A CAUSAL COMPARATIVE STUDY ON THE EFFECT OF PROFICIENCY-BASED EDUCATION ON SCHOOL CLIMATE

by

Kay B. York

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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ABSTRACT

This quantitative, causal comparative study sought to determine if proficiency-based education has an effect on school climate. With sweeping school reform across the United States, educators are seeking ways to improve student achievement and maintain a positive school climate. This study consisted of 87 teachers in proficiency-based high schools and 125 teachers in non-proficiency-based high schools in New England who were emailed the Secondary School Climate Assessment Instrument (SCAI-S-G). Data analysis consisted of descriptive statistics computed for each teacher group through SPSS. SPSS was also used to conduct separate *t* tests for each of the eight domains of the SCAI-S-G in order to compare the two groups. Assumption testing was carried out with the Kolmogorov-Smirnov and the Wilks-Shapiro tests. Assumptions of normality were not tenable, therefore, the Mann-Whitney U was run for each of the eight domains of the SCAI-S-G in order to compare the two groups. In order to limit the risk of type I error with multiple tests run, a Bonferroni correction was used. The following research question was examined: Is there a difference between the teachers' assessments of school climate in a proficiency-based high school and the teachers' assessments of school climate in a non-proficiency-based high school on the eight categories measured by the SCAI-S-G? It was found that there was a statistical difference in four domains of school climate with non-proficiency-based schools showing a slightly higher score than proficiency-based schools for physical environment, student interactions, attitude and culture and community relations. There was no statistically significant difference between non-proficiency-based schools and proficiency-based schools in the domains of faculty relations, leadership and decisions, discipline and learning and assessment. While these results were surprising, in light of the components of the proficiency-based model that encompass student-centered learning, relationships and autonomy, the

information is useful for schools as they strive to build a positive school climate in the midst of educational change. Recommendations for further research could include: to find out if there is correlation between the types of leadership in the schools and school climate in proficiency-based and non-proficiency-based schools, the area of school climate and student outcomes, conducting research through the lens of the student and parent population with school climate and proficiency-based and non-proficiency-based education, and research on the impact of self-actualization linked to student success within the proficiency-based model.

Keywords: school climate, organizational climate, proficiency-based education, standards, academic achievement

Dedication

This research is dedicated to my family who has encouraged me each step of the way: my husband Brent who has endured many study evenings and has been my strong support, my children who have cheered me on, as well as my siblings who have encouraged and prayed for me and to my parents who provided me with faith, determination, and a love of learning. Thanks also goes out to my colleagues who have helped and encouraged along the way. And finally, all praise goes to the Lord for His steadfast faithfulness on this journey!

Acknowledgments

I would like to acknowledge those on my committee who have provided their time and guidance to assist me in my doctoral pursuit. To my chair and research consultant, Dr. Michelle Barthlow, a heartfelt thank you for the time you have invested to help me achieve this goal, your gentle guidance and encouragement has been amazing! Dr. Holly Couturier, my Maine connection and Dr. Vance Pickard, thank you for your time and encouragement throughout this process. I am deeply grateful for each of you!

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List of Abbreviations

Common Core State Standards (CCSS)

No Child Left Behind (NCLB)

Non-proficiency-based education (Non-PBE)

Proficiency-based education (PBE)

The Alliance for the Study of School Climate (ASSC)

Secondary School Climate Assessment Instrument-General (SCAI-S-G)

CHAPTER ONE: INTRODUCTION

Overview

This chapter gives the reader some background information on the topic of school climate and proficiency-based education. It discusses the problem that educational demands place on schools and the subsequent impact on school climate. The chapter finishes with the purpose and significance of the study and the research question.

Background

School climate is something that is taken for granted until it becomes a problem. Freiberg (1998) likened school climate to the air that we breathe, it is just there and not noticed until it turns bad. School climate can have a positive or negative effect on students' learning and teachers play a major role in the nurturing of a positive school climate (Anari, 2011; Freiberg, 1998; Thapa et al., 2013). With the strong focus on educational reform since the passage of the No Child Left Behind Act (2001) and ESSA (2015), schools and teachers have been under pressure to improve student performance (U.S. Department of Education, 2016). This pressure has increased the stress on teachers and subsequently impacted school climate (Brand, Felner, Seitsinger, Burns, & Bolton, 2008; Stauffer & Mason, 2013; Zullig, Koopman, Patton, & Ubbes, 2010).

The school climate construct goes back over 100 years with work published by Perry in 1908 (Zullig et al., 2010). However, it was not really studied until the 1950's when the term "organizational climate" was coined in the business world as the workplace environment was scrutinized to look at the effect on productivity (Zullig et al., 2010). In the 1970's, school climate was viewed through the lens of researchers as they attempted to connect positive school climate with better student achievement (Zullig et al., 2010). In 1983, with the publication of the

federal report, “A Nation at Risk”, schools were put under a microscope. This federal report is seen as the historical milestone marking the beginning of the accountability era (Tschannen-Moran & Gareis, 2015). Researchers, school leaders, and even politicians began to seek ways to “fix” the schools (National Commission on Excellence in Education (NCEE), 1983; Zullig et al., 2010). Furthermore, education in the 1990’s, focused not only on schools, but on individual classrooms and teachers. With today’s educational reform, school climate has once again become the focus of study and the impact that these reforms may have on school climate (Stauffer & Mason, 2013; Zullig et al., 2010).

Intertwined with school climate and the focus of school reform is the notion that clear expectations, as expressed in explicit standards and outcomes, will result in improved student scores (Tschannen-Moran & Gareis, 2015). Furthermore, research has linked positive school climate to improved student performance (Brand et al., 2008; Kelley, Thornton, & Daughtery, 2005; Thapa et al., 2013). With the triangle of school reform, positive school climate, and providing students with explicit standards and outcomes, the notion of standards-based education has resurfaced. Standards-based education has many different names including: performance-based education, personalized learning, competency-based education, mass customized learning, and proficiency-based education (Keenan, 2013; Liebtag, 2013; Marzano, 2012; Schwann & McGarvey, 2012). For the purpose of clarity, the term proficiency-based education will be used throughout this paper. Proficiency-based education refers to a system of instruction that includes instruction, formative and summative assessments that are based on a student’s mastery of learning targets or standards before a student can progress to the next lesson or level. A proficiency-based system reports a student’s progress through a report card that shows progress

and proficiency toward a set of standards (CompetencyWorks, 2015; Maine Department of Education, 2015).

Proficiency-based education also came about as a result of the "A Nation at Risk" report in 1983 (U.S. Department of Education) and No Child Left Behind in 2001. Both the report and No Child Left Behind highlighted the problem of low student achievement and sought to find ways to raise student achievement and learning in our nation's schools. The Common Core State Standards, another historical marker for standards and accountability, were adopted by many states to address educational problems and inequities in curriculum (National Governors' Association Center for Best Practices and Council of Chief State School Officers, 2010). The Common Core State Standards provide standards for what students need to know to reach clear, academic benchmarks (Tschannen-Moran & Gareis, 2015). The development of standards is one initiative resulting from the educational reform happening in the United States (Clark, 2005). The rationale of educational standards is the foundation of the proficiency-based model of education (Liebtag, 2013).

There are two main theoretical constructs that guide this research. The first is based on Maslow's (1943) theory of human motivation and Ryan and Deci's (2000) self-determination theory. Maslow's theory introduced the idea that each person has unique individual needs that are important to meet in order to meet their full potential (Erickson, 1973; Maslow, 1943; Scales & Leffert, 2004). These needs include physiological, safety, love, self-esteem and self-actualization (Maslow, 1943; Scales & Leffert, 2004). Maslow's defined needs showed an impact on the choices that an individual made and is further emphasized by Maslow's statement, "We are motivated by the desire to achieve or maintain the various conditions upon which these basic satisfactions rest and by certain more intellectual desires" (Maslow, 1943, p. 394). School

climate is impacted by whether a teacher or student's needs are being met which in turn impacts the learning and academic success of the students and school (Erickson, 1973; Scales & Leffert, 2004; Thoonen, Sleegers, Oort, Peetsma, & Geijsel, 2011; Wolf, Dulmus, Maguin, & Cristalli, 2013). Deci and Ryan (2000) further the research on motivation and needs of the learner with the theory of self-determination. Deci and Ryan (2000) examined the needs of an individual and the psychological needs that motivate a person. Through empirical research, Deci and Ryan (2000) found that there are three basic needs that foster an individual's intrinsic motivation including, competence, relatedness, and autonomy. Maslow's (1943) theory of motivation and the recent work of Deci and Ryan's (2000) self-determination theory, provide a strong foundation for understanding proficiency-based education.

Organizational climate theory is the second theoretical construct guiding this research. It was originally developed by the business world and based on employee performance (Schneider, Ehrhart, & Macey, 2013). According to Thoonen et al. (2011), this model ties performance and motivation in the workplace to different characteristics of the work setting and includes external factors such as the social or political environment. This model was used to create a framework to guide research for large-scale reform through the work of Leithwood, Jantzi, and Mascall (2012). Thoonen et al., (2011) used this model in education as a basis for research on school climate.

Problem Statement

The world of education over the last twenty years has increasingly focused on high standards for all students. The No Child Left Behind Act of 2001 required that all students be tested and found proficient in reading and math through state standardized tests (Parkay, Anctil & Hass, 2014). This high-stakes testing mandate has affected the climate of our schools (Parkay

et al., 2014). With the recent passage of The Every Student Succeeds Act (ESSA) in December of 2015, the federal government demonstrated a continued commitment to high standards and accountability in education for all students (U.S. Department of Education, 2016). With the expectations of ESSA, teachers continue to face increasing job demands and are seeking instructional strategies, such as proficiency-based education, to help students meet more stringent academic demands. Students come to school, not only with emotional or physical needs, but also experience stress and test anxiety due to the era of high-stakes testing (Embse & Hasson, 2012). Although there has been much research done on school climate, Thapa et al. (2013) called for more research on school climate from multiple perspectives. Furthermore, Thapa et al. (2013) highlighted a gap in the literature on school climate and called for research that targets specific aspects, activities or curriculum interventions that may affect not only school climate but ultimately, teaching and learning. Due to the increasing difficulty in obtaining consent from schools and parents for research on school climate, Brand et al. (2008), emphasized the utilization of teacher perspectives, carrying out research, through surveys to guide school reform through the lens of school climate. Several studies commissioned by the Nellie Mae Foundation pointed to the limited amount of empirical research on student-centered learning's impact in K-12 classrooms (Friedlander, Burns, Lewis-Chap, Cook-Harvey, & Darling-Hammond, 2014; LaBanca et al., 2015; Voight, Austin, & Hanson, 2013). The problem is it is unclear how proficiency-based education will impact school climate.

Purpose Statement

The purpose of this causal comparative study is to add to the research on school climate and find out the impact of proficiency-based education on school climate through the perspective of high school teachers. The independent variable will be defined as the proficiency-based

school or the non-proficiency-based school. The dependent variable will be defined as school climate.

Proficiency-based education is a shift in thinking for some teachers and requires teachers to give up long-held beliefs regarding teaching and learning (Starr, 2011). Teachers in proficiency-based classrooms are no longer the "sage on the stage" but a facilitator of student learning (CompetencyWorks, 2015; Schwahn & McGarvey, 2012). Throughout the United States there are some schools that have made the shift to proficiency-based education however the research is limited on whether or not school climate is impacted by this system of instruction (CompetencyWorks, 2015). This research study will look at whether proficiency-based education has an effect on school climate from teachers' perspectives in high schools in New England. Proficiency-based education provides students with personalized learning and clear targets as well as teachers with the opportunity to connect with students and achieve academic success (Sturgis, 2015; Marzano, Boogren, Heflebower, Kanold-McIntyre, & Pickering, 2012; Voight, Austin, & Hanson, 2013). Research has linked academic success to positive school climate (Freiberg, 1998, Gumuseli & Eryilmaz, 2011, Embse & Hasson, 2012). With the push for academic reform, Thapa et al. (2013) pointed out that school climate is an important consideration in strengthening instructional supports and called for more research to be done on school climate linked to various curriculum models or interventions. Therefore, school climate will be examined through the lens of the proficiency and non-proficiency based model.

Significance of the Study

Due to the push by several states for proficiency-based education, some districts throughout the United States have moved to a proficiency-based system. However, there are schools on both ends of the spectrum, with some schools fully implemented and some schools

that are still non-proficiency based (Maine Department of Education, 2015, CompetencyWorks, 2015). Districts and schools that have made the change agree that teacher engagement is important to the change process and dependent on the culture and climate of the schools (Maine Department of Education, 2015).

Proficiency-based education provides clear learning targets for students and allows them to learn at their own pace. This reduces the inequity found in education in the past. According to Friedlander et al. (2014), students in affluent schools tend to get the individual help that they need, have choice in their learning process, and experience authentic learning. However, students in poorly funded schools, low-income areas or schools with a high population of underserved students, typically do not have the same opportunities for personalized learning and inequity of learning opportunities is present (Friedlander et al., 2014).

The path to academic success requires a paradigm shift for many teachers. The literature pointed to factors that contributed to teacher stress and burnout, with major shifts in school reform as one of these factors (Anari, 2012; Lim & Eo, 2014; Stauffer & Mason, 2013). With the stress and demands in today's schools and classrooms, positive school climate becomes a major factor in the academic success of schools and students (Thapa et al., 2013). The research highlighted the importance of teacher engagement in the success of the proficiency-based model (Maine Department of Education, 2015). Proponents of the proficiency-based model discussed the positive effects on student learning, teacher collaboration, and engagement (CompetencyWorks, 2015). The research is limited on whether school climate is different in a proficiency-based school as opposed to a non-proficiency-based school. With the push towards proficiency-based education across New England, this timely study will add to the research on

proficiency-based education and the impact on school climate. The research will further inform educators as they move forward in providing the best environment for teaching and learning.

Research Question

RQ1: Is there a difference between the teachers' assessments of school climate in a proficiency-based high school and a non-proficiency-based high school on the eight categories measured by The Alliance for the Study of School Climate Secondary Assessment Instrument (SCAI-S-G)?

Definitions

1. *School Climate* – "The perceptions and practical realities of those within a school as a result of everything that happens within that school, defined across eight separate but inter-related dimensions" (Freiberg, 2005; The Alliance for the Study of School Climate Survey, 2015).
2. *Dimension 1-Physical Appearance* – "Examines the relationship between the physical characteristics and environment of a school and the climate that it promotes" (SCAI-S-G).
3. *Dimension 2-Faculty Relations* – "Examines the relationship between how members of the faculty relate to one another and its effects on the climate of the school" (SCAI-S-G).
4. *Dimension 3-Student Interactions* – "Examines the relationship among student expectations, peer interactions, and their place in the school and climate that exists" (SCAI-S-G).
5. *Dimension 4-Leadership and Decision-Making* – Examines the relationships among decision-making mechanisms, how administrative authority is manifested and the climate that is created as a result" (SCAI-S-G).

6. *Dimension 5-Discipline and Management Environment* – Examines the relationship between the management and discipline approaches used within the school and the climate that is created as a result" (SCAI-S-G).
7. *Dimension 6-Learning, Instruction and Assessment* – "Examines the relationships among the instructional strategies and the assessment methods used in the school and the climate that is created" (SCAI-S-G).
8. *Dimension 7-Attitude and Culture* – "Examines the pervasive attitudes and cultures that operate within the school and their relationship to the climate" (SCAI-S-G).
9. *Dimension 8-Community Relations* – "Examines the relationship between the way that the school is perceived externally and its climate" (SCAI-S-G).
10. *Proficiency-Based Education* – "Proficiency-based education refers to any system of academic instruction, assessment, grading and reporting that is based on students demonstrating mastery of the knowledge and skills they are expected to learn before they progress to the next lesson, get promoted to the next grade level or receive a diploma. If students struggle to meet minimum expected standards, they receive additional instruction, practice time and academic support to help them achieve proficiency, but they do not progress in their education until expected standards are met" (Maine Department of Education, 2015; Sturgis, 2015). Students receive differentiated instruction and support to meet their individual needs. Learning outcomes include application and creation of knowledge and meaningful formative and summative assessment is given (Pace, Moyer, & Williams, 2015).

CHAPTER TWO: LITERATURE REVIEW

Overview

This literature review will begin with the discussion of two theoretical frameworks of the study. The first framework is grounded in the work of Abraham Maslow (1943) and his theory of human motivation and Ryan and Deci's (2000) more recent work on motivation with the development of self-determination theory. The second is the organizational climate theory that is the foundation of school climate (Schneider et al., 2013). The literature review will then focus on school climate and the impact on academic success. School climate will be examined through research in the following eight areas: physical appearance, relationships among faculty, as well as student interactions, leadership and decision-making, discipline and management environment, teaching and learning, including assessment, attitude and culture, and community relations (ASSC, 2015). Finally, proficiency-based education will be explained and connections made with regard to school climate. Five key elements of a strong proficiency-based model will be discussed including: student mastery, clear targets with measurable learning objectives, formative and summative assessment that is meaningful and positive for students, differentiated teaching and support, and learning targets that include application and creation of new knowledge (CompetencyWorks, 2015).

Theoretical Framework

There are two main theoretical constructs that guided this research. The first is based on the theory of human motivation (Maslow, 1942; Ryan & Deci, 2000). Maslow's theory introduced the idea that each person has unique individual needs that are important to fulfill in order to meet their full potential (Erickson, 1973; Maslow, 1943; Scales & Leffert, 2004). These needs include physiological, safety, love, self-esteem and self-actualization (Maslow, 1943;

Scales & Leffert, 2004). Maslow's defined needs affect the choices that an individual makes as emphasized by Maslow's statement, "We are motivated by the desire to achieve or maintain the various conditions upon which these basic satisfactions rest and by certain more intellectual desires (Maslow, 1943, p. 394). School climate is impacted by whether a teacher or student's needs are being met which in turn impacts the learning and academic success of the students and school (Erickson, 1973; Scales & Leffert, 2004; Thoonen et al., 2011; Wolf et al., 2013).

Building on the work of Maslow, Ryan and Deci (2000) co-founded the self-determination theory and further defined and explained human motivation. Self-determination theory aligns with Maslow's work on human motivation and the idea that all human beings have basic needs both physical and psychological that must be met in order to reach one's full potential (Ryan & Deci, 2000). Ryan and Deci (2000) identified three needs important for the development of self-motivation and positive outcomes: competence, autonomy, and relatedness. The researchers pointed out the importance of motivation in many settings, including the educational setting. Motivation provides not only energy but also direction and perseverance and ultimately produces results (Ryan & Deci, 2000).

Self-determination theory further explains what motivates people and examines types of motivation and how they are manifest in different situations (Ryan & Deci, 2000). In its simplest form, motivation can be broken down into two types. The first type is autonomous motivation also known as intrinsic motivation. The second type is controlled motivation also known as extrinsic motivation (Deci & Flaste, 1995; Ryan & Deci, 2000).

