

ABSTRACT

AnnaMaria Romero-Lehrer, RESHAPING SCHOOL CULTURE TO MAXIMIZE STUDENT ACHIEVEMENT (Under the direction of Dr. R. Martin Reardon). Department of Educational Leadership, March 2018.

The issue that my study addressed was the declining culture of Suburban Middle School, (SMS) a pseudonym used to describe a large suburban middle school in southeastern North Carolina. Declining or stagnant test scores over the last three years coincided with abrupt changes in leadership, new curriculum, and increasing enrollment. These three factors impacted teacher morale, which in turn impacted school climate and, ultimately, school culture. To address this problem, the purpose of my study was to implement a five-phase action research project which would identify teacher morale indicators and provide data for interventions to increase teacher morale and improve school climate, leading to a culture focused on high student achievement. In implementing a single site case study, using a convergent parallel mixed methods design, I used End of Grade (EOG) and quarterly benchmark data to illuminate student achievement. I collected quantitative data about teacher morale concurrently through the use of a survey administered quarterly to staff. Qualitative aspects of my study included the conduct, transcription, and grounded theory analysis of interviews, observations, and field notes from conversations with teachers at SMS. As a result of my study, I anticipated that student achievement would increase due to improved teacher morale, leading to a more positive school climate and an enhanced school culture. The association between positive teacher morale and student achievement that underpinned my study is of relevance to schools who face declining student achievement scores. My study provides a structure for interventions and a plan for enhancing school culture through improving teacher morale and other climate indicators.

RESHAPING SCHOOL CULTURE TO MAXIMIZE STUDENT ACHIEVEMENT

A Dissertation

Presented to

The Faculty of the Department of Educational Leadership

East Carolina University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education in Educational Leadership

by

AnnaMaria Romero-Lehrer

March, 2018

©Copyright 2018
AnnaMaria Romero-Lehrer

RESHAPING SCHOOL CULTURE TO MAXIMIZE STUDENT ACHIEVEMENT

by

AnnaMaria Romero-Lehrer

APPROVED BY:

DIRECTOR OF DISSERTATION: _____
R. Martin Reardon, PhD

COMMITTEE MEMBER: _____
Matthew Militello, PhD

COMMITTEE MEMBER: _____
Karen Jones, PhD

COMMITTEE MEMBER: _____
Dawn McKernan, EdD

INTERIM CHAIR OF THE DEPARTMENT OF EDUCATIONAL LEADERSHIP:

Marjorie Ringler, EdD

DEAN OF THE GRADUATE SCHOOL:

Paul Gemperline, PhD

DEDICATION

This study is dedicated to my mother, Frina Romero (1931-2015), who taught me how to write my first research paper in fourth grade.

ACKNOWLEDGEMENTS

I want to thank my husband, Rich, who always believed I could do this and who made sure I was fed during my long hours at work. Thank you also to Maile, my youngest, who supported me by doing housework and giving me tea and hugs.

I also want to thank the following people who read, edited, commented on, and helped me revise and polish my work: Malia Lehrer, Georgia Woodworth, Tamara Myrka, and Mary Parker-Ashley. I want to thank my friend, Tiffany Smith, who sent me a daily reminder text to keep on working.

I appreciate the contributions of fellow students, Jonathan DeBerry, Jakki Jethro, and Joyce McRae, Christine Catalano, Drew Harris, and Mark Samberg who listened to me, encouraged me, and helped me become a better writer.

Thank you to the staff at my school, who allowed me to lead, and who had the courage to make changes. Thank you for your encouragement, help, and support.

Thank you to my brother, Levi Romero, and my sisters, Socorro Snow, Dr. Josina O'Connell, and Cristina Castaneda, who always believed I would be a doctor.

Thank you to Dr. Dawn McKernan, who was kind enough to serve on my committee.

And most of all, many, many thanks to Dr. Martin Reardon, without whom I would not have completed this work. I will always be humbled by his knowledge and his ability to know what I really wanted to say. Thank you for having the courage to push me to learn and grow as a scholar and an educator.

