evidence that proved that a positive classroom environment alone increased student achievement. A study by Hoy, Sweetland, and Smith (2002) found that the overall collective efficacy of teachers in a school was more important in explaining school achievement than individual teacher self-efficacy.

### **School Culture**

Teachers have the greatest impact on student achievement; however, teachers are only one component (Tonissen, 2015). Creemers and Kyriakides (2010) reported that school culture has been shown to be a major component of school, teacher, and student success. The second research question in the study focused specifically on the current state of school culture at X High School. The study used the School Culture Survey to measure the current state of school culture as reported by the participating teachers at X High School. The survey was administered in January 2019. The mean score of the results from the survey were calculated for each participant. Scores for the School Culture Survey range from 1 and 5. A score of 1 reflects a negative school culture, and a score of 5 reflects a positive school culture. The study found that based on the views of the seven teachers surveyed, school culture was high at X High School with all teachers except participants 201 and 202, who reported a negative school culture.

The results of a study conducted by Asby and Roebuck (1974) revealed that the climate established by teachers in the classroom has a significant impact on student attitudes about learning and on overall classroom morale. Chang (1993) found that stronger school cultures had better motivated teachers, and better motivated teachers led to more motivated students. Data collected from this study support these two previous studies. Of the six constructs, only construct 6, learning partnerships, reflected a negative mean score. The mean score of construct 6, learning partnerships, was a 3.3. Learning partnerships measures the degree to which teachers, parents, and students work together for the common good of the student. This construct could potentially be linked with the teacher morale construct of community pressures, which was the second lowest scoring construct for teacher morale. This area was discussed within the focus group, and it was reported by the participants that parents at X High School do not support teachers in that they either seem to not care about their student's academic success or they overly care and question the teacher whenever anything occurs. They further stated that parents tend to go straight to administration with a concern rather than first discussing the concern with the teacher. In addition, the focus group made mention of the fact that since X High School is located in a small community, teachers who also attended X High School or who lived in the community and saw parents more regularly were given different treatment by parents than those teachers who did not attend X High School or who did not live in the community. This construct links back to the area of physiological arousal within the teacher efficacy framework and mirrors the theory that increased stress and how they feel others view them results in lower teacher efficacy, lower morale and a lower sense of positive school culture.

All other constructs of school culture reflected a positive score, with the highest

score being construct 4, collegial support. This construct measures the degree to which teachers work towards a common mission for the school. Linking this construct with teacher morale, it is mirrored in the high score of construct 3, rapport among teachers. At its core, school culture is the quality and character of the school. It is based on patterns of school experiences for those who work and learn there. It reflects norms, goals, values, interpersonal relationships, and organizational structures (National School Climate Center, 2007). Based on the results of this construct, teachers at X High School reported that they enjoy their colleagues and they feel as though they are working together to ensure the success of the students and the school. This is mirrored in the area of vicarious experience and mastery experience within the teacher efficacy framework. This response reflects back to Bosso's (2017) study on teacher efficacy where teachers expressed that their motivation, morale, and professional identity are strongly associated with a belief in the moral purpose of their work. Also, teachers firmly articulated that their passion for teaching is a central feature of their individual professional identities and that their belief in the moral purpose of their work and interactions with their students are fundamental sources of this passion (Bosso, 2017).

The second highest mean score in regard to school culture was construct 3, professional development, and construct 5, unity of purpose. Both of these constructs reported a mean score of 4.1. The construct of professional development measures the degree to which teachers value continuous personal development and school-wide improvement, while the construct of unity of purpose measures the degree to which teachers work toward a common mission for the school. Participants in the focus group stated that they felt they are given opportunities to further their profession and are encouraged to do so by administration; however, they did state that more encouragement



and highlighting of teacher accomplishments could help to increase the culture even further. This construct and discussion points back to the teacher efficacy area of verbal persuasion in that teachers feel encouraged to better themselves within their professional careers. This response coincides with Donohoo et al. (2018) who stated that empowering teachers to take on leadership roles gives educators a true stake in their school and that when teachers have a role in making important school decisions, feel their voices are heard, and can actively participate in building school culture, efficacy is raised.

Construct 1, collaborative leadership, measures the degree to which the school leaders can establish and maintain various collaborative relationships with school staff. This construct reported a mean score of 3.7. While still in the positive range, this score reflects a 5-point decrease from the next highest score. According to a 2009 study by MacNeil et al., the school culture is cultivated by the school principal. In addition, Leithwood (1992) stated that the principal is the change agent and implied that they have the most impact on changing and altering the school culture. While the mean score of this construct is positive, X High School did undergo a leadership change during the 2017-2018 school year. This change in leadership could be reflected in the lower score. As discussed in the focus group, the participants stated there were many times they felt as though certain important matters were not communicated with them by administration. This mirrors the findings of Koerner (1990) who stated the school culture must be one where open communication is constant among all, conflicts are dealt with, differences are appreciated, and voices are fostered and developed.