Developmentalists acknowledge that intrinsic motivation is found in young children and is not dependent upon any type of reward. However, it is unclear why motivation has a tendency to decrease as students progress through school (Ryan & Deci, 2000). Therefore, Ryan and Deci

(2000) sought to understand this phenomenon through self-development theory and researched human motivation not only from a needs standpoint but also to discover conditions that fostered intrinsic motivation. The researchers found that classroom models and curriculum that supported competence, autonomy, and relatedness promoted intrinsic motivation (Deci & Flaste, 1995; Ryan & Deci, 2000).

Intrinsic motivation involves the need to feel competent. Competence is defined as an individual taking on challenges that are not too hard or too easy but provide a meaningful challenge that when achieved provides an individual with a sense of accomplishment and competence (Deci & Flaste, 2000). High standards and rigor do not guarantee positive outcomes if an individual perceives that they are unattainable (Dweck, Walton, & Cohen, 2014). As an individual perceives competence, this inspires intrinsic motivation (Deci & Flaste, 1995).

While it was found that competence is important in relation to intrinsic motivation, autonomy must also be present (Ryan & Deci, 2000). "People must not only experience competence or efficacy, they must also experience their behavior as self-determined for intrinsic motivation to be in evidence" (Ryan & Deci, 2000, p. 70). Autonomy rather than control is important in fostering intrinsic motivation (Ryan & Deci, 2000). Choice and the free will of the individual related to the task or activity that they are involved in provides autonomy. Feedback that is not given to control a person's actions but to encourage and support that person where they are, will result in that person feeling competent (Deci & Flaste, 1995). Research has shown that students taught in a controlling environment show less initiative, less motivation, and learn less (Grolnick & Ryan, 1987; Utman, 1997). Through their research, Ryan and Deci (2000) found that autonomous motivation is an important factor in better performance and understanding of tasks that require application, creativity or higher order thinking skills (Deci &

Flaste, 1995). This has also been found to hold true in areas other than education and work, such as sports and music (Frederick & Ryan, 1995). Deci and Flaste (1995) stressed the importance of competence and autonomy related to intrinsic motivation and success for an individual (Deci & Flaste, 1995).

Relatedness was shown to be important in building and maintaining intrinsic motivation (Ryan & Deci, 2000). Relatedness is defined as, "the need to feel connected with others…the need to love and be loved, to care and be cared for" (Deci & Flaste, 1995, p. 88). This relatedness or connection is supported through research that demonstrated the importance of caring relationships in a student's academic success (Allen et al., 2013**;** Drolet & Arcand, 2013; Hawkins, Monahan, & Oesterle, 2010; Murray-Harvey, 2010; Petty**,** Wang, & Harbaugh, 2013). Intrinsic behaviors are positively impacted in individuals who experienced a sense of belonging and connection (Ryan & Deci, 2000; Dweck et al., 2014).

In order to better understand self-determination theory, one must examine and understand controlled motivation, the opposite of autonomous motivation. Controlled motivation puts various forms of pressure on an individual, including positive reinforcement such as rewards or even praise (Deci & Flaste, 1995). Ryan and Deci (2000) found through their research that this type of motivation produces compliance that tends to produce less learning or understanding and more anxiety, depression, or narcissism. It may also produce defiance and result in negative behaviors or behaviors opposite to the desired outcome (Deci & Flaste, 1995). In education, this controlled motivation may also produce more rote learning, learning for "the test" and less, deeper learning and understanding of the material (Deci & Flaste, 1995). The research of Adams, Forsyth, Dollarhide, Miskell, and Ware (2015), further corroborated autonomous motivation. These researchers found that schools who emphasized autonomy, competence, and

relationships and did not control student behaviors through rewards and punishment were found to be significantly higher in mathematics achievement than those schools who utilized controlling behaviors (Adams et al., 2015).

The second theoretical construct that guided this research is the theory of organizational climate. It was originally developed for the business world and based on employee performance (Schneider, Ehrhart, & Macey, 2013). Most of the research on the organizational climate theory started in 1950 and attempted to look at the environment of businesses and the impact on morale, productivity, and turnover (Zullig et al., 2010). Organizational climate is defined as, "the shared perceptions of and the meaning attached to the policies, practices, and procedures employees experience and the behaviors they observe getting rewarded and that are supported and expected" (Schneider et al., 2013, p. 362). Performance and motivation in the workplace are tied to different characteristics of the work setting and includes external factors such as the social or political environment (Thoonen et al., 2011). As workers start in a new job or position, they observe the culture and climate of the organization. Through observation and experiences, including the type of motivation presented, the individual worker makes decisions on performance according to the impact it will have on their psychological well-being (Wolf, Dulmus, & Maguin, 2012). Organizational climates that provide a safe environment to learn from mistakes or failure, and resolve problems are important for successful outcomes (Wolf et al., 2012). Prior research regarding organizational climate established that the characteristics and conditions of the organization had more impact on climate than individuals in the organization (Schneider et al., 2013). A shared perception of individuals within the organization, however, may affect the overall climate and organizational outcomes (Wolf et al., 2013). The literature also indicated a strong connection between poor organizational climate and poor results. This

highlighted the need for best practices in an organization to ensure an improvement in climate that ultimately produces quality outcomes (Schneider et al., 2013). It is important to note that Wolf et al. (2013) pointed out that there were not a large number of studies that specifically linked organizational climate to client outcomes. Further research may be appropriate in this area.

In transferring the business model of organizational climate to the research on school climate, researchers found four essential areas important including: safety, relationships, teaching and learning, and institutional environment (Anderson, 1982; Brand et al., 2008; Miller & Fredericks, 1990; National School Climate Center, 2015; Thoonen et al., 2011). Each of these areas will be examined through an educational lens and their impact on schools and student success.

Related Literature

School Climate

According to the Center for Social and Emotional Education, "School climate is based on patterns of peoples' experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures" (National School Climate Center, 2015). School climate forms the core of a school. A positive school climate draws students, teachers, administrators, and other staff members to enjoy coming each day (Freiberg, 2005). School climate is part of a healthy school environment and is not something that can be addressed once and fixed. Nurturing school climate takes time, continuous care, and intentional practices (Freiberg, 2005).

Voight, Austin, and Hanson (2013) carried out an extensive study on what makes a school successful. Their research associated the climate of a school with a school's success more

than a school's resources. The essential areas associated with school climate impacted the success of the students and school more than resources such as money, teacher experience or support service (Voight et al., 2013). School climate can be shaped and impacted by school districts and therefore is an important consideration in regard to school reform and success (Voight et al., 2013). Van Ryzin (2011) also found that perceptions of school climate were connected to engagement and academics. With many research studies linking positive school climate to teacher and student engagement as well as academic success for students, it is important for schools to better understand areas that impact school climate (Brand et al., 2008; Freiberg, 1998; Stauffer & Mason, 2013; Thapa et al., 2013). There are eight essential areas of school climate that will be examined through research in order to better understand what encompasses school climate; physical appearance, relationships, safety, leadership and decision-making, discipline environment, learning, instruction, and assessment, attitude and culture, and community relations (Adams et al., 2015; Alliance for the Study of School Climate, 2014; Voight, Austin, & Hanson, 2013).

Physical appearance. The physical appearance of the school including the conditions of the facility and building, impact the climate of the school in various ways (Uline, Wolsey, Tschannen-Moran, & Lin, 2010). The poor quality of facilities may detract good teachers from wanting to work in such an environment. This in turn impacts the quality of teaching and learning for students and ultimately impacts school climate (Horng, 2009; Uline et al., 2010). Research further shows that teachers and students in schools with poor quality facilities and low resources show a reduction in efficacy and motivation to achieve (Horng, 2009; Uline et al., 2010). Uline et al. (2010) pointed out, however, that in one school studied, the facilities were inadequate yet the teachers and students worked hard to build a climate of school pride and

community and positively impacted school climate and achievement. Uline et al. (2010) discussed earlier research that found cleanliness and neatness of a school were preferred by all stakeholders more than newer facilities and may explain why schools that had poor resources still ranked high in school climate. As more research is conducted in this area, findings may point to a better understanding of the relationship between the physical environment and positive school climate. Uline et al. (2010) also noted that further research should investigate the extent to which the physical environment impacts not only an individual's attitudes and behaviors but also the total school climate.

Relationships. "The process of learning and teaching is fundamentally relational. The patterns of norms, goals, values, and interactions that shape relationships in schools provide an essential foundation for school climate" (Cohen & Geier, 2010, p. 3). Relationships in a school setting happen not only between colleagues but also between teachers and students. These relationships combined together have an impact on the quality of school climate and ultimately the quality of academic life (Bird, Martin, Tummons, & Ball, 2013).

Faculty relations. The importance of positive relationships among faculty plays a vital role in building a positive school climate. Collegial interactions are important in fostering respect as well as the sharing of ideas that combat feelings of isolation (Conner, 2014). Troman's (2008) case study found that relationships mattered to teachers as they discussed their opinions on school climate. Administrative leadership in a school should support the collaboration and relationship building of faculty that in turn helps to foster a positive school climate and subsequently, impacts academic achievement (Southern Regional Education Board, 2009, 2012). Conner (2014) also pointed out that this collaboration among staff likewise acts as a role model for students in the construction of positive school climate.

Teacher and students. Many research studies demonstrated the importance of relationships for adolescents (Allen et al., 2013**;** Drolet & Arcand, 2013; Hawkins, Monahan, & Oesterle, 2010; Murray-Harvey, 2010; Petty**,** Wang, & Harbaugh, 2013). The research highlighted the importance of positive support from caring adults. Adolescents expressed their need for positive relationships and the need to be heard and understood (Drolet & Arcand, 2013). Research has shown that interactions in the school setting with teachers impacted the students' attitudes toward school and ultimately toward academics (Bird et al., 2013; Reglin, 1990; Roeser & Eccles, 1998). It was also found that the positive student-teacher relationship increased student participation and satisfaction with school. This in turn raised academic motivation, and effected the student absence rate and dropout rate (Bird et al., 2013; Wentzel, Battle, Russell, & Looney, 2010). Positive student-teacher relationships helped the student to feel connected to the school. This school connectedness showed a link to positive outcomes and also lessened the probability of other negative behaviors and risk (Hawkins, Monahan, & Oesterle, 2010). Murray-Harvey (2010) provided empirical evidence for the importance of teachers building positive relationships with students that not only impacts students socially and emotionally but is also essential for improving academic achievement. The emotional connection in the classroom is a key piece in predicting student learning and encompasses not only positive student and teacher relationships but also positive peer interactions (Allen et al., 2013).

Peer to peer. Maslow (1943) listed self-esteem as an important, basic need. Self-esteem is linked to the amount of perceived social support among students and a sense of belonging. As social support increases, a person's self-esteem increases (Budd, Buschman, & Esch, 2009). A sense of belonging is defined by whether or not a student feels accepted and valued as part of the school community (Frehill & Dunsmuir, 2015; Goodenow & Grady, 1993). The literature

addressed the strong need for students to feel like they belong and the impact it has on school success (Allen et al., 2013; Aryana, 2010; Cohen & Garcia, 2008; Goodenow & Grady, 1993; Osterman, 2000). The research highlighted the importance of a student's need for a sense of belonging with peers in the school and coincided with Maslow's theory on the defined needs of an individual (Parkay, Anctil, & Hass, 2014; Scales & Leffert, 2004). The need for a sense of belonging can be traced back to the research of Goodenow and Grady (1993) that emphasized the correlation between a student's sense of belonging and academic motivation and achievement. According to Goodenow and Grady (1993), "Students' subjective sense of school belonging has been identified as a potentially important influence on academic motivation, engagement, and participation, especially among students from groups at risk of school dropout" (p. 60). Maslow's theory is again emphasized as research highlighted the importance of student belongingness in achieving academic success. Students who do not feel that they belong, or believe that they are welcomed and respected in the school will start to disengage and eventually drop out (Finn & Rock, 1997; Goodenow & Grady, 1993). Wallace, Ye, and Chhuon (2012), noted that students needed to have a sense of belonging in areas of their life where they spend significant amounts of time and gave evidence to the connection between academic achievement and sense of belonging. The research of Kingery, Erdley, and Marshall (2011) indicated robust findings that demonstrated peer acceptance as a predictor of academic achievement. Another study also found that a student's sense of belonging predicted academic success in both high and low poverty areas (Irvin, Meece, Byun, Farmer, & Hutchins, 2011). It is important to note that one research study, while finding no correlation between self-esteem, which is linked to a sense of belonging, and student achievement, also found that self-esteem had no negative effect on

achievement (Baumeister, Campbell, Krueger, & Vohs, 2003). Further research may be appropriate in this area.

The importance of peer-to-peer relationships as they pertain to learning in the classroom impacts the climate of the classroom and the school. Supportive peer relationships were found to strengthen a positive learning climate (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010). The significance of peer acceptance and friendships is supported by Burack et. al's (2013) research that found peer acceptance and friendships, and not parent or cultural affiliations, impacted school grades.

Positive student interaction also supported instruction and learning through the use of methods such as cooperative learning (D. Johnson, R. Johnson, & Roseth, 2010). Classroom and school climates that encouraged students to learn together, share, teach each other and value each other produced a positive social interdependence and higher achievement (D. Johnson, R. Johnson, & Roseth, 2010). The promotion of positive peer relationships through such avenues as cooperative learning fostered self-esteem and supported the belief that a higher self-esteem is shown to have a positive impact on student achievement (Aryana, 2010).

A sense of belonging in the classroom was also linked to a student's ability to feel confident and competent in regard to academics in the classroom (Darragh, 2013). Darragh (2013) found a direct association between confidence, competence, and a sense of belonging in a mathematics classroom. This research aligned with Ryan and Deci's (2000) self-development theory and the importance of competence, autonomy, and relatedness.

Peer relationships may impact the development of self-efficacy. Carlisle's (2011) research highlighted the strong connection between self-efficacy and motivation. This sense of self-regulation is key in goal setting and persistence in following a task to completion (Erdem &

Demirel, 2007). "There is evidence that a high sense of self-efficacy supports motivation, even when the feeling of efficacy is unrealistically high" (Woolfolk as cited in Erdem & Demirel, 2007). Research has shown that schools can impact the development of self-efficacy through relationship building with staff and peers. Schools can also help raise students' self-efficacy levels through curriculum, instruction, and support that promote academic success (Carlisle, 2011; Scales & Tacccogna, 2000; Starkman, Scales, & Roberts, 1999).

It is important to note that Wentzel's (2009) research found that older students were more than likely to share academic failures and successes than younger students possibly in order to gain help in school. This is further explored through the research of Lynch, Lerner, and Levanthal (2013) who found peers influenced behaviors both within the circle of friends and the larger peer group. These findings are inconsistent with other research that demonstrated students are less likely to seek help from peers as they grow older (Altermatt, 2011; O'Neel & Fuligni, 2013). A Chinese study challenged the association of sense of belonging and academic achievement. The researchers found no direct correlation between sense of belonging and academic success (Liu & Lu, 2010). However, with the study limited to Chinese students, the researchers explained that Chinese high school is very difficult and cognitive factors may play a role in academic achievement more than a student's sense of belonging (Liu & Lu, 2010).

Strong research supports the important role of peers in the educational environment. Consequently, schools should consider the role of peers when working to improve academic success. The influence of peer culture in school, however, requires further research and study (Lynch et al., 2013).

Safety. The need to feel safe remains fundamental to a student's success. Maslow (1943) showed the need all humans have for safety. This is socially, emotionally, intellectually,

and physically important for all human beings. Schools must ensure that both teachers and students have the basic need of safety met before teaching and learning can occur (Thapa, Cohen, Guffey, & Higgins-D'Allessandro, 2013). Research has shown that schools where students do not feel either emotionally or physically safe with peers, have higher rates of absenteeism and lower academic achievement (Astor, Guerra, & Van Acker, 2010; Gregory et al., 2010). Voight et al. (2013) provided additional research that showed the importance of providing a safe and supportive environment to support optimal student performance. Cornell and Mayer (2010) added to the literature on the impact of disorder in schools due to student behaviors that disrupt the classroom and school environment and have been shown to impact learning and academic achievement. Schools that had clear and consistent rules provided students with a feeling of safety and well-being (Bosworth, Ford, & Hernandaz, 2010). It is important to note, however, that schools with safety and order issues must not only look at classroom management and instruction but also take a more interdisciplinary approach with other stakeholders in the community, including mental health providers (Cornell & Mayer, 2010**).** As Maslow (1943) and Ryan and Deci (2000) demonstrated, the physical and psychological human needs must be met in order to achieve success academically and ultimately in life. As Cornell and Mayer (2010) shared from the Goals 2000, Educate America Act, "by the year 2000, every school in America will be free of drugs and violence and the unauthorized presence of firearms and alcohol, and will offer a disciplined environment conducive to learning" (Goals 2000: Educate America Act, 1994). While this valued goal remains unmet as of today, a safe environment is important to educators. Ultimately, a safe and supportive environment plays a vital role in building positive school climate (Bosworth et al., 2010).

Leadership and decision-making. Research shows that the school administration plays a vital role in determining school climate (Hough & Schmitt, 2011; May & Sanders; Southern Regional Education Board, 2009, 2012; Zullig et al., 2010). Beaudoin (2011) pointed out that transformational leaders are the driving force behind positive school reform and climate. At the building level, this leadership should focus on fostering collaboration and empowering teachers to create the optimal learning environment for students (McCarley, Peters, & Decman, 2014).

Principal's role. The leadership of the school plays a major role in the development of positive school climate that in turn impacts any type of school reform and the change process (May & Sanders, May & Supovitz, 2011; Sebastian & Allensworth, 2012). Park's (2012) research gave empirical evidence that a principal's leadership style contributed to a school climate that is open to change and innovation. The scope of leadership responsibilities varied across districts. May and Supovitz (2011) focused on three areas important to measuring leadership; having a clear vision for the school, building and supporting a collaborative climate, and supporting teachers' instructional practices. Thoonen et al. (2011) found that transformational leadership practices such as vision building and individual support promoted teacher empowerment. Leaders who provided support and time for teachers to collaborate were found to be more effective in positive school climate and increased academic improvement (Southern Regional Education Board, 2012). Leaders who provided professional development and intellectual stimulation fostered a climate of collaboration and trust (Thoonen et al., 2011). Tschannen-Moran and Gareis' (2015) found a strong correlation between trustworthy leadership and the cultivation of a strong school climate. These findings are in agreement with the extensive research of Kouzes and Posner (2012) who shared that a leader's behavior is vital to the success of an organization. According to Kouzes and Posner (2012), this behavior should

lead to intentional practices including, “Model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart” (p. 29).

While many studies provided evidence of leadership practices that were found to be effective in positive school climate and transformative change, May and Supovitz (2011) took the research one step further and examined the scope of a principal’s efforts and the impact on school climate and instruction. Their research found that a principal’s influence on targeted, individual teachers impacted school improvement more than broad-based influence involving the whole school (May & Supovitz, 2011). According to Park (2012), school administrators tend to overlook or neglect stakeholders in the change process. This impacts the success of school change. Kouzes and Posner (2012) shared the importance of helping individuals within an organization to develop and increase their abilities, self-determination, and confidence that in turn will produce strong leaders and a climate of engagement and success. May and Supovitz (2011) cautioned, however, that only targeting individual teachers may not be the best practice in every situation and suggested that a principal utilize a combination of broad and targeted influence. Successful principals act as role models, provide direction for the school, support for teachers, and create a climate of collaboration and trust (Thoonen et al., 2011).