TABLE OF CONTENTS

	Page
TITLE.....	i
COPYRIGHT.....	ii
SIGNATURE.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENTS.....	v
LIST OF TABLES.....	xi
LIST OF FIGURES.....	xiii
CHAPTER 1: INTRODUCTION.....	1
Problem of Practice.....	1
School Context.....	2
Instructional Context.....	3
State Testing.....	3
School Leadership Environment.....	6
Demographic Context.....	7
Impact of Demographic Context on the Leadership Environment	8
Teacher Characteristics.....	9
School Culture and Student Achievement.....	14
School Culture.....	16
Principal Leadership.....	18
Culture and Climate.....	18
Teacher Culture and Collaboration.....	20

Student Culture.....	21
How to Shape School Culture.....	22
School Climate.....	23
Purpose of Study.....	25
CHAPTER 2: IMPROVEMENT GOAL.....	32
CHAPTER 3: STUDY DESIGN.....	36
Research Questions and Tasks.....	36
Research Question 1.....	36
Research Question 2.....	36
Research Question 3.....	37
Study Plan.....	38
Participants.....	38
Phase 1: Analysis of NCTWCS Results (6 weeks).....	40
Phase 2: Promoting Student Achievement (36 weeks).....	41
Phase 3: Interviews, Observation, and Conversations (36 weeks).....	43
Open-ended questions for interviews.....	45
Observations in meetings.....	46
Conversations and informal observations.....	46
Phase 4: Quarterly Climate Survey.....	47
Phase 5: Interpretation and Analysis of Quantitative and Qualitative Data...	48
CHAPTER 4: DATA COLLECTION AND ANALYSIS.....	52
Initiative Overview.....	53
Selecting Relevant Indicators.....	55

Change of Plan.....	56
Interim Survey Findings.....	57
Student Achievement Data.....	59
EOG Scores.....	59
EOG Achievement Outcomes.....	63
Benchmark Scores.....	63
Assumptions about Benchmark Test Scores.....	65
Benchmark Outcomes.....	65
Achievement and Climate.....	69
Introducing the MTSS Process	69
Renewing the Student Support Team (SST) Process within MTSS.....	70
Positive Behavioral Interventions & Supports (PBIS).....	71
Achievement Interventions.....	72
Intervention and Enrichment Block (ThinkLab).....	72
Intervention.....	76
Enrichment.....	79
Process for scheduling students.....	80
Outcomes on climate and achievement.....	81
Climate Initiatives.....	84
Be My Guest.....	84
Communities of Practice.....	87
Leadership Training.....	89
Sunshine Committee.....	91

Outcomes on Climate.....	91
Qualitative Data.....	91
Focus on Student Needs.....	97
Discussion of student needs.....	97
Discussion of academics.....	100
Discussion of easy relationships.....	101
Personnel Climate and Culture Items.....	101
Problem-solving process.....	104
Leadership and professional development.....	106
Values.....	112
Action Items.....	119
Grounded Theory.....	121
CHAPTER 5: SIGNIFICANCE AND REFLECTION.....	126
Analysis of Study Questions.....	128
Question 1.....	130
Question 2.....	130
Question 3.....	130
Implications for School Leaders.....	131
Implications for Further Research.....	133
Reflections and Significant Learning.....	133
Change in Hypothesis.....	134
Conundrum.....	136
Further Research in Improvement Science.....	138

Reflections on the Impact of the Study on School Life at SMS.....	139
Physical environment.....	139
Benchmark scores.....	140
The SST Process.....	141
Restructuring PBIS.....	141
ThinkLab climate issues.....	143
Be My Guest.....	145
Leadership training.....	145
Concluding Reflection on Initiatives.....	146
Next Steps for SMS.....	147
REFERENCES.....	150
APPENDIX A: IRB APPROVAL.....	153
APPENDIX B: INTERVIEW PROTOCOL.....	154
APPENDIX C: SAMPLE QUARTERLY TWCS.....	155
APPENDIX D: STEP PLAN FOR PBIS.....	157
APPENDIX E: SCHOOLWIDE ATTENDANCE PLAN.....	158
APPENDIX F: THINKLAB ENRICHMENT CLASS APPLICATION.....	159
APPENDIX G: LIST OF THINKLAB ENRICHMENT CLASSES, ROTATION 1, 2017-18.....	161
APPENDIX H: BE MY GUEST TEMPLATES.....	163
APPENDIX I: COMMUNITY OF PRACTICE AGENDA AND MINUTES.....	164
APPENDIX J: AGENDA FOR LEADERSHIP TEAM MEETINGS.....	165
APPENDIX K: INTERVIEW QUESTIONS.....	166