The lowest score within the positive range of school culture was construct 2, teacher collaboration. This construct scored a 3.6 and measured the degree to which teachers engage in constructive dialogue that furthers the educational vision of the

school. As with construct 1, while this construct did reflect a positive score in terms of school culture, the score of 3.6 is lower than the top positive scores within constructs 3, 4, and 5. Within the focus group, the teachers stated that they felt as though the different departments were beginning to work together more and were developing an all hands on deck approach to teaching and student achievement. However, this change is a slow process for X High School; and while there are some departments that are strong and doing well, others are still developing. They also noted that within a high school setting, collaboration was much different than in lower grades and that having common planning within their content area has helped tremendously, but it is a slow process.

Keiser and Schulte (2009) stated that positive school climate increases academic performance, enhances social and emotional skills, and thus in turn retains teachers. Results of this study mirror this statement in that the overall mean score of X High School in terms of school culture was 3.9, indicating an overall positive school culture; and in addition, both biology and English II student achievement mean scores were above mastery. This study reinforces a study conducted by Wang et al. (1997) which found that school culture is among one the top influences on improving student achievement.

### **Student Achievement**

Student test performance is now a part of statewide accountability programs in an attempt to improve student achievement (Decker & Bolt, 2008). In assessing student achievement, there are multiple measures that range from formal, summative high stakes testing to continuous formative assessments (Ediger, 2003). The third question in the study focused specifically on student achievement at X High School. The study used the mean of student scale scores on the biology and English II EOC exams to measure the student achievement of the participating teachers at X High School. The exams were

administered in January 2019. The mean score of the student scale scores for the exam were calculated for each teacher participant. For biology, a mean scale score of 250 or above reflects mastery, while any score below 250 reflects below mastery achievement. For English II, a mean scale score of 148 or above reflects mastery, while any score below 148 reflects below mastery achievement. Standardized tests are tested for validity and reliability making them more attractive as a method of universally testing student achievement (Noddings, 2004).

The student achievement data from both content areas indicate overall student mastery for each content area. The two participants, 101 and 201, whose mean score was below the cut off score for student mastery, were only 1 and 3 points away from achieving student mastery. It should be noted that many find that standardized tests are an indirect measure of learning due to the fact that many aspects of learning cannot be assessed through them (Marzano, 2003). Both of these participants reported low teacher morale and positive school culture. Participant 103 reported high teacher morale and positive school culture and achieved above mastery on student achievement. Participants 102, 104, 202, and 203 all reported low teacher morale and positive school culture and scored above mastery on student achievement.

### **Conclusions and Connections to Theoretical Framework**

The findings of this study indicate that while there is a positive linear correlation between the constructs of teacher morale and school culture with student achievement, the correlation is not statistically significant based on the data included in the study. The correlation between teacher morale and student achievement yielded a positive linear correlation of  $r = .724$ , with a significance of  $p = .06$ . Even though the  $p$  value is only 0.01 higher than the 0.05 needed to prove statistical significance, it is still higher and thus

reflects no statistical significance for the correlation. The correlation between school culture and student achievement yielded a positive linear correlation of  $r = .435$  but a significance of  $p = .329$ . The  $p$  value proves to be much greater than  $p = 0.05$ , which is needed to prove statistical significance, resulting in no statistical significance in the correlation between teacher morale and student achievement.

The data reveal that X High School has an overall positive school culture, with only one participant reporting negative school culture. The data also reveal that X High School has an overall low teacher morale, with only one participant reporting high morale. These data are in contrast to Black (2001) and his theory that teachers with an unhealthy attitude are often a symptom of an unhealthy school. While data reflect X High School to be a healthy school overall with positive school culture, the morale of the teachers surveyed is low. These results are interesting due to the fact they seem to contrast most literature on the subject including the theory between teacher morale and school culture proposed by MacNeil et al. (2009) who stated positive school cultures have more motivated, happy teachers. As seen in Bosso's (2017) study, many of the teachers surveyed did not perceive high degrees of respect on a policy making or societal level, they reported feeling respected within their school environment and individually. Within the local educational environment, teachers who feel respected by their colleagues and are recognized for their expertise and knowledge tend to contribute to their school culture in a positive manner; so while teachers may feel a sense of low morale on a larger scale, personally, their personal teacher efficacy may remain high and reflect a positive school culture (Bosso, 2017).