Discipline environment. The expectations of student behaviors and the management of student behaviors are factors in a positive or negative school climate (ASSC, 2015; Zullig, Huebner, & Patton, 2010). Strong leadership was found to connect to an orderly learning environment that in turn had a positive effect on school climate (Sebastian & Allensworth, 2012). Shindler, Jones, Williams, Taylor, and Cadenas (2011) also found that individual teacher’s management styles affected not only student achievement but also school climate. Management styles that promoted a sense of responsibility for one’s actions and empowered

students to be self-directed learners were associated with a positive school climate (Shindler et al., 2011). Teachers willing to build relationships and who are committed to the students and school help foster a positive school climate (Shindler et al., 2011).

Learning, instruction, and assessment. Since the beginning of structured education, the concept of teaching and learning centered on the teacher as instructor. Research increasingly points to a shift with the teacher as a facilitator of learning (Khan, 2012; Marzano, 2012; Schwahn & McGarvey, 2011). With the age of technology and the Internet, students have information at their fingertips. Although information is easy to find and constantly changing in a global world, students need a teacher who can help them apply the information in various ways such as comparing, classifying, analyzing, investigating and inventing (Klein, 2013; Marzano & Kendall, 2008).

A classroom climate that fosters inquiry in a safe environment with high expectations and achievable goals will help students achieve academic success (Hoy, 2012). High expectations are important in building academic tenacity. Academic tenacity is defined as "non-cognitive factors that promote long-term learning and achievement" (Dweck et al., 2014, p. 4). Fostering academic tenacity can be accomplished by challenging students with high standards and the expectation that with the proper support and scaffolding, students will be successful (Dweck et al., 2014; Deci & Flaste, 1995; Schwahn & McGarvey, 2011).

According to Marzano (2007), teaching is an art. Teachers have the ability to impact the effectiveness of the classroom and school not only with climate but also student learning and academic success (Marzano et al., 2012; Tschannen-Moran & Gareis, 2015). Classrooms that meet individual student needs and assist students to become self-regulated with authentic

interactions between peers and teachers are important features to make schools a positive learning environment (Hoy, 2012).

Effective classroom pedagogy may be attained through effective instructional strategies, effective management strategies, and effective curriculum design (Marzano, 2007). By providing students with clear expectations and goals to achieve in the classroom, teachers are promoting effective instructional strategies and fostering a positive school climate. Academic rigor is supported by providing students with clearly defined learning outcomes and assists in the development of an outstanding academic school climate (Bryk et al., 2010, Marzano et al., 2012). Effective management strategies such as cooperative learning, respect and trust, and strong relationships in the classroom setting, all help to promote a positive climate (Thapa et al., 2012). Not only do these strategies contribute to effective classroom pedagogy and affect school climate, they also align with a proficiency-based model of instruction (Schwahn & McGarvey, 2011).

Teacher's role. The vision and mission of the school as well as the improvement of educational practices is part of the important role of a teacher in today's schools (Kilinc, 2014). We need teachers who are leaders both in and out of the classroom. Teacher leadership is defined as teachers who lead in and outside of the classroom, and contribute to the community of learners through best teaching practices to increase school improvement (Katzenmeyer & Moller, 2009). Teachers promote a positive school climate when practicing collaboration and establishing supportive relationships throughout the school (Kilinc, 2014; Sweetland, & Hoy, 2000). Kurt, Duyar, and Calik (2012) further emphasized that a positive or negative school climate impacted the relationships between colleagues and teachers and students. Research has shown that students placed high value on positive relationships with adults who cared about

them. Students reported appreciation of adults who listened to them, helped them to improve, and supported them (Drolet & Arcand, 2013). This type of relationship builds trust, which in turn helps to build a positive school climate (Drolet & Arcand, 2013). Drolet and Arcand (2013) also found that students expressed their appreciation of adults who acknowledged what they could do and worked with them to find ways to develop the student's individual academic talent.

Effective management in the classroom supports both positive school climate and school change (Newberry, Gallant, & Riley, 2013). According to the National School Climate Center (2015), teachers should be intentional in promoting a positive school climate by being role models, managing classrooms that allow for trust and respect, and providing strong pedagogy. Some examples of strong pedagogic methods are those found in cooperative learning, service learning, and proficiency-based learning (Marzano et al., 2012; National School Climate Center, 2015). While research has shown that positive relationships with peers positively effects cognitive development, teachers cannot make students have friends. They can, however, employ classroom strategies and methods such as mentioned above, including the organization of cooperative learning groups and one to one teaching to foster relationships in the school setting (Johnson & Roseth, 2010). It should be noted that proficiency-based education encourages small group learning and individualized instruction (CompetencyWorks, 2015).

Attitude and culture. The school environment involves not only how teachers and students feel connected to the school but also involves the leadership of the school and professional attitudes of the school staff. Each of these variables has an effect on the total school environment (National School Climate center, 2015). School practices that involve leaders with a strong vision and teachers that focus on relationships and relevant instruction contribute to a school's academic success (Walters et al., 2014). Friedlaender et al. (2014) found a common

thread among successful schools. Successful schools all emphasized the idea that every student has the potential to learn to high standards. This attitude should drive the vision of the school and the practices of each stakeholder in the school community to achieve success (Friedlaender et al., 2014).

School connectedness. The Centers for Disease Control and Prevention provides a clear definition of school connectedness as "the belief held by students that adults and peers in the school care about their learning as well as about them as individuals" (CDC, 2015, para. 1). School connectedness is nurtured through the promotion of a sense of belonging within the school community. Acceptance and value to the organization promotes this sense of belonging (Frehill & Dunsmuir, 2015; Goodenow & Grady, 1993). The research also highlighted the importance of other stakeholders and their feelings of connectedness to the organization, built through trust and collaboration (Kouzes & Posner, 2012). Trust is the foundation to building and sustaining connections (Kouzes & Posner, 2012). According to Bennis and Nanus, "Trust is the emotional glue that binds followers and leaders together" (1997, p. 142).

The literature addressed the strong need for students to have a sense of belonging and the subsequent impact on school success (Allen et al., 2013; Aryana, 2010; Cohen & Garcia, 2008; Goodenow & Grady, 1993; Osterman, 2000). Goodenow and Grady (1993) defined sense of belonging as "the extent to which students feel personally accepted, respected, included, and supported in the school social environment" (p. 60). Students who feel connected to their school are more likely to have better academic achievement and school attendance (CDC, 2015; Klem & Connell, 2004, Wentzel et al., 2010). The literature also pointed out that school connectedness is linked to a positive school climate and feeling safe at school (Mehta, Cornell, Fan, & Gregory, 2012). Mehta et al.'s (2012) research supported the school safety research that showed students

who felt unsafe or bullied, showed less connectedness and low engagement at school (Astor et al., 2010; Gregory et al., 2010; Thapa et al., 2013; Voight et al., 2013).

Community relations. The importance of the community including parents, businesses, community members, and other organizations has been shown to improve and expand learning opportunities and build relationships that promoted a positive school climate (Perkins, 2008). The research pointed to the relationship between community and school improvement and the desire of community to be involved with the school (Ice, Thapa, & Cohen, 2015).

Having clean and well-maintained physical facilities positively affected community engagement (Uline et al., 2010). The condition of physical facilities also factors in attracting quality teachers and staff. School leaders realize that well maintained, welcoming school environments may effect decisions made by community members, taxpayers, and policymakers who make choices on whether or not to allocate resources for school improvement (Uline et al., 2010).

Jeynes (2007) meta-analysis of 52 research studies sought to determine whether parent involvement made a significant difference in a child's education. The results of the meta-analysis found an association between parent involvement and a child's academic success. It also showed the importance of this involvement with various populations as well as various parental programs (Jeynes, 2007).

Building school-family-community relations starts with good communication (Griffin & Galassi, 2010). Schools need to engage parents and community members in the educational process, asking for input, and communicating resources that are available to promote academic success (Griffin & Galassi, 2010). Parents and community members need to feel welcome in the

school and are more likely to communicate with school personnel and access resources to support academic achievement if they have a sense of community (Griffin & Galassi, 2010).

Proficiency-Based Education

As the research demonstrates, there is a strong case for the importance of positive school climate. Attention to the needs of teachers and students supports a positive school climate (Newberry et al., 2013). In light of the school reform occurring across the United States, many studies pointed out that schools must find ways not only to promote a positive school climate but also to facilitate student learning and achievement (Corrigan, D'Alessandro, & Brown, 2013; Hoy, 2012; Kilinc, 2014; Stauffer & Mason, 2013; Thoonen et al., 2011; Wentzel et al., 2010). As Freiberg (2005) stated, "Continuous improvement requires continuous information about the learner and the learning environments" (p.24).

One of the major reforms sweeping the nation is the Common Core State Standards created by the Council of Chief State School Officers and the National Governors Association (NGA & CCSSO, 2010). The Common Core State Standards were designed to provide clear academic benchmarks and standards that provide equity, clarity, and collaboration in and among schools (Liebtag, 2013). Proficiency-based education is one way to implement the Common Core State Standards and move towards a more individualized approach of teaching and learning and also encompass many of the essential areas that promote a positive school climate (Maine Department of Education, 2015).

Melville, Bartley, and Weinburgh (2012) pointed out that lasting student gains are dependent on teachers and students working together for the common good. Proficiency-based education encourages peer-to-peer collaboration as well as teachers working collaboratively with students and colleagues. Proficiency-based education is a learner-based model whereby students

are given the individual academic support needed to assist them in mastery of knowledge at their own pace (Maine Department of Education, 2015). Tschannen-Moran and Gareis (2015) reasoned that if schools are clear about standards and assess students on these standards and educators are held accountable, then academic performance will improve. This sounds simplistic, however, many factors impact academic performance including the area of school climate. Education is complex and schools need to find ways to meet the needs of the learner in the twenty-first century (Tschannen-Moran & Gareis, 2015). Voight et al. (2013) highlighted the outcomes of over 300 studies from the U.S. Department of Education that demonstrated the importance of high expectations, learning connected to students' needs, and small group instruction to increase academic success. Proficiency-based education is one model that many schools are turning to as they strive to improve academic performance (CompetencyWorks, 2015; Maine Department of Education, 2015).

Students today have very different needs, experiences, and expectations than schools structured 100 years ago (Schwahn & McGarvey, 2011). Technology not only provides knowledge and information at the touch of a button, it also provides schools with many more options for learning (Khan, 2012). Today's world requires a workforce that is not just proficient in math and reading but able to solve problems, synthesize, and conceive new ideas (Khan, 2012). Proficiency-based education does not rely on tests or one-shot snapshots of a student's performance but understands that students learn at different rates and in different ways and tailors learning to their individual needs (CompetencyWorks, 2015; Khan, 2012).

Proficiency-based education provides cognitive scaffolding for students. Cognitive scaffolding gives support for students that is more individualized to their needs, and quality feedback that assists students in reaching high standards (Dweck et al., 2014). The students are

able to utilize feedback to improve their learning and ensure that targets or standards are met (Schwahn & McGarvey, 2011).

The proficiency-based classroom supports the three conditions that self-determination theorists found important in motivation for academic success including competence, autonomy, and relatedness (Ryan & Deci, 2000). Students are provided the scaffolding needed to feel competent and yet have autonomy in learning choices (Dweck et al., 2014). Sense of belonging or relatedness is cultivated in a proficiency-based classroom through small group learning and smaller learning communities within the school (Dweck et al., 2014). Many studies have shown the power behind school connectedness and the desire for students to get one-on-one attention from their teachers (Allen et al., 2013; Aryana, 2010; Cohen & Garcia, 2008; Dweck et al., 2014; Goodenow & Grady, 1993; Osterman, 2000).

The research with organizational climate theory aligns with the proficiency-based model highlighting the importance of a work or educational environment that provides a safe, positive environment where failure is not an option. Instead, students know what they need to learn, and mistakes are an avenue to feedback that promotes learning (Dweck et al., 2014; Marzano, 2012; Schwahn & McGarvey, 2011).

The research remains unclear whether or not proficiency-based education has an impact on teacher satisfaction and ultimately school climate. Sturgis (2015) pointed out several factors, however, that may promote teacher satisfaction and thereby impact school climate. Teachers in a proficiency-based model have more autonomy in how they design the learning pathways for their students (Sturgis, 2015). There is also more emphasis on one to one planning and small group instruction. This fosters relationships that are key in a positive school climate (CompetencyWorks, 2015; Sturgis, 2015). Finally, a shared leadership and collaborative effort

among staff was found in successful proficiency-based school models that promoted respect and trust (Sturgis, 2015).

There are five main elements that are key in proficiency-based education: student mastery, clear targets with measurable learning objectives, formative and summative assessment that is meaningful and positive for students, differentiated teaching and support, and learning targets that include application and creation of new knowledge (CompetencyWorks, 2015). It was also noted that strong teachers and leaders are part of an effective proficiency-based model (CompetencyWorks, 2015).

Student mastery and clear targets go hand in hand. Students are expected to master specified content that is clearly defined. Clear targets are important to the success of students. If students are provided with a clear target, they will hit it (Stiggins, 2014). The materials, assignments, and teaching instruction align with the specified content to provide clearly defined targets for mastery (Deci, 2009; Schwahn & McGarvey, 2011). The learning is personalized with support and teaching is based on an individual's needs. Student progress is tracked and advancement made upon mastery (Marzano, 2012; Schwahn & McGarvey, 2011). A phrase often used in regard to proficiency-based education is, "Learning is constant, and time is the variable" (Sturgis, 2015, p. 8).

Along with clear targets, formative assessments that help students understand what they know and what they need to work on is important before they demonstrate mastery of the learning objectives through a summative assessment. Formative assessments provide teachers with feedback on what students have learned so that support is provided for student mastery (Friedlaender et al., 2014; Marzano, 2012; Schwahn & McGarvey, 2011). High standards and rigor do not guarantee positive student outcomes if students do not perceive that they can attain

them (Dweck et al., 2014). "The effects of any educational intervention depend on its psychological meaning to the students" (Dweck et al., 2014, p. 24). Challenging work should be presented in a positive way so that it does not overwhelm or discourage students but provides the supports necessary to foster success (Dweck et al., 2014). It also involves engagement of the student through instruction and activities that provide choice and significance. This engagement is connected to autonomous motivation through choice and relevance (Deci, 2009, Deci & Flaste, 1995; Ryan & Deci, 2000).

Differentiated teaching and support for individualized student learning also impacts student achievement (Haystead, 2010). Schools need to provide individual support both in school and out of school that builds confidence and competence. Both areas will boost motivation that is intrinsically based and a good foundation for school success (Walters et al., 2014). Individualized learning gives students a choice in their learning. It also helps bridge the gap between real world skills and a traditional curriculum (Dachtler, 2015).

Finally, according to Marzano and Kendall (2008) learning targets that include higher order thinking are an important part of proficiency-based education. The focus is not on the attainment of knowledge but on what the student does with the knowledge. It goes beyond recall and encourages students to investigate, experiment, problem solve, make decisions, and invent (Marzano & Kendall, 2008). Educational reform has typically focused on curriculum and how it is presented. With the knowledge that self-development theory presents, and the research available on non-cognitive or motivational factors, schools need to challenge students with high expectations and application of learning (Dweck et al., 2014).

Murray-Harvey (2010) found that schools with teaching interventions that built supportive relationships helped to counteract the stressful environments that students may

encounter outside of school. These environments provided for the positive relationships that students have found to be important to their success. Proficiency-based education encourages the teacher-student relationship as they work in small groups and individually as well as planning educational pathways that meet individual student needs (Schwahn & McGarvey, 2011).

Proficiency-based education also provides students with the means to take responsibility. Students must not only take responsibility to plan their own learning, they are an important part of their peers' learning (Khan, 2012). This aligns with the research showing the importance of peer interactions in relation to academic success (Aryana, 2010; Bryk et al., 2010; Drolet & Arcand, 2013; Johnson & Roseth, 2010; Klem & Connell, 2004).

In order for schools to embrace the change necessary for proficiency-based education to take root, the perspective of the self-determination theory should be noted. It is necessary for teachers and students to internalize the importance of this type of reform (Deci, 2009). According to self-determination theorists, internalization takes place through the satisfaction of the need for competency, autonomy, and a sense of relatedness (Deci, 2009; Ryan and Deci, 2000). These needs also support ownership and commitment to educational reform (Deci, 2009; Deci & Flaste, 1995).

As research has noted, organizational climate theory and subsequent school climate research demonstrated the need for best practices in an organization that foster a positive climate (Adams et al., 2015; Alliance for the Study of School Climate, 2014; Friedlaender, 2014; Schneider et al., 2013; Voight, Austin, & Hanson, 2013; Wolf et al., 2013). Proficiency-based education may be one educational practice that leads to improved climate that ultimately produces quality outcomes (CompetencyWorks, 2015; Schwahn & McGarvey, 2011; Sturgis, 2015).

Summary

The theories that guided this research are the theory of human motivation through the work of Maslow (1943) and Ryan and Deci (2000) and organizational climate theory. Maslow's (1943) work introduced the idea that each person has needs that must be met in order for motivation to positively impact an individual's choices. Ryan and Deci's (2000) self-determination theory delves deeper into human motivation and examines intrinsic and extrinsic motivation. Intrinsic motivation, also called autonomous motivation, is at the core of creativity, responsibility, academic success, and lasting change (Deci & Flaste, 1995). Ryan and Deci's (2000) research focused on conditions that fostered intrinsic motivation. The researchers found that competence, autonomy, and relatedness are important factors in nurturing intrinsic motivation. The opposite of intrinsic motivation, extrinsic motivation, should be understood in light of school climate and academic success. Extrinsic motivation, also known as controlled motivation, produces compliance for task completion or learning that is initiated by negative or positive control but does not always produce lasting change or deeper learning (Ryan & Deci, 2000).

Organizational climate theory began in the business world and was the springboard for school climate research (Schneider et al., 2013; Thoonen et al., 2011; Zullig et al., 2010). School climate research has grown over the last few years as school reform has resurfaced (Brand et al., 2008; Tschannen-Moran & Gareis, 2015; Stauffer & Mason, 2013; Zullig et al., 2010). With education reform at the forefront due to the No Child Left Behind federal legislation and the adoption of the Common Core State Standards (National Governors' Association Center for Best Practices & Council of Chief State School Officers, 2010), school climate has once again become a focus as schools seek educational reform (Stauffer & Mason, 2013; Zullig et al., 2010).