LIST OF TABLES

1. Student Achievement Scores – Average Percent of Students Passing EOG (Levels 3, 4, and 5).....	5
2. Teachers in SMS Achieving Each Level on Evaluations in 2015.....	11
3. 2014 and 2016 NCTWCS: Teachers Who Agree or Strongly Agree on Select Indicators	13
4. Contrasting Climate with Culture.....	15
5. Logic Model for Problem of Practice.....	30
6. Study Plan: School Climate and Culture.....	50
7. Side by Side List of Initiatives across 2016-2017 & 2017-2018.....	54
8. Selected Teacher Working Conditions Survey Results.....	58
9. Proficiency Levels on EOG Tests.....	60
10. Summary of the Growth Indices of the EOG Scores.....	62
11. Extended Core Instruction (ECI) Daily Schedule.....	75
12. Daily Bell Schedule Including ThinkLab/ECI Period.....	77
13. How the Organization of SMS Addresses Maslow’s (1943, 1954) Hierarchy of Needs.....	93
14. All Themes, Sources, and Number of References from Teacher Interviews.....	95
15. Focus on Student Needs.....	99
16. References to Easy Relationships as a Theme.....	102
17. Personnel Climate and Culture Sources and References.....	103
18. Problem-Solving as Collaboration and Communication.....	105
19. Problem-Solving as Non-Judgmental Perspective-Taking.....	107
20. Problem-Solving as Conflict Resolution.....	108
21. Problem-Solving as Collegiality.....	109

22. Professional Development in School Culture..... 113

23. Values as Themes from Responses..... 114

24. References for the Value “Positive”..... 116

25. Action Items..... 120

LIST OF FIGURES

1. Conditions leading to school culture.....	10
2. Literature map of problem of practice.....	17
3. Graphic representation of my study’s design.....	29
4. Subset of literature map particularly relevant to my improvement goals.....	35
5. Excel spreadsheet used to collect student achievement data on benchmark scores....	44
6. Average scores on benchmark tests for Grade 6.....	66
7. Average scores on benchmark tests for Grade 7.....	67
8. Average scores on benchmark tests for Grade 8.....	68
9. Be My Guest board.....	86
10. Categories within the total number of references.....	98
11. Improving school culture through addressing teacher needs and student needs.....	124
12. Partial screenshot of “remain in current job” survey response (truncated at the 5% response rate level).....	127
13. Partial screenshot of “leave current job” survey response on the same set of items shown in in Figure 12.....	129
14. The relationship between and collective influences of school climate and school culture and student academic success.....	135
15. Relationship between student achievement and school climate.....	137

CHAPTER 1: INTRODUCTION

You walk into a school building and your senses quickly take in the environment, the sounds, and the people around you. You are immediately comfortable with what you are experiencing, or you are not. It is not something you can put your finger on, but it is real. This something is school culture. School culture is “the underground stream of norms, values, beliefs, traditions, and rituals that has built up over time as people work together, solve problems, and confront challenges” (Peterson & Deal, 1998, p. 28). It can be considered the heart of a school. But what happens when the culture changes in a negative, ineffective direction? What are the signs that something has happened with a formerly effective school culture, and how can it be reshaped so it can be effective once again?