The data report that overall student achievement is above mastery for both biology and English II at X High School. When compared to teacher morale and school

culture, the data illustrate that X High School's student achievement is more closely correlated with school culture than teacher morale. These results mirror a study by Berkowitz et al. (2016) that revealed the theory that there is a positive relationship between school culture and student achievement.

When comparing this most recent data for Biology and English II with scores from 2017-2018, it is revealed that scores in student achievement for these two content areas have dropped. While still above mastery, biology scores are 13.5 points lower from the 2017-2018 school year, and English II scores are 16.2 points lower. While there is still another semester of student achievement data that will result in additional scores for biology and English II, it should be noted that these are significant drops in student achievement for X High School. While school culture is reported to be positive among those teachers surveyed, the overall teacher morale is low; and in addition, the student achievement data for the 2018-2019 fall semester is significantly lower than what X High School has scored in previous years. Based on previously discussed literature and theories, most research reflects that student achievement increases when morale is high. X High School is performing above mastery on EOC assessments but at the same time has low morale. X High School could potentially increase student achievement even further if they found ways to raise the morale of the teachers. Focusing on ways to improve teacher morale could potentially prove to be vital in X High School's desire to continue to raise student achievement.

With research stating the theory that teacher efficacy has an impact on student achievement, the student achievement occurring at X High School could be associated with high teacher efficacy. Teacher efficacy is when a teacher believes in their own ability to guide their students to success (Hattie, 2012). For over 30 years, researchers

have explored the link between teacher self-efficacy and student achievement. Research suggests that teachers with a strong sense of self-efficacy tend to be better planners, more resilient through failure, and more open-minded and supportive with students (Hattie, 2012). Professional growth opportunities that are reflective of trust in teacher professionalism involve meaningful support and feedback and encourage greater levels of teacher autonomy. They are connected to a shared vision and are often associated with heightened efficacy (Darling-Hammond, 1998).

Furthermore, professional growth endeavors that genuinely seek to develop teachers, as opposed to a controlling, behaviorist approach rooted in compliance and accountability for their own sake, boost morale, motivation, and self-efficacy. Educational environments responsive to teachers' needs, concerns, responsibilities, and expertise are better situated to provide suitable professional growth endeavors and thereby improve teacher efficacy, morale, and motivation.

Based on the data collected from the Purdue Teacher Opinionnaire, areas pertaining to rapport with principal, satisfaction with teaching, rapport among teachers, community support, and school facilities all reported high scores. In addition, on the School Culture Survey, areas pertaining to collaborative leadership, teacher collaboration, professional development, collegial support, unity of purpose, and learning partnerships also all reported high scores. These areas overlap with research, previously discussed, that has been linked to high teacher efficacy. A study by Bosso (2017) revealed that within the local educational environment, teachers who feel respected by their colleagues and are recognized for their expertise and knowledge tend to contribute to their school culture in a positive manner. Bosso went on to theorize that it is quite possible an individual teacher's morale may remain high even as school morale and that of the

broader environment may suffer. The teachers of X High School did report in the focus group that they felt supported by administration to further their educational endeavors and continue to grow as a teacher. They also stated they felt positive in the areas of the surveys that related to satisfaction and gratification received from teaching. Based on research, these results could create environments where students perceive that they are participants in a caring learning environment, making them more likely to be engaged in school. Higher levels of engagement produce increased attendance and higher test scores. This demonstrates the link of teacher efficacy to student achievement on standardized tests (Barkley, 2006).

### **Limitations of the Study**

The limitations of a study provide useful information about possible areas of weakness in a study which could ultimately affect the results (Creswell, 2012). One limitation in this study included the fact that the researcher was an assistant principal at the study site. This limitation resulted in the use of a proxy to create a nonthreatening, nonbiased situation for the participants. Even though the proxy conducted the focus group and was the source of contact for the participants, it was still known that the researcher was the assistant principal and would be reading the data. While no identifying markers were used and the focus group had been scripted before the researcher was given the data, participants may have not answered honestly knowing that the researcher, who was one of their assistant principals, would see the results.

Another limitation in this study was the small sample size of only two subject areas being utilized and only seven teachers being surveyed. According to Creswell (2012), the recommended number of participants for a correlational study is 30. In a correlational study, the larger number of participants creates a greater ability to

generalize findings, resulting in more statistically significant results.

A third limitation in this school was that to measure the constructs of teacher morale and school culture, opinion surveys were given to participants. Further, the study took place during one small section of time, which might reflect only the feelings at that current moment rather than overall feelings.