School climate is defined as "the quality and character of school life" (National School Climate Center: School Climate, 2015, para. 3). Research has shown that school climate, in relation to student achievement, has a positive correlation with school engagement and academic success (Anari, 2011; Freiberg, 1998; Gumuseli & Eryilmaz, 2011; Embse & Hasson, 2012; Van Ryzin, 2011; Thapa et al., 2013). There are several essential areas that research found important to school climate. They are: safety, relationships, teaching and learning, and the school environment as it relates to staff, administration, teachers, and community (National School Climate Center, 2015).

Education reform brought about the creation of Common Core State Standards and with these standards, an educational initiative called proficiency-based education (Maine Department of Education, 2015; NGA & CCSSO, 2010). Proficiency-based education has many different names including: standards-based education, performance-based education, personalized learning, competency-based education, and mass customized learning (CompetencyWorks, 2015; Keenan, 2013; Liebtag, 2013; Schwann & McGarvey, 2012). It is defined as instruction, assessment, and grading based on student mastery of specific standards. Students are not bound by class or time but must meet specific standards before they move on to the next level. Students receive differentiated instruction and support to meet their individual needs. The classroom environment encourages students to take responsibility for their learning. Learning outcomes include application and creation of knowledge as opposed to just factual knowledge (CompetencyWorks, 2015; Maine Department of Education, 2015). Research has shown the importance of positive relationships and a sense of belonging on an individual's success and also the impact on school climate (Anari, 2011; Freiberg, 1998; Gumuseli & Eryilmaz, 2011; Embse & Hasson, 2012; Van Ryzin, 2011; Thapa et al., 2013). Proficiency-based education offers the

necessary elements to improve school climate through relationship building in the classroom and focusing on the needs of each individual to assist them in working to their potential and experiencing academic success. This relates well to the research on motivation by Maslow (1943) and Ryan and Deci (2000) that highlighted the importance of competence, autonomy, and relatedness.

Proficiency-based education provides instruction, support, and feedback that challenges students but also fosters competency. Competency must accompany autonomy according to Ryan and Deci (2000). Proficiency-based classrooms encourage autonomy through choice in activities and learning that takes place on an individual level (CompetencyWorks, 2015; Schwahn & McGarvey, 2011). Competence and the perception of autonomy promote intrinsic motivation that supports academic success (Ryan and Deci, 2000).

The self-determination theory also emphasized the need for relatedness. Ryan and Deci's (2000) research pointed out that relatedness is important for intrinsic motivation to flourish. The research also underscored the important of caring relationships to academic success. Proficiency-based classrooms promote relationship building through individualized instruction and small group interactions with both teachers and peers (Bird et al., 2013; Bryk et al., 2010; Schwahn & McGarvey, 2011; Wentzel et al., 2010). Cooperative learning promotes positive peer relationships that foster self-esteem and that Aryana (2010) confirmed impacts academic achievement.

With the explosion of technology and the changing needs of businesses and organizations in today's world, schools are challenged to meet these needs by changing how students are educated (Schwahn & McGarvey, 2011). The proficiency-based model provides the cognitive scaffolding needed to meet individual student needs (Dweck et al., 2014). It also provides

teachers and students with the framework to experience success in the classroom that in turn fosters a positive climate (Maine Department of Education, 2015; Melvin & Bartley, 2012; Tschannen-Moran & Gareis, 2015; Schwahn & McGarvey, 2011). This research study will add to the research regarding school climate by focusing on a gap in the literature that targets a curriculum method or instructional practice, proficiency-based education, that may have an effect on school climate as well as teaching and learning (Thapa et al., 2013).

CHAPTER THREE: METHODS

Overview

This chapter focuses on the research design, the hypotheses, and a detailed look at the participants, setting, the instrument utilized for research, the procedures, and data analysis.

Design

This quantitative study used a non-experimental, causal-comparative research design in which the researcher sought to identify if there is a difference between school climate in a proficiency-based high school and a non-proficiency-based high school. The independent variable is defined as the type of school, proficiency-based or non-proficiency-based. "Proficiency-based education refers to any system of academic instruction, assessment, grading and reporting that is based on students demonstrating mastery of the knowledge and skills they are expected to learn before they progress to the next lesson, get promoted to the next grade level or receive a diploma" (Maine Department of Education, 2015). The dependent variable is defined as school climate. "School climate refers to the quality and character of school life. School climate is based on patterns of students', parents' and school personnel's experience of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures" (National School Climate Center: School Climate, 2015, para. 3). This design is appropriate as Gall, Gall and Borg (2007) stated, "Causal-comparative research is a type of non-experimental investigation in which researchers seek to identify cause-and-effect relationships by forming groups of individuals in whom the independent variable is present or absent… and then determining whether the groups differ on the dependent variable" (p. 306). The dependent variable is continuous in nature and the independent variable is a

dichotomous nominal-level discrete variable which is appropriate when analyzing the data using an independent samples *t*-test (Ritchey, 2008).

Research Question

RQ1: Is there a difference between the teachers' assessments of school climate in a proficiency-based high school and a non-proficiency-based high school on the eight categories as measured by The Alliance for the Study of School Climate Secondary Assessment Instrument (SCAI-S-G)?

Hypotheses

$H_0$1: There is no statistically significant difference between the teachers' assessments of physical environment in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$2: There is no statistically significant difference between the teachers' assessments of faculty relations in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$3: There is no statistically significant difference between the teachers' assessments of student interactions in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$4: There is no statistically significant difference between the teachers' assessments of leadership and decisions in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$5: There is no statistically significant difference between the teachers' assessments of the discipline environment in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$6: There is no statistically significant difference between the teachers' assessments of learning and assessment in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$7: There is no statistically significant difference between the teachers' assessments of attitude and culture in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$8: There is no statistically significant difference between the teachers' assessments of community relations in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

Participants and Setting

The participants for this study were taken from a convenience sample of high schools in New England identified as either a proficiency-based school or a non- proficiency-based school. For the purpose of this study, the type of school was identified according to whether or not the school report card used is proficiency-based in all content areas. Gall, Gall, and Borg (2007) pointed out that many times researchers must do a convenience sample in order for the study to be conducted. Due to the large geographic area of New England and the small size of many schools, multiple schools were part of the study to obtain a sufficient sample size. In order to ensure an appropriate sample size based on Gall et al. (2007), medium effect size and statistical power at .7, this study included 87 teachers from proficiency-based high schools and 125 teachers from non-proficiency based high schools. The participants consisted of 77 male and 135 female teachers. The number of years of teaching experience is as follows: 41 survey participants having 0-5 years of experience, 37 survey participants with 6-10 years of experience, 79 survey participants with 11-20 years of experience and 54 survey participants with 20+ years

of experience. The ethnicity of the survey participants is as follows: Caucasian-202, Latino-1, Native American-3 and other-6. The representation of content levels is as follows: English Language Arts-27, Math-34, Social Studies-22, Science-26, Special Education-27 and other-76.

Instrumentation

This study used a survey developed by the Alliance for the Study of School Climate, with the purpose of investigating the difference between the teachers' assessments of school climate in a proficiency-based school and the teachers' assessments of school climate in a non-proficiency-based school. The survey tool is called the Secondary School Climate Assessment Instrument-General (SCAI-S-G) specifically designed for use with teachers, administrators, and external assessment consultants. Approval was granted to use the SCAI-S-G in the research study (see Appendix A). All surveys were returned to ASSC through an online link and data compiled by ASSC.

The SCAI-S-G is recognized as a scientifically sound assessment tool, receiving a top rating by an independent study of climate instruments and has also been approved by the U.S. Department of Education Office of Safe and Supportive Schools (Alliance for the Study of School Climate, 2014). This instrument was also used in many research studies (Gangi, 2010; Shindler, Jones, Williams, Taylor, & Cadenas, 2009; Thapa et al., 2013). Cronbach's alpha coefficient for internal consistency reliability for the survey tool was calculated by adding together the questions for each of the sub-scales, and then dividing by the total number of items present in the scale. Using this coding format allowed the average of the composite scale to be interpreted as a function of the original measurement metric of the scale (i.e., a scale of 1 to 4). This was done for each sub scale to determine Cronbach's alpha of reliability. Each of the sub-scales of the SCAI are all above the accepted standard for a reliable instrument of 0.7 with each

of the sub-scales holding a Cronbach's alpha reliability measure at .77 or higher. The individual coefficients for each sub-scale are as follows: physical environment-.77, faculty relations-.89, student interactions-.83, leadership and decisions-.94, discipline and environment-.89, learning and assessment-.90, attitude and culture-.91 and community relations-.80, N=212 (ASSC, 2015). Validity for the instrument was demonstrated through face, construct, and predictive validity (ASSC, 2015). Face validity is demonstrated, as each of the item descriptions will be familiar to participants and mirrors what takes place within the school setting (ASSC, 2015). The items also reflect current research in regard to characteristics found within effective schools (ASSC, 2015). Construct validity on each of the eight sub-scales is grounded in a theoretical set of constructs that relate to each other both practically and theoretically (ASSC, 2015). This indicates that the items were created based on principles that predict a school's success. In other words, if certain characteristics are found in a school, then it is more than likely that other characteristics will also be found (ASSC, 2015). Predictive validity is shown as stated by The Alliance for the Study of School Climate, "The SCAI is predictive of student achievement and as a reliable measure of internal locus of control producing behaviors it is predictive of outcomes related to the level of internal locus of control" (ASSC, 2015, para. 5).

The eight sub-scales are defined as follows and describe the dimensions of the SCAI-S-G in order to provide a more complete picture of school climate. In the SCAI-S-G, physical appearance looks at the relationship between the physical setting of the school, including how others view it. It also incorporates the custodial staff and their role and expectations (ASSC, 2015). Faculty relations looks at relationships between faculty members and the level of respect and collaboration that is present (ASSC, 2015). Student interactions examine peer relationships relative to school climate. It also looks at whether these interactions are intentional or accidental

(ASSC, 2015). The administrative leadership style is examined in the sub-scale of leadership and decision-making. The shared vision of the school community is also examined (ASSC, 2015). Discipline and management examines discipline styles and also strategies that focus on student responsibility and motivation. Teacher-student interactions are also given consideration in relation to the climate (ASSC, 2015). Learning and assessment examines learner centered instruction and clear learning targets (ASSC, 2015). Attitudes and culture is the seventh sub-scale in the SCAI-S-G and examines social and communal bonds as well as prevailing attitudes in the school including a sense of pride in the school (ASSC, 2015). The final sub-scale is community relations. This encompasses the community's attitudes toward and perceptions of the school as well as the degree to which the school is a part of the community (ASSC, 2015).

The SCAI-S-G consists of 79 items and takes approximately 22 minutes to complete. Each item is rated on a three-point Likert scale with ratings that range from high to low. Participants will be asked to select the rating that best describes the school currently and responses will be recorded as follows: high=3, high-middle=2.5, middle=2, middle-low=1.5 and low=1. The eight sub-factors include a different number of items under each one and are listed as follows: physical appearance-8 items, faculty relations-11 items, student interactions-10 items, leadership and decisions-11 items, discipline environment- 10 items, learning and assessment-12 items, attitude and culture-10 items, and community relations-7 items. The scores on the SCAI-S-G can range from a low of 0 to a high of 237. The high scores range from 159-237 and describe a positive school climate that depicts a collaborative school, with a vision that drives effective, student-centered teaching and learning. The school vision and mission would also include teaching and learning built on clear standards and assessments that measure a student's progress towards mastery (ASSC, 2015). The middle scores on the SCAI-S-G range

from 80-158 and describe a school climate that depicts a collegial school with a vision that has good intentions that may work most of the time. However, the teacher is the central part of the learning environment. Student voice and choice is also not a significant part of the learning process. The school follows standards and assessments created and defined by external entities with a mix of student success (ASSC, 2015). The low scores on the SCAI-S-G can range from 0-79. These scores would indicate a school climate that is focused on the faculty and staff and their interests. The atmosphere is competitive, contentious and unfriendly with poor relationships among staff and students. Learning is not student-centered and assessments are used to punish or motivate learning in a negative way. The whole educational experience has a negative effect on students (ASSC, 2015).

Procedures

IRB approval was secured for the research study (see Appendix E). Following IRB approval, ASSC was contacted to work out final details needed to carry out the inventory including payment for the use of the survey and how it would be emailed to participants. The identified New England high school principals in proficiency-based schools and non-proficiency based schools were contacted by telephone to explain the research study and obtain consent. In order to preserve the anonymity of the survey, the researcher sent a link to the survey and consent form (Appendix D) to principals and the principals sent out the link to their staff. An explanation of the voluntary study was sent with the link so that teachers were fully informed and if requested, a paper copy was provided (Appendix C). The email explained that the principals of the participants' schools had granted prior approval. The SCAI-S-G was given in an online format provided by ASSC to participating high school teachers, unless a paper copy was specifically requested. A few days following the requested deadline specified for

respondents to complete the assessment survey, the principals were contacted with a follow up email and another link with an appeal for a response from their staff (Gall et al., 2007).

All principals were sent a follow up, thank you email to be distributed to their staff, once the assessment survey was completed. The principals were also given the opportunity to request a copy of the summary and findings.

Data Analysis

Prior to all statistical analyses, there were several data preparation steps taken. The original dataset consisted of a sample of 405, however, the data was restricted to 212 valid cases present for all the dependent variables. List-wise deletion was used during all analyses for missing variables for the independent samples *t*-test (Allison, 2002). An exploratory analysis of data was conducted with descriptive statistics computed for each teacher group. Gall et al. (2007) pointed out that usually the descriptive statistics reported include the group mean and standard deviation. Next a *t* test for the difference between two sample means was conducted. The two teacher groups were compared in each of the eight categories of the SCAI-S-G survey with a separate *t* test for each comparison. The data was examined to accept or fail to reject the null hypothesis for each category. Gall et al. (2007) emphasized the importance of a separate *t* test for each category explaining that there is more of a chance to find a significant difference between groups by comparing the groups on a number of variables. For each *t* test there are three assumptions regarding the scores. According to Gall et al. (2007), "The first assumption is that the scores form an interval or ratio scale of measurement" (p. 315). The second and third assumptions are that score variances for the populations under study are normally distributed and equal (Gall et al., 2007). A box and whisker plot was run and any outliers dismissed. The researcher checked for normality using Kolmogorov-Smirnov and the Shapiro-Wilks test (Green

and Salkind, 2014). Some violations of normality were found and noted. The Levene's Test for Equality of Variance was run to find out if the population distributions consisted of the same variances with the hope that the *F* ratio will be nonsignificant (Warner, 2013).

In order to limit the risk of type I error with multiple tests run, a Bonferroni correction was used (Warner, 2013). The Bonferroni correction is calculated by dividing the alpha level of .05 by the number of tests run, which in this research is 8, with the new alpha level set at .006. The null hypothesis was rejected with statistical significance if $p < .006$. The effect size is reported as eta squared (η^2) (Gall et al., 2007).

Due to violations that the Shapiro-Wilks and the Kolmogorov-Smirnov tests showed, assumption of normality was not tenable (Green and Salkind, 2014). Therefore, a non-parametric test, Mann-Whitney U, was conducted and results reported. Scores are converted to ranks and therefore, outliers do not have as much significance on results (Warner, 2013). Due to the use of the non-parametric Mann-Whitney U, outliers were not excluded (Warner, 2013).

CHAPTER FOUR: FINDINGS

Overview

This study sought to identify if there is a difference between school climate in a proficiency-based high school and a non-proficiency based high school from the teacher's viewpoint. The independent variable is the type of school, proficiency-based or non-proficiency based. The dependent variable is school climate measured through the eight categories in the SCAI-S-G.

This chapter begins with a review of the research question that navigates this study, followed by the eight null hypotheses associated with that question. The descriptive statistics are presented followed by results of the data analyses.

Research Question

RQ1: Is there a difference between the teachers' assessments of school climate in a proficiency-based high school and a non-proficiency-based high school on the eight categories as measured by The Alliance for the Study of School Climate Secondary Assessment Instrument (SCAI-S-G)?

Null Hypotheses

$H_0$1: There is no statistically significant difference between the teachers' assessments of physical environment in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$2: There is no statistically significant difference between the teachers' assessments of faculty relations in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$3: There is no statistically significant difference between the teachers' assessments of student interactions in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$4: There is no statistically significant difference between the teachers' assessments of leadership and decisions in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$5: There is no statistically significant difference between the teachers' assessments of the discipline environment in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$6: There is no statistically significant difference between the teachers' assessments of learning and assessment in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$7: There is no statistically significant difference between the teachers' assessments of attitude and culture in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

$H_0$8: There is no statistically significant difference between the teachers' assessments of community relations in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G.

Descriptive Statistics

Descriptive statistics are presented as frequencies for the categorical variables for proficiency based and non-proficiency based schools as noted in Table 1 (Ritchey, 2008). Slightly more than half (58.7%) of the sample is in non-proficiency based schools.

Table 1

Percentages and Frequencies, Study Variables

	Frequency	Percent
Non-PBE schools	125	58.7%
PBE schools	87	40.8%
N	212	100.0%

Descriptive statistics including the means and standard deviations were calculated for all variables in Table 2. Ritchey (2008) notes that for continuous variables, means and standard deviations are the appropriate descriptive statistics to report. It is important to note that for every subscale, non-proficiency-based schools have a higher mean than proficiency-based schools (Table 2). This indicates that there is a difference between the two types of schools in regard to school climate and will be further discussed in chapter 5.

Table 2

Means and Standard Deviations, Study Variables

	Non-PBE schools		PBE schools	
Variables	M	SD	M	SD
Physical Environment	3.93	0.66	3.33	0.71
Faculty Relations	4.00	0.67	3.87	0.59
Student Interactions	3.95	0.56	3.75	0.49
Leadership & Decisions	3.88	0.81	3.65	0.77
Discipline & Environment	3.91	0.63	3.83	0.58
Learning & Assessment	3.91	0.62	3.89	0.61
Attitude & Culture	3.88	0.66	3.59	0.66
Community Relations	4.07	0.65	3.64	0.77

NOTE: n = 212

Results

In order to investigate the research question and corresponding hypotheses associated with the research question, a series of independent samples *t*-tests were used. As Ritchey (2008) notes, the use of an independent samples *t*-test is appropriate when the dependent variable is continuous in nature and the independent variable is a dichotomous nominal-level discrete variable. These criteria are satisfied under the current circumstances. Gall et al. (2007) also emphasized the importance of a separate *t*-test for each category, explaining that there is more of a chance to find a significant difference between groups by comparing groups on a number of variables.

Assumption Tests

For each *t*-test, the assumption of normality was checked utilizing the Shapiro-Wilks test and the Kolmogorov-Smirnov test (Green and Salkind, 2014). These tests were performed for all non-proficiency based and proficiency based variables. The results of the Kolmogorov-Smirnov tests are displayed in Table 3, while results of the Shapiro-Wilks tests are displayed in Table 4.