X High School also experienced a principal change during the 2017-2018 school year which may have been a limitation of the study. The feelings reflected in the two surveys might be situational and only apply to the school at the current moment and not overall. The opinions reported could be a reflection of the adjustment process pertaining to the leadership change and might change when the unfamiliarity of a new principal is no longer an issue.

An additional limitation of this study included that Math I EOC scores were not included due to the state's decision to hold all math EOC scores until the summer of 2019. This created a lower number of participants and student scores. The researcher did not have the option of using those scores or those participants in the study.

The study utilized results from only one school. The utilization of one school was due to the fact that X High School is the only high school in the district. In addition, only EOC teachers and EOC scores were used in the collection of data for this study. The researcher looked only at the overall measure of school culture and teacher morale and did not investigate further on the reasons for the current measures.

### **Recommendations for Further Study**

While the Pearson correlation did report a positive linear correlation between teacher morale and student achievement as well as a positive linear correlation between school culture and student achievement, the results did not prove to be statistically



significant at the  $p = 0.05$  level. Further study on this topic could include more subject areas. More subject areas would result in more teacher feedback and would yield better data about the current state of the entire state of teacher morale and school culture of X High School. By incorporating more teachers, more information could be gained about which constructs X High School needs to focus on to raise teacher morale. In addition, based on the data results from this study, a study seeking the impact of teacher morale on overall school culture would yield information on how much of a factor teacher morale is on the overall culture of a school.

This study collected data over only one semester. A future study that took place over a whole year would provide more accurate data of the state of teacher morale and school culture and a true reflection of their relationship on student achievement. Adding additional study sites to a future study would allow for a comparison between the two sights and would yield valuable information about the current states of teacher morale and school culture at different locations and how those variables affect student achievement.

Further, a study looking at how to improve teacher morale, specifically for X High School, would help to shed further light on the reason for low morale and ways to improve it. While X High School is still achieving above mastery on EOC assessments and the low teacher morale does not appear to be impacting student achievement, research does show that schools with high teacher morale have high student achievement. X High School could look to improve their student achievement more by finding methods of raising the morale of its teachers.

## Summary

This study sought to identify a relationship between teacher morale, school culture, and student achievement. School leaders must actively focus on increasing staff morale and school culture in order to positively impact student achievement in their schools (Penfold, 2011). The use of standardized testing to assess student achievement and the high stakes associated with it have taken a toll on teacher morale and the school environment as a whole (Walker, 2014). In addition, low teacher morale leads to low performance in the classroom as well as low expectations for students. These low expectations can decrease achievement on standardized tests (Tanriogen & Ermeç, 2008), and in schools where the culture is not hospitable to learning, student achievement can suffer (Ellenberg, 1972). While there was a positive correlation between both teacher morale and student achievement in this study as well as with school culture and student achievement, there was not enough data to note a significant statistical correlation.

This study did reveal valuable insight into the current state of teacher morale and school culture at X High School and reported key areas for improvement within the two variables of teacher morale and school culture. Equipping school leaders with knowledge gained from this study will not only lead to an insight into the current state of teacher morale and school culture but also to what impact teacher satisfaction and the overall school culture have on teaching and furthermore student learning and achievement. In this time of high standards for all children, the concept of teacher efficacy, both of individual teachers and of the school faculty as a whole, is critically important (Protheroe, 2008). Teachers who believe they can teach all children in ways that enable them to meet these high standards are more likely to exhibit teaching behaviors that support this goal (Protheroe, 2008). Principals can then work to balance their support for

both high levels of student learning and achievement and also a positive school culture and high staff morale (Protheroe, 2006).

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Appendix A  
Purdue Teacher Opinionnaire

Prepared by Ralph R. Bentley and Averno M. Rempel (1980)

This instrument is designed to provide the opportunity to express your opinions about your work as a teacher and various school problems in your particular school situation. There are no right or wrong responses, so do not hesitate to mark the statements frankly.

Please **do not** record your name on this document.

Read each statement carefully. Then indicate whether you (1) disagree, (2) probably disagree, (3) probably agree, (4) agree with each statement. Circle your answers using the following scale:

1= Disagree    2=Probably Disagree                      3=Probably Agree    4=Agree