Table 3

Tests of Normality, Kolmogorov-Smirnov Tests

	Kolmogorov-Smirnov		
	Statistic	*Df*	*P*
Physical Environment Non-PBE	0.178	124	0.000
Physical Environment PBE	0.100	81	0.045
Faculty Relations Non-PBE	0.116	119	0.000
Faculty Relations PBE	0.110	79	0.018
Student Interactions Non-PBE	0.092	116	0.018
Student Interactions PBE	0.116	81	0.009
Leadership & Decisions Non-PBE	0.103	115	0.004
Leadership & Decisions PBE	0.096	77	0.078
Discipline & Environment Non-PBE	0.121	113	0.000
Discipline & Environment PBE	0.103	74	0.052
Learning & Assessment Non-PBE	0.112	110	0.002
Learning & Assessment PBE	0.097	77	0.068
Attitude & Culture Non-PBE	0.085	108	0.051
Attitude & Culture PBE	0.095	75	0.094
Community Relations Non-PBE	0.115	107	0.001
Community Relations PBE	0.097	80	0.061

As Table 3 indicates, all of the variables violate the assumption of normality except for Leadership and Decisions PBE, Discipline and Environment PBE, Learning and Assessment PBE, Attitude and Culture non PBE, Attitude and Culture PBE and Community Relations PBE.

Table 4

Tests of Normality, Shapiro-Wilk Tests

	Shapiro-Wilk		
	Statistic	Df	Sig.
Physical Environment Non-PBE	0.921	124	0.000
Physical Environment PBE	0.982	81	0.333
Faculty Relations Non-PBE	0.949	119	0.000
Faculty Relations PBE	0.902	79	0.000
Student Interactions Non-PBE	0.972	116	0.015
Student Interactions PBE	0.983	81	0.342
Leadership & Decisions Non-PBE	0.932	115	0.000
Leadership & Decisions PBE	0.951	77	0.005
Discipline & Environment Non-PBE	0.953	113	0.001
Discipline & Environment PBE	0.977	74	0.197
Learning & Assessment Non-PBE	0.969	110	0.011
Learning & Assessment PBE	0.921	77	0.000
Attitude & Culture Non-PBE	0.960	108	0.002
Attitude & Culture PBE	0.985	75	0.545
Community Relations Non-PBE	0.949	107	0.000
Community Relations PBE	0.971	80	0.063

As Table 4 indicates, all of the variables violate the assumption of normality except for Physical Environment PBE, Student Interactions PBE, Discipline and Environment PBE, Attitude and Culture PBE and Community Relations PBE. Due to the results of these tests, the assumption of normal data was not tenable. This may be due to the fact that the teacher groups were not equal with slightly more than half (58.7%) of the sample from non-proficiency-based schools. With the violation of non-normal data, the non-parametric Mann-Whitney U test was conducted and results reported following the *t* test.

Data was screened by checking for outliers for all eight of the dependent variables via box and whisker plots (Green and Salkind, 2014). The box and whisker plots are shown in figures 1-8 with outliers noted.

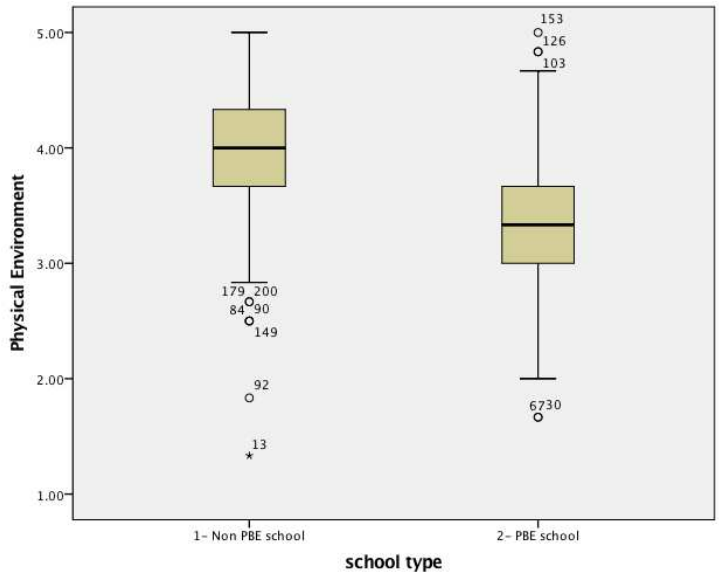

Figure 1. Box and Whisker Plot for Physical Environment scale.

As can be seen by Figure 1, there are 7 outliers for Non-PBE schools and 4 outliers for PBE schools.

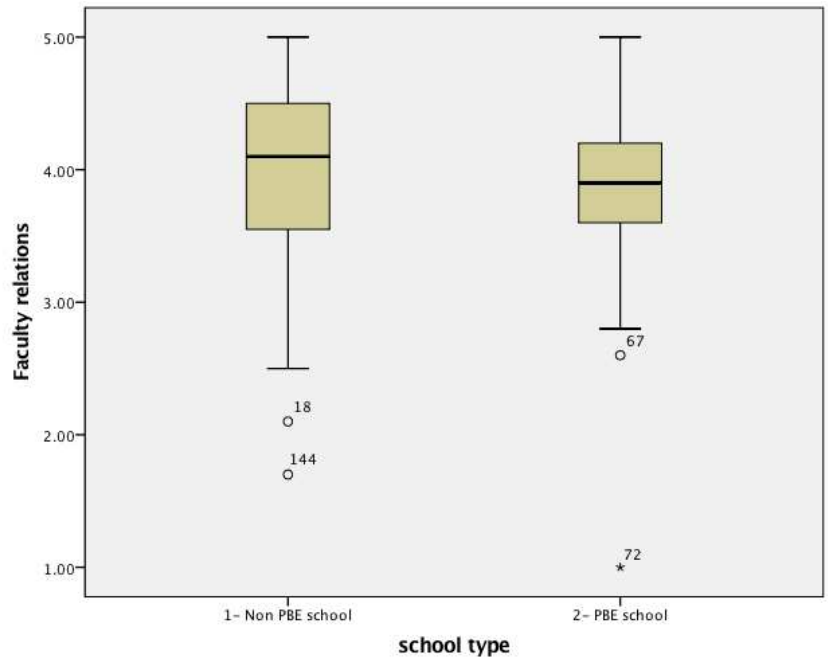

Figure 2. Box and Whisker Plot for Faculty Relations scale.

As can be seen by Figure 2, there are 2 outliers for Non-PBE schools and 2 outliers for PBE schools.

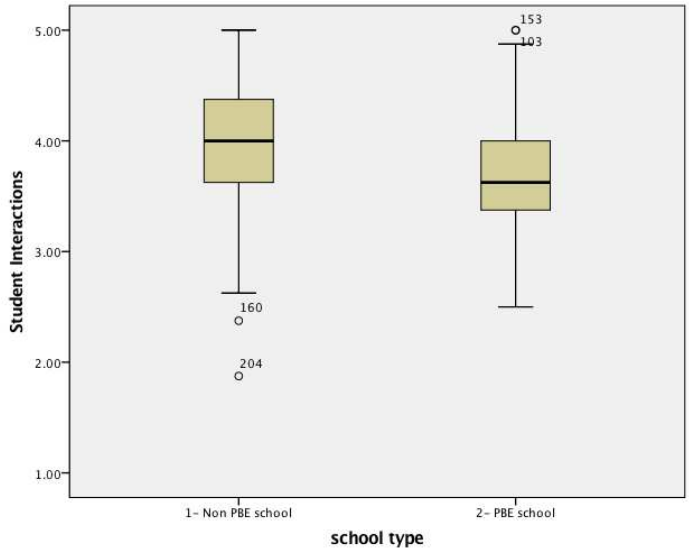

Figure 3. Box and Whisker Plot for Student Interactions scale.

As can be seen by Figure 3, there are 2 outliers for Non-PBE schools and 2 outliers for PBE schools.

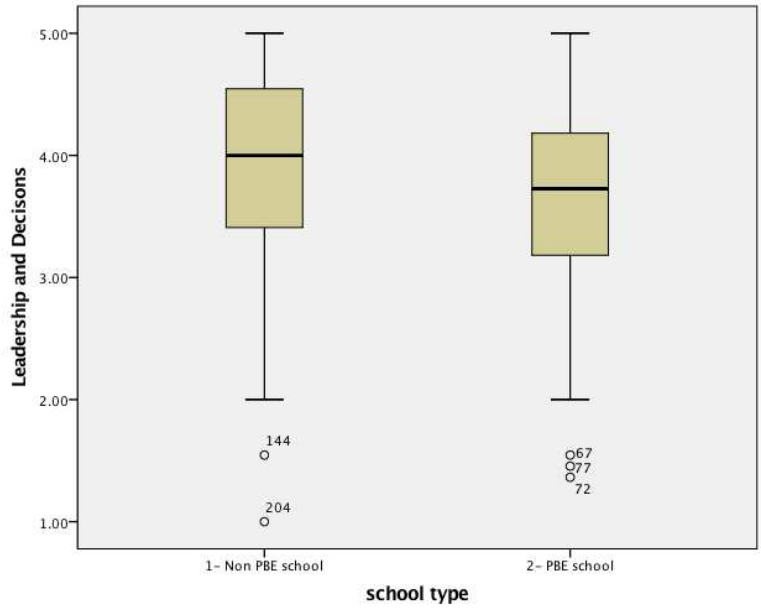

Figure 4. Box and Whisker Plot for Leadership and Decisions scale.

As can be seen by Figure 4, there are 2 outliers for Non-PBE schools and 3 outliers for PBE schools.

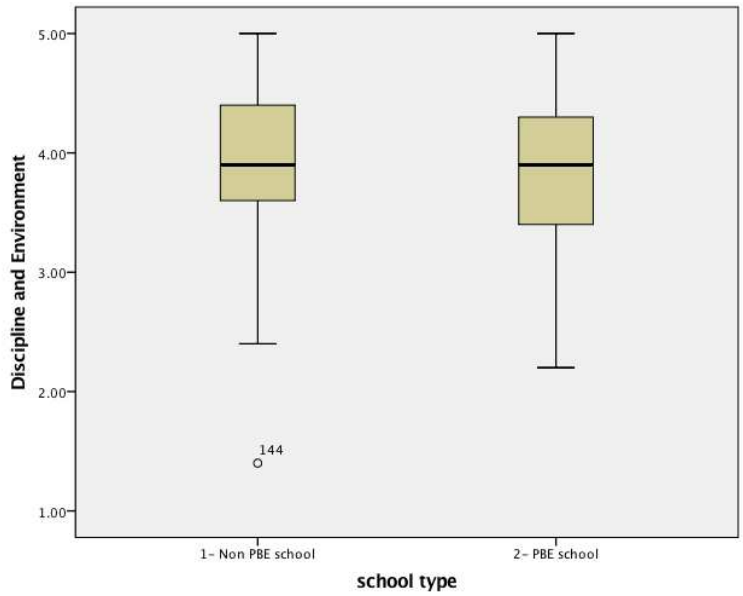

Figure 5. Box and Whisker Plot for Discipline and Environment scale.

As can be seen by Figure 5, there is 1 outlier for Non-PBE schools and no outliers for PBE schools.

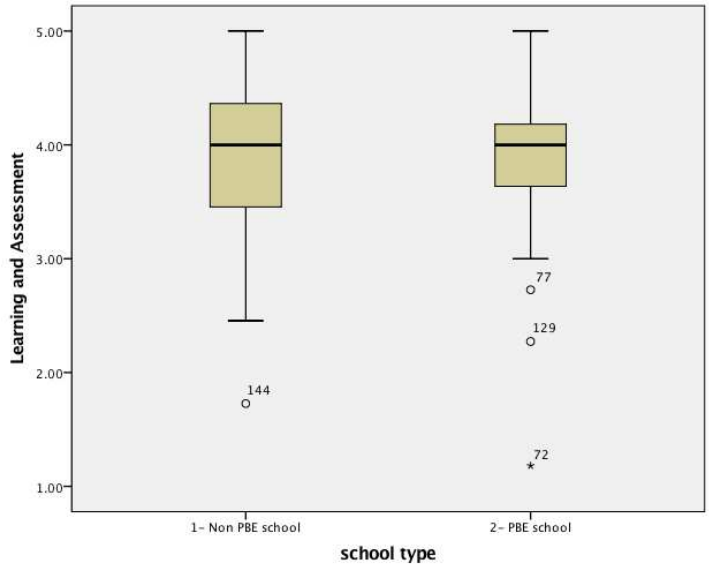

Figure 6. Box and Whisker Plot for Learning and Assessment scale.

As can be seen by Figure 6, there is 1 outlier for Non-PBE schools and 3 outliers for PBE schools.

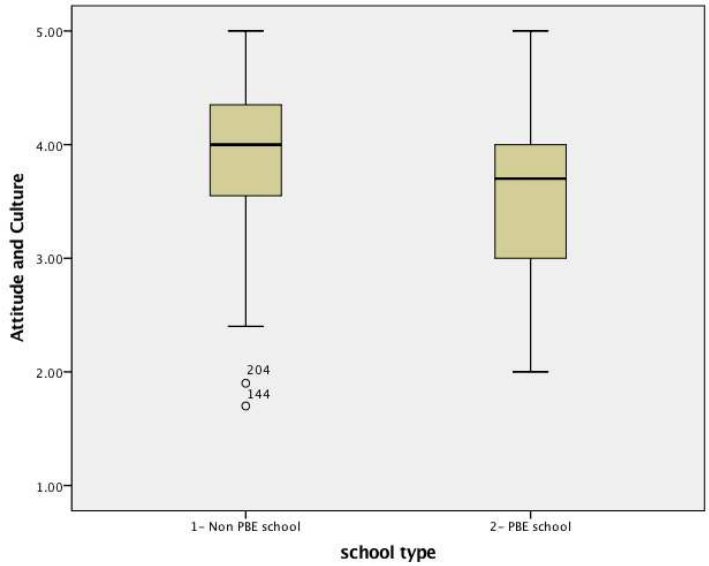

Figure 7. Box and Whisker Plot for Attitude and Culture scale.

As can be seen by Figure 7, there are 2 outliers for Non-PBE schools and no outliers for PBE schools.

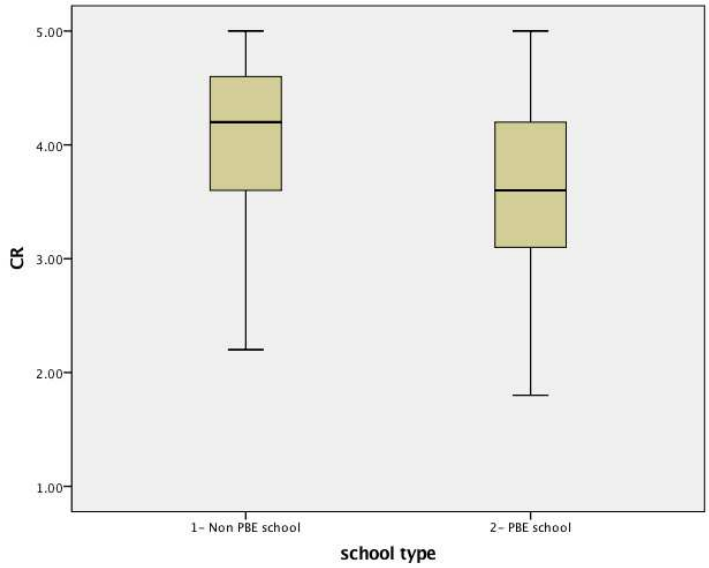

Figure 8. Box and Whisker Plot for Community Relations scale.

As can be seen by Figure 8, there were no outliers.

The Kolmogorov-Smirnov tests were run with and without the outliers with no change in the results. With the Mann-Whitney U test utilized in this research, Warner (2014) indicates that outliers are not a problem in non-parametric analyses and can be left alone.

Hypotheses

Null Hypothesis One

The first null hypothesis states, **$H_0$1:** There is no statistically significant difference between the teachers' assessments of physical environment in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G. In order to investigate this hypothesis, an independent samples *t*-test was conducted. The use of an independent samples *t*-test is appropriate when the dependent variable is continuous in nature and the independent variable is a dichotomous, nominal-level discrete variable. These criteria are satisfied under the current circumstances. The results are reported in Table 5. It was found that the domain of physical environment yielded a statistically significant difference as a function of the independent variable (t=6.18; p=0.000). Levene's test for homogeneity of variance shows that the data are homoscedastic (F=0.409; p=0.523). The analysis indicates that teachers in non-proficiency-based schools (M=3.93) have a slightly higher score on physical environment relative to teachers in proficiency-based schools (M=3.33), therefore the null is rejected with p <.006. The data was run with and without outliers with no change in results.

Due to violations that the Shapiro-Wilks test and the Kolmogorov-Smirnov test showed, assumption of normality was not tenable (Green and Salkind, 2014). For the K-S test, in the domain of physical environment, non-proficiency-based, D(124)=.178, p=.000 and proficiency-based, D(81)=.100, p=.045. With these violations of normality evident, a non-parametric test, Mann-Whitney U was conducted. The use of the Mann-Whitney U test is appropriate when assumption of normality is not tenable (Warner, 2013). This criterion is satisfied under the current circumstances. The results are reported in Table 6. It was found that the domain of physical environment yielded a statistically significant difference. The analysis indicates that

teachers in non-proficiency-based schools (M=123.09) have a slightly higher average rank on physical environment relative to teachers in proficiency-based schools (M=72.24), Z = -6.017; p = 0.000. Therefore, the null is rejected with p <.006. It is important to note that these results agree with the *t* test results above.

Null Hypothesis Two

The second null hypothesis states, **$H_0$2:** There is no statistically significant difference between the teachers' assessments of faculty relations in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G. In order to investigate this hypothesis, an independent samples *t*-test was conducted. The use of an independent samples *t*-test is appropriate when the dependent variable is continuous in nature and the independent variable is a dichotomous, nominal-level discrete variable (Ritchey, 2008). These criteria are satisfied under the current circumstances. The results from the independent samples *t*-test are reported in Table 5. The results indicated no significant differences between the teachers' assessments of faculty relations in a proficiency-based high school (M=3.87) and a non-proficiency-based high school (M=4.00), (t=1.37; p=0.172). Based on the non-significant results, the researcher failed to reject the null hypothesis. The data was run with and without outliers with no change in results.

Due to violations that the Shapiro-Wilks test and the Kolmogorov-Smirnov test showed, assumption of normality was not tenable (Green and Salkind, 2014). For the K-S test, in the domain of faculty relations, non-proficiency-based, D(119)=.116, p=.000 and proficiency-based, D(79)=.110, p=.018. With these violations of normality evident, a non-parametric test, Mann-Whitney U was conducted. The use of the Mann-Whitney U test is appropriate when assumption of normality is not tenable (Warner, 2013). This criterion is satisfied under the current

circumstances. The results are reported in Table 6. The results indicated there were no significant differences between the teachers' assessments of faculty relations in a proficiency-based high school (M=90.09) and a non-proficiency-based high school (M=105.75), Z = -1.886; p = .059. Based on the non-significant results, the researcher failed to reject the null hypothesis. It is important to note that these results agree with the t test results above.

Null Hypothesis Three

The third null hypothesis states, **$H_0$3:** There is no statistically significant difference between the teachers' assessments of student interactions in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G. In order to investigate this hypothesis, an independent samples t-test was conducted. The use of an independent samples t-test is appropriate when the dependent variable is continuous in nature and the independent variable is a dichotomous, nominal-level discrete variable (Ritchey, 2008). These criteria are satisfied under the current circumstances. The results are reported in Table 5. It was found that the domain of student interactions yielded a statistically significant difference as a function of the independent variable (t=2.66; p=0.008). Levene's test for homogeneity of variance shows that the data are homoscedastic (F=0.860; p=0.355). The analysis indicates no significant differences between the teachers' assessments of student interactions in non-proficiency-based schools (M=3.95) and proficiency-based schools (M=3.75). The researcher failed to reject the null hypothesis. The data was run with and without outliers with no change in results.

Due to violations that the Shapiro-Wilks test and the Kolmogorov-Smirnov test showed, assumption of normality was not tenable (Green and Salkind, 2014). For the K-S test, in the domain of student interactions, non-proficiency-based, D(116)=.092, p=.018 and proficiency-based, D(81)=.116, p=.009. With these violations of normality evident, a non-parametric test,

Mann-Whitney U was conducted. The use of the Mann-Whitney U test is appropriate when assumption of normality is not tenable (Warner, 2013). This criterion is satisfied under the current circumstances. The results are reported in Table 6. It was found that the domain of student interactions yielded a statistically significant difference. The analysis indicates that teachers in non-proficiency-based schools (M=109.26) have a slightly higher average rank on student interactions relative to teachers in proficiency-based schools (M=84.31), $Z = -3.030$; $p = .002$. Therefore, the null is rejected with $p < .006$. It is important to note that these results do not agree with the *t* test results above.

Null Hypothesis Four

The fourth null hypothesis states, **$H_0$4:** There is no statistically significant difference between the teachers' assessments of leadership and decisions in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G. In order to investigate this hypothesis, an independent samples *t*-test was conducted. The use of an independent samples *t*-test is appropriate when the dependent variable is continuous in nature and the independent variable is a dichotomous, nominal-level discrete variable (Ritchey, 2008). These criteria are satisfied under the current circumstances. The results are reported in Table 5. The results indicated no significant differences between the teachers' assessments of leadership and decisions in a proficiency-based high school (M=3.65) and a non-proficiency-based high school (M=3.88), (t=1.99; p=0.047). Levene's test for homogeneity of variance shows that the data are homoscedastic (F=0.698; p=0.405). Based on the non-significant results, the researcher failed to reject the null hypothesis. The data was run with and without outliers with no change in results.

Due to violations that the Shapiro-Wilks test and the Kolmogorov-Smirnov test showed, assumption of normality was not tenable (Green and Salkind, 2014). For the K-S test, in the

domain of leadership and decisions, non-proficiency-based, D(115)=.103, p=.004 and proficiency-based, D(77)=.096, p=.078. With these violations of normality evident, a non-parametric test, Mann-Whitney U was conducted. The use of the Mann-Whitney U test is appropriate when assumption of normality is not tenable (Warner, 2013). This criterion is satisfied under the current circumstances. The results are reported in Table 6. The results indicated there were no significant differences between the teachers' assessments of leadership and decisions in a proficiency-based high school (M=84.82) and a non-proficiency-based high school (M=104.32), Z = -2.385; p = .017. Based on the non-significant results, the researcher failed to reject the null hypothesis. It is important to note that these results agree with the *t* test results above.

Null Hypothesis Five

The fifth null hypothesis states, **$H_0$5:** There is no statistically significant difference between the teachers' assessments of the discipline environment in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G. In order to investigate this hypothesis, an independent samples *t*-test was conducted. The use of an independent samples *t*-test is appropriate when the dependent variable is continuous in nature and the independent variable is a dichotomous, nominal-level discrete variable (Ritchey, 2008). These criteria are satisfied under the current circumstances. The results from the independent samples *t*-test are reported in Table 5. The results indicated no significant differences between the teachers' assessments of the discipline environment in a proficiency-based high school (M=3.83) and a non-proficiency-based high school (M=3.91), (t=1.00; p=0.321). Based on the non-significant results, the researcher failed to reject the null hypothesis. The data was run with and without outliers with no change in results.

Due to violations that the Shapiro-Wilks test and the Kolmogorov-Smirnov test showed, assumption of normality was not tenable (Green and Salkind, 2014). For the K-S test, in the domain of discipline environment, non-proficiency-based, D(113)=.121, p=.000 and proficiency-based, D(74)=.103, p=.052. With these violations of normality evident, a non-parametric test, Mann-Whitney U was conducted. The use of the Mann-Whitney U test is appropriate when assumption of normality is not tenable (Warner, 2013). This criterion is satisfied under the current circumstances. The results are reported in Table 6. The results indicated there were no significant differences between the teachers' assessments of the discipline environment in a proficiency-based high school (M=86.75) and a non-proficiency-based high school (M=98.75), Z = -1.485; p = .138. Based on the non-significant results, the researcher failed to reject the null hypothesis. It is important to note that these results agree with the t test results above.

Null Hypothesis Six

The sixth null hypothesis states, **$H_0$6:** There is no statistically significant difference between the teachers' assessments of learning and assessment in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G. In order to investigate this hypothesis, an independent samples t-test was conducted. The use of an independent samples t-test is appropriate when the dependent variable is continuous in nature and the independent variable is a dichotomous, nominal-level discrete variable (Ritchey, 2008). These criteria are satisfied under the current circumstances. The results from the independent samples t-test are reported in Table 5. The results indicated no significant differences between the teachers' assessments of learning and assessment in a proficiency-based high school (M=3.89) and a non-proficiency-based high school (M=3.91), (t=0.32; p=0.750). Based on the non-significant results, the researcher failed to reject the null hypothesis. The data was run with and

without outliers with no change in results.

Due to violations that the Shapiro-Wilks test and the Kolmogorov-Smirnov test showed, assumption of normality was not tenable (Green and Salkind, 2014). For the K-S test, in the domain of learning and assessment, non-proficiency-based, D(110)=.112, p=.002 and proficiency-based, D(77)=.097, p=.068. With these violations of normality evident, a non-parametric test, Mann-Whitney U was conducted. The use of the Mann-Whitney U test is appropriate when assumption of normality is not tenable (Warner, 2013). This criterion is satisfied under the current circumstances. The results are reported in Table 6. The results indicated there were no significant differences between the teachers' assessments of learning and assessment in a proficiency-based high school (M=92.25) and a non-proficiency based high school (M=95.23), Z = -.371; p = .711. Based on the non-significant results, the researcher failed to reject the null hypothesis. It is important to note that these results agree with the *t* test results above.

Null Hypothesis Seven

The seventh null hypothesis states, **$H_0$7:** There is no statistically significant difference between the teachers' assessments of attitude and culture in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G. In order to investigate this hypothesis, an independent samples *t*-test was conducted. The use of an independent samples *t*-test is appropriate when the dependent variable is continuous in nature and the independent variable is a dichotomous, nominal-level discrete variable (Ritchey, 2008). These criteria are satisfied under the current circumstances. The results are reported in Table 5. It was found that the domain of attitude and culture yielded a statistically significant difference as a function of the independent variable (t=2.86; p=0.004). Levene's test for homogeneity of variance shows that

the data are homoscedastic (F=0.199; p=0.656). The analysis indicates that teachers in non-proficiency-based schools (M=3.88) have a slightly higher score in the domain of attitude and culture relative to teachers in proficiency-based schools (M=3.59), therefore the null is rejected with p <.006. The data was run with and without outliers with no change in results.

Due to violations that the Shapiro-Wilks test and the Kolmogorov-Smirnov test showed, assumption of normality was not tenable (Green and Salkind, 2014). For the K-S test, in the domain of attitude and culture, non-proficiency-based, D(108)=.085, p=.051 and proficiency-based, D(75)=.095, p=.094. With these violations of normality evident, a non-parametric test, Mann-Whitney U was conducted. The use of the Mann-Whitney U test is appropriate when assumption of normality is not tenable (Warner, 2013). This criterion is satisfied under the current circumstances. The results are reported in Table 6. It was found that the domain of attitude and culture yielded a statistically significant difference. The analysis indicates that teachers in non-proficiency based schools (M=102.06) have a slightly higher average rank on attitude and culture relative to teachers in proficiency-based schools (M=77.52), Z = -3.085; p = .002. Therefore, the null is rejected with p <.006. It is important to note that these results agree with the t test results above.

Null Hypothesis Eight

The eighth null hypothesis states, **$H_0$8:** There is no statistically significant difference between the teachers' assessments of community relations in a proficiency-based high school and a non-proficiency-based high school as measured by the SCAI-S-G. In order to investigate this hypothesis, an independent samples t-test was conducted. The use of an independent samples t-test is appropriate when the dependent variable is continuous in nature and the independent variable is a dichotomous, nominal-level discrete variable (Ritchey, 2008). These

criteria are satisfied under the current circumstances. The results are reported in Table 5. It was found that the domain of community relations yielded a statistically significant difference as a function of the independent variable (t=4.09; p=0.000). Levene's test for homogeneity of variance shows that the data are homoscedastic (F=3.228; p=0.074). The analysis indicates that teachers in non-proficiency-based schools (M=4.07) have a slightly higher score in the domain of community relations relative to teachers in proficiency-based schools (M=3.64), therefore the null is rejected with p <.006. The data was run with and without outliers with no change in results.

Due to violations that the Shapiro-Wilks test and the Kolmogorov-Smirnov test showed, assumption of normality was not tenable (Green and Salkind, 2014). For the K-S test, in the domain of community relations, non-proficiency-based, D(107)=.115, p=.001 and proficiency-based, D(80)=.097, p=.061. With these violations of normality evident, a non-parametric test, Mann-Whitney U was conducted. The use of the Mann-Whitney U test is appropriate when assumption of normality is not tenable (Warner, 2013). This criterion is satisfied under the current circumstances. The results are reported in Table 6. It was found that the domain of community relations yielded a statistically significant difference. The analysis indicates that teachers in non-proficiency based schools (M=106.90) have a slightly higher average rank on community relations relative to teachers in proficiency-based schools (M=76.74), Z = -3.784; p = .000. Therefore, the null is rejected with p <.006. It is important to note that these results agree with the t test results above.

Table 5

Independent Samples t-Test Results,8 domains of SCAI-S-G

	Non-PBE schools		PBE schools			
Variables	M	SD	M	SD	*T*	*p*
Physical Environment	3.93	0.66	3.33	0.71	6.18	0.000
Faculty Relations	4.00	0.67	3.87	0.59	1.37	0.172
Student Interactions	3.95	0.56	3.75	0.49	2.66	0.008
Leadership & Decisions	3.88	0.81	3.65	0.77	1.99	0.047
Discipline & Environment	3.91	0.63	3.83	0.58	1.00	0.321
Learning & Assessment	3.91	0.62	3.89	0.61	0.32	0.750
Attitude & Culture	3.88	0.66	3.59	0.66	2.86	0.004
Community Relations	4.07	0.65	3.64	0.77	4.09	0.000

NOTE: n = 212; all p-values are for two-tailed tests.

Table 6

Mann Whitney U test ,8 domains of SCAI-S-G Results,8 domains of SCAI-S-G

	Non-PBE schools	PBE schools		
Variables	Mean Rank	Mean Rank	*Z*	*p*
Physical Environment	123.09	72.24	-6.017	0.000
Faculty Relations	105.75	90.09	-1.886	0.059
Student Interactions	109.26	84.31	-3.030	0.002
Leadership & Decisions	104.32	84.82	-2.385	0.017
Discipline & Environment	98.75	86.75	-1.485	0.138
Learning & Assessment	95.23	92.25	-0.371	0.711
Attitude & Culture	102.06	77.52	-3.085	0.002
Community Relations	106.90	76.74	-3.784	0.000

NOTE: n = 212; all p-values are for two-tailed tests.

CHAPTER FIVE: CONCLUSIONS

Overview

This chapter begins with a discussion of the results and implications of this study in light of the theory and research outlined in the literature review. The chapter presents the limitations of the study and concludes with recommendations for future study.

Discussion

The purpose of this quantitative, causal comparative study was to find out whether proficiency-based education, through the perspective of high school teachers, impacts school climate. Proficiency-based education is a shift in thinking for many and emphasizes student-centered learning (Starr, 2011). Throughout the United States, various schools have shifted to proficiency-based education but the research is limited on whether or not this system of instruction impacts school climate (CompetencyWorks, 2015). Prior research indicated the positive effects of the proficiency-based model in regard to student learning and engagement, teacher collaboration and satisfaction, and academic performance (CompetencyWorks, 2015, Tschannen-Moran & Gareis, 2015). Proficiency-based education also provides for the needs of the individual found in the works of Maslow (1943) and Ryan and Deci (2000) concerning the theory of human motivation.

With the push for academic reform through proficiency-based education, Thapa et al. (2013) pointed out that positive school climate is an important consideration in strengthening instructional supports and called for more research on school climate linked to various curriculum models or interventions. Therefore, school climate was examined through the lens of the proficiency and non-proficiency based model, addressing eight domains of school climate.

The first research hypothesis sought to discover if a statistically significant difference existed between the teachers' assessments of physical environment in a proficiency-based high school and a non-proficiency-based high school. The physical environment includes the setting of the school, how others view it and the custodial staff and their expectations. While physical environment may not directly affect the teaching model utilized in a school, it does impact school climate and is important to consider when looking at the overall perceptions of school climate. The analysis indicates that teachers in non-proficiency-based schools scored slightly higher on physical environment relative to teachers in proficiency-based schools. Based on these results, the null hypothesis was rejected. Uline et al. (2010) points out that poorer facilities may detract from good teachers taking jobs in such environments and this in turn impacts school climate. This research does not indicate the condition of the facilities in the sample schools. Therefore, further research is necessary to investigate whether or not there is a difference in the physical environment of each type of school and whether this in fact does impact school climate. Research indicates that physical environment, however, is important for any instructional model. Maslow's theory of human motivation also highlights the importance of a safe physical environment in order for an individual to meet their full potential (Maslow, 1942; Ryan & Deci, 2000).

The second research hypothesis sought to discover whether a statistically significant difference occurred between the teacher's assessments of faculty relations in a proficiency-based high school and a non-proficiency-based high school. Faculty relations pertains to the level of respect and collaboration between faculty members (ASSC, 2015). The results indicated no significant differences and, based on this non-significance, the researcher failed to reject the null hypothesis.

Despite no significant differences between the two models of instruction in relation to this research project, research does indicate that collaboration is important and may foster relationships that are key to a positive school climate (CompetencyWorks, 2015; Sturgis, 2015). The proficiency-based education model places a strong emphasis on teachers working collaboratively with students and colleagues (Melville et al., 2012; Sturgis, 2015). For this reason, it is interesting to note that there were no significant differences. The teachers in the non-proficiency-based school had a higher rank (105.79) than the teachers in the proficiency-based school (90.09) showing that collaboration and relationships seem to be stronger in the non-proficiency based schools. This is contrary to the literature. This may be due in part to the type of leadership that is present in each school type. Administrative leadership that supports collaboration and relationship building fosters a positive school climate (Conner, 2014). Troman (2008) also found that relationships matter to teachers as they discussed their opinions on school climate. Nevertheless, with the huge shift in the teaching and learning model of proficiency-based education, and the time required to implement new models of instruction, educators may be sacrificing collegial relationships. With the means in both schools very close, (Non-PBE, M=4.00; PBE, M=3.87) further research is needed in this area.

The third research hypothesis sought to discover whether there was a statistically significant difference between the teacher's assessments of student interactions in a proficiency-based high school and a non-proficiency-based high school. Student interactions as measured by the SCAI-S-G examine peer relationships and a teacher's perspective on whether those interactions are intentional or accidental. The results of the analysis indicated teachers in a non-proficiency based school had a slightly higher score on student interactions than teachers in proficiency-based schools, therefore the researcher rejected the null hypothesis.

These findings were surprising in light of the emphasis that proficiency-based education places on student interactions and peer relationships. The proficiency-based model should support and cultivate a sense of belonging and relatedness through small group learning and smaller learning communities within the school (Dweck et al., 2014). Positive faculty relationships may act as a role model for students and impact student interactions (Conner, 2014). With faculty relations in non-proficiency-based schools showing a higher rank than the proficiency-based schools, and research indicating a correlation between faculty relations and student interactions, further research in this area would be appropriate. The stress of educational reform may impact both faculty relations and student interactions.

The fourth research hypothesis sought to discover whether there was a statistically significant difference between the teacher's assessments of leadership and decisions in a proficiency-based high school and a non-proficiency-based high school. Leadership and decisions on the SCAI-S-G examines the administrative leadership style in the school. The results indicated no significant differences and, based on this non-significance, the researcher failed to reject the null hypothesis.

Due to the need for the Bonferroni correction, the alpha level was set very low, at .006. If the usual alpha level of .05 had been used, then the null hypothesis would have been rejected. In order to determine whether or not there is a difference in teachers' assessments of leadership and decisions between these two types of schools, further research is needed in this area.

Leadership is important in determining school climate (Hough & Schmitt, 2011; May & Sanders; Southern Regional Education Board, 2009, 2012; Zullig et al., 2010). This research project indicated that there was no difference in school climate in relation to leadership and decisions. Further research in this area may be beneficial as schools experience educational

reform and change. Beaudoin (2011) shared that transformational leaders are the driving force behind positive school reform and positive school climate. The research on leadership indicates that the type of leadership factors significantly in affecting educational change and creating a positive school climate.

The fifth research hypothesis sought to discover whether there was a statistically significant difference between the teacher's assessments of the discipline environment in a proficiency-based high school and a non-proficiency-based high school. The discipline environment considers discipline styles of the staff and strategies that focus on student responsibility and motivation. The results indicate no significant differences between the teacher's assessments of the discipline environment in a proficiency-based high school and a non-proficiency-based high school. Therefore, the researcher failed to reject the null hypothesis.

Past research on the discipline environment indicated that strong leadership and teacher's management styles affected this domain (Sebastian & Allensworth, 2012; Shindler et al., 2011). Considering the proficiency-based model's emphasis on fostering relationships between teacher and students and the subsequent impact on student behavior and learning, it was surprising that no statistical difference occurred between the two models (Ryan & Deci, 2000; Dweck et al., 2014; Griffin & Galassi, 2010; Sturgis, 2015). Deci (2009) denotes the importance of the self-determination theory in building relationships that in turn fosters positive school climate. It is unclear, however, whether the teachers involved in this research project have internalized this importance thereby impacting the results. Furthermore, with the stress of educational reform, teachers in proficiency-based schools may be struggling to manage classrooms built around small group instruction and individual student needs (Anari, 2012; Lim & Eo, 2014; Stauffer & Mason, 2013; Thapa et al., 2013). Further research in this area is appropriate.

The sixth research hypothesis sought to discover whether there was a statistically significant difference between the teacher's assessments of learning and assessment in a proficiency-based high school and a non-proficiency-based high school. Learning and assessment examines learner-centered classrooms and clear targets. The results of the research analysis indicate no significant differences between the teachers' assessment of learning and assessment in a proficiency-based high school and a non-proficiency-based high school. Based on the non-significant results, the researcher failed to reject the null hypothesis.