1	Details, "red tape," and required reports absorb too much of my time.	1	2	3	4
2	The work of individual faculty members is appreciated and commended by our principal.	1	2	3	4
3	Teachers feel free to criticize administrative policy at faculty meetings called by our principal	1	2	3	4
4	The faculty feels that their suggestions pertaining to salaries are adequately transmitted by the administration to the appropriate personnel within your state (i.e., school board, department of education, etc.)	1	2	3	4
5	Our principal shows favoritism in his/her relations with teachers in our	1	2	3	4

	school.				
6	Teachers in this school are expected to do an unreasonable amount of record keeping and clerical work.	1	2	3	4
7	My principal makes a real effort to maintain close contact with the faculty.	1	2	3	4
8	Community demands upon the teacher's time are unreasonable.	1	2	3	4
9	I am satisfied with the policies under which pay raises are granted.	1	2	3	4
10	My teaching load is greater than that of most of the other teachers in our school.	1	2	3	4
11	The extra-curricular load of the teachers in our school is unreasonable.	1	2	3	4
12	Our principal's leadership in faculty meetings challenges and stimulates our professional growth.	1	2	3	4
13	My teaching position gives me the social status in the community that I desire	1	2	3	4
14	The number of hours a teacher must work is unreasonable.	1	2	3	4
15	Teaching enables me to enjoy many of the material and cultural things I like.	1	2	3	4
16	My school provides me with adequate classroom supplies and equipment.	1	2	3	4

17	Our school has a well-balanced curriculum.	1	2	3	4
18	There is a great deal of griping, arguing, taking sides, and feuding among our teachers	1	2	3	4
19	Teaching gives me a great deal of personal satisfaction.	1	2	3	4
20	The curriculum of our school makes reasonable provision for student individual differences.	1	2	3	4
21	The procedures for obtaining materials and services are well defined and efficient.	1	2	3	4
22	Generally, teachers in our school do not take advantage of one another.	1	2	3	4
23	The teachers in our school cooperate with each other to achieve common, personal, and professional objectives.	1	2	3	4
24	Teaching enables me to make my greatest contribution to society.	1	2	3	4
25	The curriculum of our school is in need of major revisions.	1	2	3	4
26	I love to teach.	1	2	3	4
27	If I could plan my career again, I would choose teaching.	1	2	3	4
28	Experienced faculty members accept new and younger members as colleagues.	1	2	3	4
29	I would recommend teaching as an occupation to students of high scholastic ability.	1	2	3	4



30	If I could earn as much money in another occupation, I would stop teaching.	1	2	3	4
31	The school schedule places my classes at a disadvantage.	1	2	3	4
32	Within the limits of financial resources, the school tries to follow a generous policy regarding fringe benefits, professional travel, professional study, etc.	1	2	3	4
33	My principal makes my work easier and more pleasant.	1	2	3	4
34	Keeping up professionally is too much of a burden.	1	2	3	4
35	Our community makes its teachers feel as though they are a real part of the community.	1	2	3	4
36	Salary policies are administered with fairness and justice.	1	2	3	4
37	Teaching affords me the security I want in an occupation.	1	2	3	4
38	My school principal understands and recognizes good teaching procedures.	1	2	3	4
39	Teachers clearly understand the policies governing salary increases.	1	2	3	4
40	My classes are used as “dumping grounds” for problem students.	1	2	3	4
41	The lines and methods of communication between teachers and the principal in our school are well developed and maintained	1	2	3	4
42	My teaching load in this school is unreasonable.	1	2	3	4

43	My principal shows a real interest in my department.	1	2	3	4
44	Our principal promotes a sense of belonging among the teachers in our school.	1	2	3	4
45	My teaching load unduly restricts my non-professional activities.	1	2	3	4
46	I find my contacts with students, for the most part, highly satisfying and rewarding	1	2	3	4
47	I feel that I am an important part of this school.	1	2	3	4
48	The competency of the teachers in our school compares favorably with that of teachers in other schools with which I am familiar.	1	2	3	4
49	My school provides the teachers with adequate audio-visual aids and projection equipment.	1	2	3	4
50	I feel successful and competent in my present position.	1	2	3	4
51	I enjoy working with student organizations, clubs, and societies.	1	2	3	4
52	Our teaching staff is congenial to work with.	1	2	3	4
53	My teaching associates are well prepared for their jobs.	1	2	3	4
54	Our school faculty has a tendency to form into cliques.	1	2	3	4
55	The teachers in our school work well together.	1	2	3	4
56	I am at a disadvantage professionally because other teachers are better prepared to teach than I am.	1	2	3	4