These findings were unexpected with the strong emphasis that proficiency-based education places on the learner. Proficiency-based education emphasizes individual academic support to assist the learner in mastery of learning targets at the learner's own pace (CompetencyWorks, 2015; Maine Department of Education, 2015). This model also provides cognitive scaffolding that gives individual support to the student and their needs (Dweck et al., 2014). With only a slightly higher rank in the non-proficiency-based school (95.23) than the proficiency-based school (92.25) in regard to learning and assessment, this seems to indicate what past research has shown, any classroom or school that focuses on individual student needs positively impacts school climate (Hoy, 2012). Further research in the area of learning and assessment and various teaching models may be appropriate.

The seventh research hypothesis sought to discover whether there was a statistically significant difference between the teacher's assessments of attitude and culture in a proficiency-based high school and a non-proficiency-based high school. Attitude and culture examines social and communal bonds within the school and how teachers and students feel connected to the school. The results of the analysis indicated that teachers in non-proficiency-based schools

scored slightly higher in the domain of attitude and culture relative to teachers in proficiency-based schools and therefore, the researcher rejected the null hypothesis.

The literature addressed a strong need for teachers and students to feel connected to the school and hold a sense of belonging that, in turn, positively affects school climate (Friedlaender et al., 2014, Frehill & Dunsmuir, 2015; Goodenow & Grady, 1993). The proficiency-based education model emphasizes relationships and collaboration (Dweck et al., 2014; Maine Department of Education, 2015) and, therefore, it was remarkable that the results of the analysis showed a higher score in non-proficiency-based schools in the domain of attitude and culture. This result may indicate that it is not necessarily the model of education used but the vision and leadership style of the school staff that affects the domain of attitude and culture. Stress on teachers and students, that educational reform brings to the school and classroom, may also impact the results (Anari, 2012; Lim & Eo, 2014; Maine Department of Education, 2015; Stauffer & Mason, 2013).

The eighth research hypothesis sought to discover whether there was a statistically significant difference between the teacher's assessments of community relations in a proficiency-based high school and a non-proficiency-based high school. The domain of community relations examines the perceptions of teacher's attitudes in relation to the community including parents and community members. Based on the analysis, teachers in non-proficiency based schools have a slightly higher rank in the domain of community relations relative to teachers in proficiency-based schools. Therefore, the researcher rejected the null hypothesis.

According to the research, building school-family-community relations starts with good communication. Schools need to engage parents and community members in the educational process (Griffin & Galassi, 2010; Jeynes, 2007). This becomes extremely important as

communities, in general, maintain strong, long-held beliefs regarding education making good communication vital in helping the school community understand the shift to proficiency-based education. With the push for proficiency-based education and educational reform, community relations should be noted as an important part of the process. Schools must clearly communicate the changes that are taking place in regard to teaching models, grading and graduation. If the school community does not understand the reason for educational reform, they will want to hold on to what they have known in education and possibly retain negative feelings towards change such as in the proficiency-based education model (Griffin & Galassi, 2010; Jeynes, 2007; Schwahn & McGarvey, 2011). With the non-proficiency-based schools in this research showing a higher rank (106.90) than the proficiency-based schools (76.74), community relations must be strengthened in order to build a positive school climate that will ultimately impact the success of students in a proficiency-based model.

Implications

This research study added to the body of knowledge on school climate and proficiency-based education through the lens of school climate. This research also adds to the literature on school climate and its importance in the process of educational reform and change. Through the analysis of data, it was found that there was a statistical difference in four domains of school climate with non-proficiency-based schools showing a slightly higher score than proficiency-based schools: physical environment, student interactions, attitude and culture and community relations. The researcher feels strongly that the higher ranks in these areas are due to the many forces that are present in the midst of educational reform. Schools that are in the process of change should look closely at building strong faculty and student relationships. The literature addressed the strong need for school connectedness which in turn strengthens trust (Frehill &

Dunsmuir, 2015; Goodenow & Grady, 1993; Kouzes & Posner, 2012). This trust is foundational for successful change to happen both in the school and community. Community relations is an important part of school climate and student success (Ice, Thapa & Cohen, 2015; Perkins, 2008). The non-proficiency-based schools showed a higher rank than the proficiency-based schools. This may be an indication that the school community does not have a strong understanding of proficiency-based education. As schools experience educational change, it is important for school leadership to build and encourage a working relationship with the community by providing information and opportunities for the school community to understand how and why the changes are taking place.

There was no statistically significant difference between non-proficiency-based schools and proficiency-based schools in the domains of faculty relations, leadership and decisions, discipline and learning and assessment. While these results were surprising, in light of the components of the proficiency-based model that encompass student-centered learning, relationships and autonomy, the information is useful for schools as they strive to build a positive school climate in the midst of educational change (Khan, 2012; Schwahn & McGarvey, 2011). The literature indicated that teacher stress and burnout comes with major shifts in school reform (Anari, 2012; Lim & Eo, 2014; Stauffer & Mason, 2013). At this time of educational reform in New England, it is possible that teachers in proficiency-based schools are feeling more stress and burnout due to the vast changes in the grading system, graduation requirements and curriculum that proficiency-based education requires of teachers and schools. Consequently, this may have impacted the results especially in the area of faculty relations and learning and assessment. As teachers make curriculum changes, the amount of work increases along with an increase in stress levels.

The researcher feels that the discipline environment is impacted once again by the stress of educational change. Teachers in proficiency-based schools may be struggling to manage classrooms where individualized student instruction and needs are emphasized. Teachers must also learn to give up control and teach students how to take responsibility for their learning. School leadership is important in assisting teachers to manage classrooms built around the needs of the students by providing professional development and support in this area.

The findings of this research in the area of leadership and decisions showed non-proficiency-based schools with a higher mean, and a very low difference. Further research in this area should be conducted, as prior research has indicated the leadership in the school plays a significant part in the process of school reform and the change process (May & Sanders, n.d.; May & Supovitz, 2011; Park, 2012; Sebastian & Allensworth, 2012). Proficiency-based education is a model that requires teachers to give up long-held beliefs and past research indicates a principal's leadership style contributes to a positive school climate that embraces change and innovation (Park, 2012; Starr, 2011). With proficiency-based education at the forefront of educational change, schools should closely examine the type of leaders that can move the school towards positive change. It is the opinion of the researcher that effective leadership is vital in the midst of educational change and plays an important role in affecting each of the eight domains that impact school climate.

As research indicates, positive school climate is important to student success and schools in the midst of educational change must find ways to promote a positive school climate. While this research project did not show a correlation between positive school climate and the proficiency-based model, it did add to the literature on the importance of leadership and the foundations that must be present in order to successfully navigate educational reform.

As schools continue the shift to proficiency-based education, further research as to the impact of this model will add to a better understanding of its effect on school climate and education.

Limitations

There are several imitations of the study. First, obtaining good response rates from teachers proved difficult, consequently, the researcher added more schools as the study progressed, thereby limiting the threat of a poor sample but adding to the number of schools in the study. Many schools across the United States and in New England are either exploring, transitioning or fully implemented in the proficiency-based model and this impacted the availability of schools to obtain a good sample. In order to limit this threat, the researcher defined the proficiency based schools as fully implemented as defined by the use of a proficiency based report card. Schools also were not asked how long they had been fully implemented in regard to proficiency-based education which may impact the findings. With schools moving to a proficiency-based model, it is recognized that with any change comes a certain amount of stress and many hours of hard work which may have impacted how teachers in proficiency-based schools responded to the survey and ultimately impacted school climate (Brand et al., 2008; Stauffer & Mason, 2013; Zullig et al., 2010). It was also difficult to get teachers to respond as the researcher did not have direct access to teacher emails and instead went through the principals. Another limitation was that the researcher depended on the principals in each school to disseminate the survey link so that respondents stayed anonymous. However, this possibly impacted the response rates as well. Another limitation of the study was that this survey only included schools in New England that were identified as proficiency-based or non-proficiency-based schools by the principals and district administration. Also, this study only targeted high

schools so it is not generalizable to all schools. Finally, a limitation that should be noted is that the personal life experiences of staff members may affect their view of school climate (Connolly, James & Beales, 2011).

Recommendations for Future Research

1. The leadership of the schools should be researched to find out if there is any correlation between the types of leadership in the schools and the impact on school climate in proficiency-based and non-proficiency-based schools.
2. Further research in school climate and student outcomes may be appropriate (Wolf et al., 2013).
3. Conducting the research through the lens of the student and parent population would assist in finding correlations between school climate and proficiency-based education.
4. Further research should investigate the extent to which the physical environment might impact a student's attitudes and behaviors in different educational models (Uline et al., 2010)
5. A qualitative study may be appropriate in the area of school climate and types of teaching models.
6. Further research on the impact of self-actualization linked to student success within the proficiency-based model may be beneficial.

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APPENDIX A

Permission to Use Survey Instrument

Kay York <kyork@sad42.us> Aug 24

to jshindl

Dear Mr. Shindler,

I am a doctoral student interested in using the SCAI survey with at least 200 teachers of both traditional and standards based classrooms to find out if there is a difference in school climate between these two types of schools. Due to the rural nature of many schools in Maine and the smaller teacher populations, I need to look at several schools data on school climate to get an appropriate effect size. My research question is as follows: Is there a difference between the teachers' assessments of school climate in a proficiency-based high school and the teachers' assessments of school climate in a non-proficiency based high school as measured by.....(school climate survey).

I am wondering if your survey would be a good fit and if so, would you grant me permission to use it? I appreciate your time.

Thank you,
Kay York

Shindler, John <jshindl@exchange.calstatela.edu> Aug 25

to me

Hi Kay,
We would be happy to provide you printable versions. But you may want to process the survey online. In that case there are a number of benefits such as having the data in xls and spss files, but we would need to include a small fee to make it fair.
I think the SCAI will be useful with your research question. You may find that different dimension reflect different results which would be useful data.
Let me know how we can help,
John

APPENDIX B

Script for Initial Phone Contact of Principals

Thank you for taking my call. My name is Kay York and I am a principal in Northern Maine at Central Aroostook Junior Senior High School and also currently a doctoral student at Liberty University. I am currently working on my dissertation focusing on traditional and proficiency-based education and the impact, if any, on school climate. I am contacting high school teachers throughout New England in both proficiency-based and non-proficiency based schools to assist in the research.

The goal of the research is to find out if there is a difference between the teachers' assessments of school climate in a proficiency-based high school and the teachers' assessments of school climate in a non-proficiency-based high school. Conclusions and recommendations from the study will provide valuable information for schools as educators seek instruction methods and a school climate that meets the needs of students in the twenty-first century.
For the purposes of this study, proficiency-based education is defined by Maine Department of Education as any system of academic instruction, assessment, grading and reporting that is based on students demonstrating mastery of the knowledge and skills they are expected to learn before they progress to the next lesson, get promoted to the next grade level or receive a diploma. If students struggle to meet minimum expected standards, they receive additional instruction, practice time and academic support to help them achieve proficiency, but they do not progress in their education until expected standards are met.

I have been given information by the state department of education in your state that your school is identified as a proficiency-based school, evidenced by the use of a proficiency-based report card.

Or

I have been given information by the state department of education in your state that your school uses a traditional report card and that you are not a proficiency-based school.

I am asking for your help in providing a link to the teachers in your school to take a short, anonymous, 20-minute survey that will provide valuable insight in regard to school climate and proficiency-based education.

Would you be willing to help me with this? If so, I will email you a follow up letter with a request for a letter of permission on school letterhead for your staff to participate in the survey. I appreciate your time and thank you for your support.

APPENDIX C

Participant E-mail

Dear Colleague,

I have spoken with your principal and received permission to contact you regarding participation in a research project that will involve taking a short, anonymous survey on school climate. I am a doctoral student at Liberty University as well as a fellow New England educator. I am currently working on my dissertation focusing on traditional and proficiency-based education and the impact, if any, on school climate. I am contacting high school teachers throughout New England in both proficiency-based and non-proficiency based schools to assist in the research.

The goal of the research is to find out if there is a difference between the teachers' assessments of school climate in a proficiency-based high school and the teachers' assessments of school climate in a non-proficiency-based high school. Conclusions and recommendations from the study will provide valuable information for schools as educators seek instruction methods and a school climate that meets the needs of students in the twenty-first century.

This voluntary survey will take about twenty minutes to complete and you may opt out at any time. By completing and submitting the survey, you are consenting to participate in this educational research. A response by September 16, 2016 would be greatly appreciated!

Follow this link to the Survey, marking only one description per item:
XXXXX

Or copy and paste the URL into your internet browser:

If you would prefer a paper copy of the survey, please contact me at kyork3@liberty.edu.

If you have any questions concerning the study and/or the survey, please contact me at kyork3@liberty.edu.
Thank you for your consideration and support in this research effort.

Sincerely,

Kay York
Liberty University Doctoral Candidate

APPENDIX D

CONSENT FORM

A Causal Comparative Study on the Effect of Proficiency-based Education on School Climate

Kay York
Liberty University
School of Education

You are invited to take part in a research study on school climate and whether or not it is impacted by the absence or presence of proficiency-based education. You were selected as a possible participant because you teach in either a proficiency-based or non proficiency-based school. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

Kay York, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is is to understand if proficiency-based education has an effect on school climate. A positive school climate has been shown to impact a student's learning. Proficiency-based education provides a framework of instruction that includes formative and summative assessments that are based on individual students' mastery of learning targets or standards before a student can progress to the next lesson or level. The proficiency-based model provides key elements that promote teacher and student satisfaction and therefore may impact school climate.

Procedures: If you agree to be in this study, I would ask you to do the following things:

1. Participants will be asked to take a short, online climate survey that should take about 20 minutes or less.
2. The data collection is anonymous. The survey responses cannot be traced back to individual participants.

Risks and Benefits of being in the Study: There are no known potential risks to participants.

Participants should not expect to receive direct benefits from completing the survey. However, possible benefits to society include information to understand how better to meet the educational needs of students in today's world.

Compensation: You will receive no compensation for taking part in this study.

Confidentiality: The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject or school. Research records will be stored securely. Only the researcher will have access to the records.

The online link for the survey is a private, secure system through The Alliance for the Study of School Climate (ASSC). The data is password protected. The report link is password protected as well and will only be available to the researcher.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting your survey responses without affecting those relationships.

Contacts and Questions: The researcher conducting this study is Kay York. You may email her any questions you have now. If you have questions later, you are encouraged to contact Kay at **kyork3@liberty.edu**. You may also contact the researcher's faculty advisor, Dr. Michelle Barthlow, at mjbarthlow@liberty.edu

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Carter 134, Lynchburg, VA 24515 or email at irb@liberty.edu

Please notify the researcher if you would like a copy of this information to keep for your records.

APPENDIX E

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

6/24/2016

Kay York IRB Exemption 2529.062416: A Causal Comparative Study on the Effect of Proficiency-Based Education on School Climate

Dear Kay York,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research

The Graduate School

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APPENDIX F

SCAI-S-G Survey

Directions: Rate each item below. For each item there are three descriptions. Select the rating that best describes the current state at your school as a whole: Level 3 (high), 2 (middle) or 1 (low). If you feel that the practices at your school rate between two of the descriptions provided, select the middle level option. Each item should receive only one rating/mark.

1. Physical Appearance *Level – 3 (high)*	***Level – 2 (middle)***	***Level – 1 (low)***
High	***high-middle middle middle-low***	***low***
1.a----------O---------- O ---------- O ---------- O ---------- O ----------		
Welcoming to outsiders, the school projects its identity to visitors.	Some signage for visitors as they enter the building, but images compete for attention.	Little concern for the image of the school.
1.b----------O---------- O ---------- O ---------- O ---------- O ----------		
Purposeful use of school colors/symbols.	Some use of school colors/symbols but mostly associated with sports.	Students associate school colors with “losers.”
1.c----------O---------- O ---------- O ---------- O ---------- O ----------		
Staff and students take ownership of physical appearance.	Staff regularly comments on school appearance, but students do not feel any sense of personal ownership.	The schools appearance is left solely to the janitorial staff.
1.d----------O---------- O ---------- O ---------- O ---------- O ----------		
No litter.	Litter cleaned at the end of day.	People have given up the battle over litter.
1.e----------O---------- O ---------- O ---------- O ---------- O ----------		
Current student work is displayed to show pride and ownership by students.	Few and/or only top performances are displayed.	Decades-old trophies and athletic records in dusty cases.
1.f ----------O---------- O ---------- O ---------- O ---------- O ----------		
Things work and/or get fixed immediately.	Things get fixed when someone complains enough.	Many essential fixtures, appliances and structural items remain broken.
1.g----------O---------- O ---------- O ---------- O ---------- O ----------		
Staff and students have respect for custodians.	Most staff are cordial with custodians.	Custodians are demeaned.
1.h----------O---------- O ---------- O ---------- O ---------- O ----------		
Graffiti is rare because students feel some sense	Graffiti occurs occasionally, but is dealt with by the staff.	Graffiti occurs frequently and projects the hostility of

of ownership of the school.	students toward their school.

2. Faculty Relations Level – 3 (high)	Level – 2 (middle)	Level –1 (low)
High *high-middle* *middle* *middle-low* *low*		
2.a----------O---------- O ---------- O ---------- O ---------- O ----------		
Faculty members commonly collaborate on matters of teaching.	Most faculty members are congenial to one another, and occasionally collaborate.	Typically faculty members view one another competitively.
2.b----------O---------- O ---------- O ---------- O ---------- O ----------		
Faculty members approach problems as a team/collective.	Faculty members attend to problems as related to their own interests.	Faculty members expect someone else to solve problems.
2.c----------O---------- O ---------- O ---------- O ---------- O ----------		
Faculty members use their planning time constructively and refrain from denigrating students in teacher areas.	Faculty members use time efficiently but feel the need to consistently vent displaced aggression toward students.	Faculty members look forward to time away from students so they can share their “real feelings” about them.
2.d----------O---------- O ---------- O ---------- O ---------- O ----------		
Faculty members are typically constructive when speaking of each other and/or administrators.	Faculty members wait for safe opportunities to share complaints about other teachers and/or administrators.	Faculty members commonly use unflattering names for other faculty and/or administration in private.
2.e----------O---------- O ---------- O ---------- O ---------- O ----------		
Faculty members feel a collective sense of dissatisfaction with status quo, and find ways to take action to improve.	Faculty members give sincere “lip service” to the idea of making things better.	Faculty members are content with the status quo and often resentful toward change-minded staff.
2.f ----------O---------- O ---------- O ---------- O ---------- O ----------		
Faculty members exhibit high level of respect for one another.	Faculty members exhibit respect for a few of their prominent members.	Faculty members exhibit little respect for self or others.
2.g----------O---------- O ---------- O ---------- O ---------- O ----------		
Faculty meetings are attended by most all, and address relevant content.	Faculty meetings are an obligation that most attend, but are usually seen as a formality.	Faculty meetings are seen as a waste of time and avoided when possible.
2.h----------O---------- O ---------- O ---------- O ---------- O ----------		
Staff and all-school events are well attended by faculty.	There are few regular attendees at school events.	Faculty and staff do a minimum of investing in school-related matters.
2.i ----------O---------- O ---------- O ---------- O ---------- O ----------		
Leadership roles are most likely performed by faculty members with other faculty expressing appreciation.	Leadership roles are accepted grudgingly by faculty.	Leadership is avoided, and the motives of those who do take leadership roles are questioned.
2.j----------O---------- O ---------- O ---------- O ---------- O ----------		
Faculty members have the time and interest to commune with one another, and feel very little isolation.	Faculty members congregate in small cordial groups, yet commonly feel a sense that teaching is an isolating profession.	Faculty members typically see no need to relate outside the walls of their class.

3. Student Interactions	Level - 3	Level - 2	Level –1
	High	*high-middle* / *middle* / *middle-low*	*low*
3.a----------O---------- O ---------- O ---------- O ---------- O ----------	Students feel a sense of community, and "school" is defined by the warm regard for the inhabitants of the building.	Students feel as though they have friends and are safe, but the school is just a place to take classes.	Students feel no sense of affiliation with the school or community.
3.b----------O---------- O ---------- O ---------- O ---------- O ----------	Students of various cultures and sub-groups blend, interrelate, and feel like valued members of the community.	Students of various sub-groups most often stay separate.	Various sub-groups are hostile to one another.
3.c----------O---------- O ---------- O ---------- O ---------- O ----------	Students readily accept the purpose of zero tolerance for "put-downs."	Students think put-downs are just part of their language.	Put-downs lead to hostility and even violence.
3.d----------O---------- O ---------- O ---------- O ---------- O ----------	Many students attend school events.	A few regulars attend school events.	It is un-cool to attend school events.
3.e----------O---------- O ---------- O ---------- O ---------- O ----------	"Popular" students feel an obligation to serve the school, not a sense of entitlement.	"Popular" students treat the other popular students well.	"Popular" students use their political capital to oppress those less popular.
3.f ----------O---------- O ---------- O ---------- O ---------- O ----------	Most students feel safe from violence.	Most students don't expect much severe violence but accept minor acts of harassment almost daily.	Most students do not feel safe from violent acts, large or small.
3.g----------O---------- O ---------- O ---------- O ---------- O ----------	Leaders are easy to find due to the wide range of gifts that are validated and harnessed.	Leaders come from a small group of students.	Students avoid leadership for fear of being viewed negatively by peers.
3.h----------O---------- O ---------- O ---------- O ---------- O ----------	Athletes are valued as quality community members and approach their role with a humble sense of honor.	It is assumed that some athletes are just "jerks," and that jocks are not "real students."	Athletes band together to oppress the weaker and more academically-gifted element in the school.
3.i ----------O---------- O ---------- O ---------- O ---------- O ----------	Most students expect to be given ownership over decisions that affect them.	Most students are upset when rights are withdrawn, but typically take little action.	Most students assume that they have few rights.
3.j ----------O---------- O ---------- O ---------- O ---------- O ----------	Most students expect to engage in "authentic learning" activities and to be taught with methods that make them responsible for their own learning.	Most students adjust their expectations to each teacher and focus mainly on doing what it takes to get "the grade."	Most students' expectation of school is that little of value is learned there and real-world learning happens elsewhere.

4. Leadership/Decisions				
	Level - 3	***Level - 2***		***Level – 1***
High	***high-middle***	***middle***	***middle-low***	***low***
4.a----------O---------- O ---------- O ---------- O ---------- O ----------				
School has a sense of vision and a mission that is shared by all staff.		School has a set of policies, a written mission, but no cohesive vision.		School has policies that are used inconsistently.
4.b----------O---------- O ---------- O ---------- O ---------- O ----------				
Vision comes from the collective will of the school community.		Vision comes from leadership.		Vision is absent.
4.c----------O---------- O ---------- O ---------- O ---------- O ----------				
School's decisions are conspicuously grounded in the mission.		Policies and mission exist but are not meaningful toward staff action.		Mission may exist but is essentially ignored.
4.d----------O---------- O ---------- O ---------- O ---------- O ----------				
Vast majority of staff members feel valued and listened to.		Selected staff members feel occasionally recognized.		Administration is seen as playing favorites.
4.e----------O---------- O ---------- O ---------- O ---------- O ----------				
A sense of "shared values" is purposefully cultivated.		Most share a common value to do what is best for their students.		Guiding school values are absent or in constant conflict.
4.f ----------O---------- O ---------- O ---------- O ---------- O ----------				
Staff understands and uses a clear system for selecting priority needs, and has a highly functioning team for "shared decision-making."		There is a SDM committee but most real power is in a "loop" of insiders/decision-makers.		Decisions are made autocratically or accidentally.
4.g----------O---------- O ---------- O ---------- O ---------- O ----------				
Most of the faculty and staff have a high level of trust and respect for leadership.		Some faculty and staff members have respect for leadership.		Most faculty and staff members feel at odds with the leadership.
4.h----------O---------- O ---------- O ---------- O ---------- O ----------				
Teacher leadership is systematic and integral to the school's leadership strategy.		Some teachers take leadership roles when they feel a great enough sense of responsibility.		Leadership is seen as solely the domain of the administration.
4.i ----------O---------- O ---------- O ---------- O ---------- O ----------				
Leadership demonstrates a high level of accountability, and finds ways to "make it happen."		Leadership is highly political about how resources are allocated and often deflects responsibility.		Leadership seems disconnected to outcomes and find countless reasons why "it can't happen."
4.j ----------O---------- O ---------- O ---------- O ---------- O ----------				
Leadership is in tune with students and community.		Leadership has selected sources of info about the community and students.		Leadership is isolated from the students and community.
4.k----------O---------- O ---------- O ---------- O ---------- O ----------				
Leadership is in tune with others' experience of the quality of school climate.		Leadership makes pro forma statements about wanting good school climate.		Leadership does not see school climate as a necessary interest.

5. Discipline Environment				
	Level – 3	***Level - 2***		***Level – 1***
High	***high-middle***	***middle***	***middle-low***	***low***
5.a----------O---------- O ---------- O ---------- O ---------- O ----------				
School-wide discipline policy is consistently applied.		School-wide discipline policy is used by some staff.		School-wide discipline policy exists in writing only.
5.b----------O---------- O ---------- O ---------- O ---------- O ----------				
It is evident from student behavior that there are clear expectations and consistency in the discipline policy.		In many classes there are clear expectations and most teachers are fair and unbiased.		Students have to determine what each teacher expects and behavioral interventions are defined by a high level of subjectivity.
5.c----------O---------- O ---------- O ---------- O ---------- O ----------				
Most teachers use effective discipline strategies that are defined by logical consequences and refrain from punishments or shaming.		Most teachers use some form of positive or assertive discipline but accept the notion that punishment and shaming are necessary with some students.		Most teachers accept the notion that the only thing the students in the school understand is punishment and/or personal challenges.
5.d----------O---------- O ---------- O ---------- O ---------- O ----------				
Classrooms are positive places, and teachers maintain a positive affect, and follow-through with consequences in a calm and non-personal manner.		Most teachers maintain a positive climate, but some days they just feel the need to complain about the class and/or get fed up with the “bad kids.”		Classrooms are places where teachers get easily angered by students and there is a sense of antagonism between the class and the teacher.
5.e----------O---------- O ---------- O ---------- O ---------- O ----------				
Maximum use of student-generated ideas and input.		Occasional use of student-generated ideas.		Teachers make the rules and students should follow them.
5.f----------O---------- O ---------- O ---------- O ---------- O ----------				
Most consider teaching and discipline within the lens of basic student needs that must be met for a functional class.		Most have some sensitivity to student needs, but the primary goal of classroom management is control.		Most view all student misconduct as disobedience and/or the student’s fault.
5.g ----------O---------- O ---------- O ---------- O ---------- O ----------				
Teacher-student interactions could be typically described as supportive and respectful.		Teacher-student interactions could be typically described as fair but teacher-dominated.		Teacher-student interactions are mostly teacher-dominated and reactive.
5.h----------O---------- O ---------- O ---------- O ---------- O ----------				
When disciplining students, teachers typically focus on the problematic behavior, not the student as a person.		When disciplining students, teachers are typically assertive yet often reactive, and give an overall inconsistent message.		When disciplining students, teachers are typically personal and often antagonistic.
5.i----------O---------- O ---------- O ---------- O ---------- O ----------				
Management strategies consistently promote increased student self-direction over time.		Management strategies promote acceptable levels of classroom control over time, but are mostly teacher-centered.		Management strategies result in mixed results: some classes seem to improve over time, while others seem to decline.
5.j ----------O---------- O ---------- O ---------- O ---------- O ----------				
Teachers successfully create a sense of community in their classes.		Teachers successfully create a functioning society in their classes.		Teachers create a competitive environment in their classes.

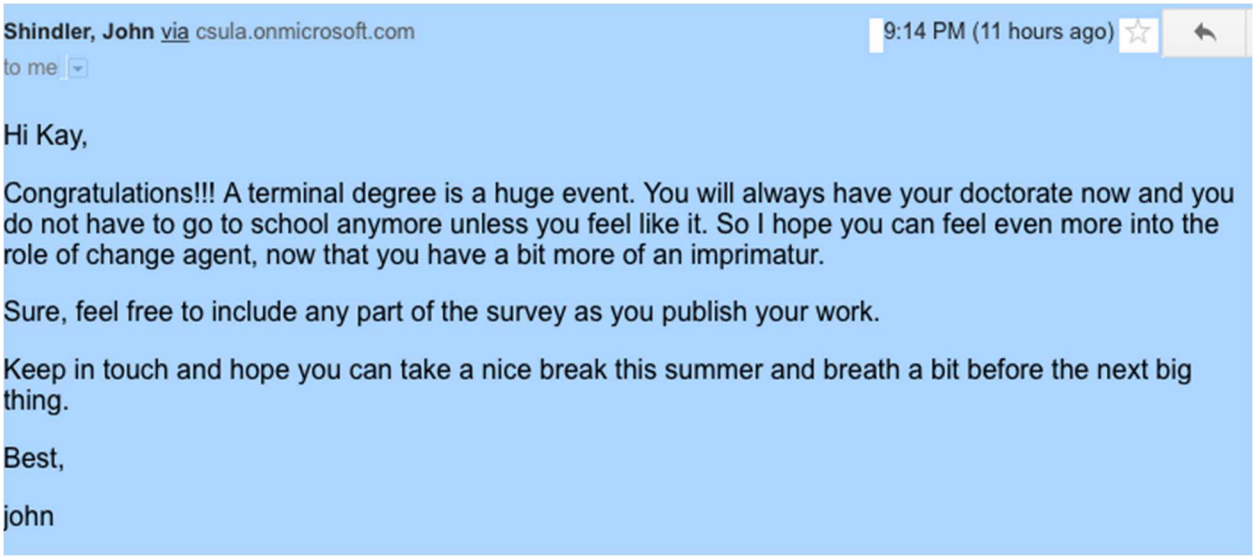
6. Learning/Assessment	Level – 2	Level – 1
Level – 3		
High / high-middle	middle / middle-low	low
6.a----------O---------- O ---------- O ---------- O ---------- O ----------		
Learning targets for assessments are clear and attainable for learners.	Most high-achieving students can find a way to meet the teacher's learning targets.	Students see grades as relating to personal or random purposes.
6.b----------O---------- O ---------- O ---------- O ---------- O ----------		
Instruction/Assessment promotes students' sense of ownership and responsibility for their learning.	Instruction/Assessment is most often focused on relevant learning, yet mostly rewards the high-achievers.	Instruction/Assessment is focused on bits of knowledge that can be explained and then tested.
6.c----------O---------- O ---------- O ---------- O ---------- O ----------		
The grading in most classes focuses on both the end result and the process.	Focusing on the process is encouraged but what is graded is mostly the end result of the work.	The focus of grades is typically the final product.
6.d----------O---------- O ---------- O ---------- O ---------- O ----------		
Teachers have some mode of making sense of, and being responsive to, varying learning styles.	Teachers are aware of learning styles as a concept, and make some attempt in that area.	Teachers expect all students to conform to their teaching style.
6.e----------O---------- O ---------- O ---------- O ---------- O ----------		
Instruction is dynamic, involving, learner-centered, and challenging.	Instruction is mostly based on relevant ideas but often seems to be busy-work.	Instruction is mostly lecture and independent seatwork.
6.f ----------O---------- O ---------- O ---------- O ---------- O ----------		
Students learn to work cooperatively and as members of teams.	Some teachers buy into the idea of cooperative learning.	Cooperative learning is rare as it is seen as leading to chaos and cheating.
6.g----------O---------- O ---------- O ---------- O ---------- O ----------		
Students are given systematic opportunities to reflect on their learning progress.	Mostly higher-level students are given occasional opportunities to reflect on their learning in some classes.	Teaching is seen as providing maximum input, and little opportunity for reflection exists.
6.h----------O---------- O ---------- O ---------- O ---------- O ----------		
Students are seen as the primary users of assessment information, and assessment is used for the purpose of informing the learning process and is never used to punish or shame.	Assessment is seen as something that occurs at the end of assignments. Grades are used primarily for student-to-student comparison.	Assessment is used to compare students to one another and/or to send a message to lazy students.
6.i----------O---------- O ---------- O ---------- O ---------- O ----------		
Classroom dialogue is characterized by higher-order thinking (e.g., analysis, application, and synthesis).	Classroom dialogue is active and engaging but mostly related to obtaining right answers.	Classroom dialogue is infrequent and/or involves a small proportion of students.
6.j ----------O---------- O ---------- O ---------- O ---------- O ----------		
Students consistently feel as though they are learning subjects in-depth.	Students are engaged in quality content, but the focus is mostly on content coverage.	Students feel the content is only occasionally meaningful and rarely covered in-depth.
6.k----------O---------- O ---------- O ---------- O ---------- O ----------		
Teachers promote the view that intelligence and ability are a function of each students' effort and application, and are not fixed. The major emphasis is placed on the process over the product.	Teachers promote the view that effort has a lot to do with how much students are able to accomplish. The major emphasis is placed on working to produce good products.	Teachers promote the view that intelligence and ability are fixed/innate traits and not all students have what it takes. The major emphasis is on the comparison of products/grades.

7. Attitude and Culture	Level – 2	Level – 1
Level – 3		
High / **high-middle**	**middle** / **middle-low**	**low**
7.a----------O---------- O ---------- O ---------- O ---------- O ----------		
Students feel as though they are part of a community.	Students feel as though they are part of a society.	Students feel as though they are visitors in a building.
7.b----------O---------- O ---------- O ---------- O ---------- O ----------		
Students voluntarily correct peers who use destructive and/or abusive language.	Students seek adult assistance to stop blatant verbal abuse.	Students accept verbal abuse as a normal part of their day.
7.c----------O---------- O ---------- O ---------- O ---------- O ----------		
Students feel as though they are working toward collective goals.	Students feel as though they are working toward independent goals.	Students feel as though they are competing with other students for scarce resources.
7.d----------O---------- O ---------- O ---------- O ---------- O ----------		
Students speak about the school in proud, positive terms.	Students speak of the school in neutral or mixed terms.	Students denigrate the school when they refer to it.
7.e----------O---------- O ---------- O ---------- O ---------- O ----------		
Most students feel listened to, represented, and that they have a voice.	Most students see some evidence that some students have a voice.	Most students feel they have very little voice when at school.
7.f ----------O---------- O ---------- O ---------- O ---------- O ----------		
Most students feel a sense of belonging to something larger.	Most students see some evidence that efforts are made to promote school spirit.	Most students feel alone, alienated and/or part of a hostile environment.
7.g----------O---------- O ---------- O ---------- O ---------- O ----------		
Teachers share commonly high expectations for all students.	Most teachers have high expectations for students who show promise.	Often teachers openly express doubts about the potential of some students.
7.h----------O---------- O ---------- O ---------- O ---------- O ----------		
Most students feel as though they owe their school a debt of gratitude upon graduation.	Graduates feel that they had an acceptable school experience.	A high number of students graduate feeling cheated.
7.i----------O---------- O ---------- O ---------- O ---------- O ----------		
Students feel welcome and comfortable in talking to adults and/or designated peer counselors.	Some students have a few staff that they target for advice.	Students assume adults do not have any interest in their problems.
7.j----------O---------- O ---------- O ---------- O ---------- O ----------		
School maintains traditions that promote school pride and a sense of historical continuity.	School maintains traditions that some students are aware of but most see as irrelevant to their experience.	School has given up on maintaining traditions due to apathy.

8. Community Relations	*Level – 2*	*Level – 1*
Level – 3		
High *high-middle*	*middle* *middle-low*	*low*
8.a----------O---------- O ---------- O ---------- O ---------- O ----------		
School is perceived as welcoming to all parents.	School is perceived as welcoming to certain parents.	School is suspicious of why parents would want to visit.
8.b----------O---------- O ---------- O ---------- O ---------- O ----------		
School sends out regular communication to community, including invitations to attend key events.	School sends out pro forma communication that may be plentiful but is not created with the consumers' needs in mind.	School sends out pro forma communication only.
8.c----------O---------- O ---------- O ---------- O ---------- O ----------		
Community members are regularly invited to speak in classes.	Inconvenience leads to few community members speaking in classes.	The vast majority of community members have not seen the inside of the school.
8.d----------O---------- O ---------- O ---------- O ---------- O ----------		
Service learning efforts are regular, promoting student learning and positive community-relations.	Service learning is performed, but very infrequently due to perceived inconvenience.	Service learning is seen as just a glorified field trip and therefore not worth the time or expense.
8.e----------O---------- O ---------- O ---------- O ---------- O ----------		
Parents and coaches all work for the best interest of student-athletes.	Parents support the coaches and teams if things are going well.	Parents feel free to challenge coaches, coaches mistrust parents.
8.f----------O---------- O ---------- O ---------- O ---------- O ----------		
Volunteer efforts are well coordinated, volunteers are plentiful, and conspicuously appreciated.	Volunteers are willing, but are often unaware of the events and/or feel a lack of guidance.	Volunteers are hard to find or unreliable.
8.g----------O---------- O ---------- O ---------- O ---------- O ----------		
Athletic events and Fine Arts performances are well attended due to deliberate efforts toward promotion and crowd appreciation.	Athletic events and Fine Arts performances are attended by a die-hard following and/or only when things are going well.	Athletic events and Fine Arts performances are poorly attended and as a result progressively less effort is made by participants.

APPENDIX G

Permission to Reproduce Survey



Shindler, John via csula.onmicrosoft.com 9:14 PM (11 hours ago)

to me

Hi Kay,

Congratulations!!! A terminal degree is a huge event. You will always have your doctorate now and you do not have to go to school anymore unless you feel like it. So I hope you can feel even more into the role of change agent, now that you have a bit more of an imprimatur.

Sure, feel free to include any part of the survey as you publish your work.

Keep in touch and hope you can take a nice break this summer and breath a bit before the next big thing.

Best,

john