57	Our school provides adequate clerical services for the teachers.	1	2	3	4
58	As far as I know, the other teachers think I am a good teacher.	1	2	3	4
59	Library facilities and resources are adequate for the grade or subject area which I teach.	1	2	3	4
60	The “stress and strain” resulting from teaching makes teaching undesirable for me.	1	2	3	4
61	My principal is concerned with the problems of the faculty and handles these problems sympathetically.	1	2	3	4
62	I do not hesitate to discuss any school problem with my principal.	1	2	3	4
63	Teaching gives me the prestige I desire.	1	2	3	4
64	My teaching job enables me to provide a satisfactory standard of living for my family.	1	2	3	4
65	The salary schedule in our school adequately recognizes teacher competency.	1	2	3	4
66	Most of the people in this community understand and appreciate good education.	1	2	3	4
67	In my judgment, this community is a good place to raise a family.	1	2	3	4
68	This community respects its teachers and treats them like professional persons.	1	2	3	4
69	My principal acts interested in me and my problems.	1	2	3	4

70	My school principal supervises rather than “snoopervises” the teachers in our school.	1	2	3	4
71	It is difficult for teachers to gain acceptance by the people in this community.	1	2	3	4
72	Teachers’ meetings as now conducted by our principal waste the time and energy of the staff.	1	2	3	4
73	My principal has a reasonable understanding of the problems connected with my teaching assignment.	1	2	3	4
74	I feel that my work is judged fairly by my principal.	1	2	3	4
75	Salaries paid in this school compare favorably with salaries in other schools with which I am familiar.	1	2	3	4
76	Most of the actions of students irritate me.	1	2	3	4
77	The cooperativeness of teachers in our school helps make our work more enjoyable.	1	2	3	4
78	My students regard me with respect and seem to have confidence in my professional ability.	1	2	3	4
79	The purposes and objectives cannot be achieved by the present curriculum.	1	2	3	4
80	The teachers in our school have a desirable influence on the values and attitudes of their students.	1	2	3	4

81	This community expects its teachers to meet unreasonable personal standards.	1	2	3	4
82	My students appreciate the help I give them with their schoolwork.	1	2	3	4
83	To me, there is no more challenging work than teaching.	1	2	3	4
84	Other teachers in our school are appreciative of my work.	1	2	3	4
85	As a teacher in this community, my nonprofessional activities outside of school are unduly restricted.	1	2	3	4
86	As a teacher, I think I am as competent as most other teachers.	1	2	3	4
87	The teachers with whom I work have high professional ethics.	1	2	3	4
88	Our school curriculum does a good job of preparing students to become enlightened and competent citizens.	1	2	3	4
89	I really enjoy working with my students.	1	2	3	4
90	The teachers in our school show a great deal of initiative and creativity in their teaching assignments.	1	2	3	4
91	Teachers in our community feel free to discuss controversial issues in their classes.	1	2	3	4
92	My principal tries to make me feel comfortable when visiting my classes.	1	2	3	4
93	My principal makes effective use of the individual teacher's capacity and talent.	1	2	3	4

94	The people in this community, generally, have a sincere and whole-hearted interest in the school.	1	2	3	4
95	Teachers feel free to go to the principal about problems of personal and group welfare.	1	2	3	4
96	This community supports ethical procedures regarding the appointment and reappointment of members of the teaching staff.	1	2	3	4
97	This community is willing to support a good program of education.	1	2	3	4
98	This community expects the teachers to participate in too many social activities.	1	2	3	4
99	Community pressures prevent me from doing my best as a teacher.	1	2	3	4
100	I am well satisfied with my present teaching profession.	1	2	3	4

Appendix B  
School Culture Survey

<b>School Culture Survey</b>
------------------------------

Indicate the degree to which each statement describes conditions in your school.

Please use the following scale:

1=Strongly Disagree  
2=Disagree 3=Undecided  
4=Agree  
5=Strongly Agree

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Undecided</i>	<i>Agree</i>	<i>Strongly Agree</i>
Teachers utilize professional networks to obtain information and resources for classroom instruction.	①	②	③	④	⑤
Leaders value teachers' ideas.	①	②	③	④	⑤
Teachers have opportunities for dialogue and planning across grades and subjects.	①	②	③	④	⑤
Teachers trust each other.	①	②	③	④	⑤
Teachers support the mission of the school.	①	②	③	④	⑤
Teachers and parents have common expectations for student performance.	①	②	③	④	⑤
Leaders in this school trust the professional judgments of	①	②	③	④	⑤



teachers.					
Teachers spend considerable time planning together.	①	②	③	④	⑤
Teachers regularly seek ideas from seminars, colleagues, and conferences.	①	②	③	④	⑤
Teachers are willing to help out whenever there is a problem.	①	②	③	④	⑤
Leaders take time to praise teachers that perform well.	①	②	③	④	⑤
The school mission provides a clear sense of direction for teachers.	①	②	③	④	⑤
Parents trust teachers' professional judgments.	①	②	③	④	⑤
Teachers are involved in the decision-making process.	①	②	③	④	⑤
Teachers take time to observe each other teaching.	①	②	③	④	⑤
Professional development is valued by the faculty.	①	②	③	④	⑤
Teachers' ideas are valued by other teachers.	①	②	③	④	⑤

Leaders in our school facilitate teachers working together.	①	②	③	④	⑤
Teachers understand the mission of the school.	①	②	③	④	⑤
Teachers are kept informed on current issues in the school.	①	②	③	④	⑤
Teachers and parents communicate frequently about student performance.	①	②	③	④	⑤
My involvement in policy or decision making is taken seriously.	①	②	③	④	⑤
Teachers are generally aware of what other teachers are teaching.	①	②	③	④	⑤
Teachers maintain a current knowledge base about the learning process.	①	②	③	④	⑤
Teachers work cooperatively in groups.	①	②	③	④	⑤
Teachers are rewarded for experimenting with new ideas and techniques.	①	②	③	④	⑤
The school mission statement reflects the values	①	②	③	④	⑤

of the community.					
Leaders support risk-taking and innovation in teaching.	①	②	③	④	⑤
Teachers work together to develop and evaluate programs and projects.	①	②	③	④	⑤
The faculty values school improvement.	①	②	③	④	⑤
Teaching performance reflects the mission of the school.	①	②	③	④	⑤
Administrators protect instruction and planning time.	①	②	③	④	⑤
Teaching practice disagreements are voiced openly and discussed.	①	②	③	④	⑤
Teachers are encouraged to share ideas.	①	②	③	④	⑤
Students generally accept responsibility for their schooling, for example they engage mentally in class and complete homework assignments.	①	②	③	④	⑤

Steve Gruenert and Jerry Valentine, Middle Level Leadership Center, University of Missouri, 1998.

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## Appendix C

### Interview Protocol Focus Group Questionnaire

### School Culture Survey

1. What item(s) on the survey did you strongly disagree with?
2. Why did you strongly disagree with those items?
3. What item(s) on the survey did you strongly agree with?
4. Why did you strongly agree with those items?
5. What items on the survey do you feel X High School is doing well?
6. What items on the survey do you feel X High School could improve upon?
7. Overall, do you feel X High School has a positive or negative school culture?
8. Why do you feel that way?

### Purdue Teacher Opinionnaire

1. What item(s) on the opinionnaire did you disagree with?
2. Why did you disagree with those items?
3. What item(s) on the opinionnaire did you agree with?
4. Why did you agree with those items?
5. What items on the opinionnaire do you feel X High School is doing well?
6. What items on the opinionnaire do you feel X High School could improve upon?
7. Overall, do you feel X High School has high or low teacher morale? Overall, would you describe yourself as having a high or low teacher morale?
8. Why do you feel that way?

## Appendix D

### Permission to Use Purdue Teacher Opinionnaire



## COLLEGE OF EDUCATION

*Office of the Dean*

June 6, 2018

Meredith Bost  
7851 Howard Avenue  
Kannapolis, NC 28081

Meredith:

The Purdue Teacher Opinionaire was developed in the 1960's, and the copyright for this instrument has now expired. You are free to use this instrument in your own research.

Best of luck with your study!

A handwritten signature in cursive script that reads "Maryann Santos".

////////////////////  
**Maryann Santos, Ph.D.**

Dean  
Purdue University College of Education  
Steven C. Beering Hall of Liberal Arts and Education  
(765) 494-2335  
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[www.education.purdue.edu](http://www.education.purdue.edu)



## Appendix E

### Permission to Use the School Culture Survey



**Steve Gruenert** <Steve.Gruenert@indstate.edu>  
to me ▾

Thu, Jun 21, 10:53 AM ☆ ↶ ⋮

Hello.

Thank you for taking the time to complete the information. We wish you good luck as you proceed with your research. We look forward to reading your findings. You have permission to use the SCS as you have identified in the email.

Thanks.

## Appendix F

### Introduction Email to Participants

Dear Potential Participants,

This email is to ask for your participation in a dissertation study being conducted by Ms. Meredith Bost on the impact of teacher morale and school culture on student achievement. The study will be looking at a possible connection between school culture, teacher morale and whether they have an impact on student achievement specifically in English 2 and Biology. In order to study these constructs, surveys will be given on teacher morale and school culture. The teacher morale survey will approximately 45 minutes to complete and the school culture survey will take approximately 15 minutes. In order to assess student achievement, EOC scores from those individuals who participate in the study will be analyzed. The data will not be used for anything other than the study and it will be destroyed once the study is complete. Name and identifying markers will not appear on the study as all of your responses and data will be assigned a number by a research proxy, known only to them, collecting data for the researcher. After the surveys are complete, there will be a brief, 30 minute, focus group to go over the results and some possible explanations for the results. This will be conducted to gain further insight into the reasons for the survey results and ways to potentially help increase these areas. As EOC scores are received, the proxy will give the participant numbers to the Director of Accountability for the district and she will create a graph of the scores of each teacher without using any identifying markers and use the same number assigned by the proxy. The survey results and scores will be entered into a statistical correlational study to see if a relationship exists between the three constructs.

There is absolutely no obligation to participate in the study. This study is not linked to any form of observational or school related assessments. You may choose to remove yourself from the study at any time without penalty. If you choose to participate in the study, an informational meeting will be held that will go over the specifics and provide you with a consent form.

Please respond to this email with your decision.

Thank you so much for you time and consideration,

Meredith Bost

## Appendix G

### Gardner-Webb University IRB Informed Consent Form

**Title of Study**

Impact of Teacher Morale and School Culture on Student Achievement

**Researcher**

Meredith Bost

**Purpose**

The purpose of the research study is to determine the relationship between teacher morale, school culture and student achievement as measured by the North Carolina high school Biology and English II EOC exams.

**Procedure**

Participant will be asked to complete 2 surveys for this study, as well as participate in a focus group discussion about the survey results. The participant will be given 2 weeks to complete the two surveys. Once the survey results have been collected and reviewed, the participant will take part in a focus group to discuss the survey results so that the researcher may gain additional insight and information pertaining to the survey data results. During the focus group, the participant can skip or refrain from answering any question that they uncomfortable answering.

**Time Required**

It is anticipated that the study will require approximately 3 hours of your time over the course of a 6 weeks. Participant will complete paper copies of The Purdue Teacher Opinionnaire and The School Culture Survey. In addition the participant will also take part in a 30 minute internal protocol focus group centered around the data results of the 2 surveys.

**Voluntary Participation**

Participation in this study is voluntary. You have the right to withdraw from the research study at any time without penalty. You also have the right to refuse to answer any question(s) for any reason without penalty. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identified state.

**Confidentiality**

The information that you give in the study will be handled confidentially. Your information will be assigned a code number. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed, along with all taped discussions. Your name will not be used in any report. Due to the nature of the data, it may be possible to deduce your identity; however, there will be no attempt to do so, and your data will be reported in a way that will not identify you.

**Risks**

There are no anticipated risks in this study.

**Benefits**

There are no direct benefits associated with participation in this study. The study may

help us to understand how teacher morale and school culture affect student achievement. The Institutional Review Board at Gardner-Webb University has determined that participation in this study poses minimal risk to participants.

### **Right to Withdraw from the Study**

You have the right to withdraw from the study at any time without penalty. If you choose to withdraw from the study, all data collected from you will be destroyed.

### **How to Withdraw from the Study**

If you want to withdraw from the study, please let the researcher know as soon as possible. There is no penalty for withdrawing.

If you would like to withdraw after your materials have been submitted, please contact Meredith Bost at [bostmeredith@gmail.com](mailto:bostmeredith@gmail.com).

### **If you have questions about the study, contact the following individuals.**

Meredith Bost  
Gardner-Webb University  
Boiling Springs, NC 28017  
[bostmeredith@gmail.com](mailto:bostmeredith@gmail.com)  
(704) 202-8667

Dr. Kelsey Greer  
Gardner-Webb University  
Boiling Springs, NC 28017  
[kmusselman@gardner-webb.edu](mailto:kmusselman@gardner-webb.edu)  
(336) 880-7507

If the research design of the study necessitates that its full scope is not explained prior to participation, it will be explained to you after completion of the study. If you have concerns about your rights or how you are being treated, or if you have questions, want more information, or have suggestions, please contact:

Dr. David Granniss  
Chair of the IRB  
Gardner-Webb University  
Boiling Springs, NC 28017  
Telephone: 704-406-2305  
Email: [dgranniss@gardner-webb.edu](mailto:dgranniss@gardner-webb.edu)

### **Voluntary Consent by Participant**

I have read the information in this consent form and fully understand the contents of this document. I have had a chance to ask any questions concerning this study and they have been answered for me.

Choose 1:

- ☐ I agree to participate in the confidential survey.  
☐ I do not agree to participate in the confidential survey.

Choose1:

- ☐ I agree to participate in the focus group.  
☐ I do not agree to participate in the focus group.

\_\_\_\_\_  
Participant Printed Name

Date: \_\_\_\_\_

\_\_\_\_\_  
Participant Signature

Date: \_\_\_\_\_

You will receive a copy of this form for your records.