Problem of Practice

The problem of practice upon which this dissertation-in-practice focuses is the ineffective school culture of a large, suburban middle school in southeastern North Carolina that was formerly effective but has had three different principals in as many years—in itself an indicator of potential school culture issues. In fact, the problem is two-fold, and both aspects relate to school culture. First, the school’s culture is no longer effective at producing the results in student achievement that are necessary for its students to become successful in a dynamic and competitive world market. The strong school culture that existed for years has become diluted in association with rapid growth in population. Other factors that potentially impact school culture include the change in the curriculum to the Common Core, alongside the major changes in school administration alluded to above. Literature suggests that creating a stronger school culture will result in higher student achievement as well as improved teacher working conditions and staff morale (á Campo, 1993; Cohen, 2009; Gruenert, 2005; Peterson & Deal, 1998). For

example, Deal and Kennedy (1983) declared that “a strong culture will yield dividends in learning achievement, morale, personal growth, and other indicators of school performance” (p. 15). The second aspect related to school culture concerns teacher morale and its direct effect on school climate. This is related to the data from school climate surveys that indicate that teacher morale is not as high as it has been in the past. There is a distinction between school climate and school culture. On the one hand, according to Gruenert (2008), school climate represents the attitude of the organization. One climate indicator would be teacher morale. On the other hand, school culture represents the “unwritten rules to which group members conform in order to remain in good standing with their colleagues” (Gruenert, 2008, p. 57). An example of an indicator of school culture would be the type of conversation that is accepted in the teacher’s lounge. In this case, climate is related to culture because teacher morale (climate) may be affected by the teacher’s lounge talk (culture). Conversely, teacher’s lounge talk (culture) may be affected by the teacher morale (climate). While climate and culture are different, understanding the climate indicators can provide insight into overall school culture.

School Context

Suburban Middle School (SMS, a pseudonym for the school that is the focus of this study) serves just over 1,000 sixth-, seventh- and eighth-grade students in a small, tight-knit community of 17,769 in 2013. There is little cultural diversity (less than 10% of students do not identify as White), and SMS does not qualify for Title I funding based on its socioeconomics, with only 33% of students qualifying for Free and Reduced Lunch. (Title I funds are designed to assist schools that have more than 45% of their students who receive Free and Reduced lunch.)

Instructional Context

The instructional context of SMS consists of two main elements: the high-stakes testing regime mandated by the state, and the school leadership environment. Other elements include the student demographics and the teaching staff.

State Testing

In 2011, the state of North Carolina adopted the Common Core curriculum for all students in grades K-12 in Mathematics and English Language Arts. This was a major change from the prior curriculum, and it carried with it an imperative for change in instructional pedagogy as well as a change in accountability measures. Students in North Carolina had completed end of year tests in English Language Arts and Mathematics since 2001. This accountability stipulation continued with the implementation of the Common Core. However, because the curriculum changed, the test had to change. It is still called the End of Grade test (EOG), but it now assesses the new curriculum.

As in the past, overall scores for each school were reported by averaging the number of students who achieved a passing score of Level 3 or 4. Four levels were assigned based on the scale score. Levels 1 and 2 were considered non-proficient. Level 3 was considered proficient on grade level standards. Level 4 was considered above proficiency on grade level standards. The levels were adjusted in school year 2013-2014 to provide five levels. Level 3 is considered minimally proficient on grade level standards. Level 4 indicates strong grade level proficiency, and Level 5 indicates above grade-level proficiency on the standards.

In SMS, before implementation of the Common Core, the average percent of students who passed the EOG's was above 80%. School administrators and teachers expected that the first year's test over the Common Core curriculum potentially would impact that percentage,

since the test was so new, the teachers were trying to learn the new curriculum, and, due to pacing and timing issues, the students had not learned parts of the curriculum. They expected that the second year's scores would see a return to the percentages of the past. As expected, at the state level, the second year's scores were higher than the first year. According to the state accountability model, student scores should increase each year since they have learned more of the curriculum. However, in SMS, after the second year of implementation of the Common Core, the student achievement scores did not increase (achievement score data confidential to the school).

As intimated above, with the implementation of the Common Core, the state's accountability model changed to reflect growth as well as overall proficiency on the standards measured by the EOG. Using the EOG, a year's worth of growth for students is determined through comparing student scale scores from one year to another. While not all students are able to show proficiency, it is expected that all students will show a year's worth of growth.

Unfortunately, in SMS, in addition to overall proficiency not rebounding to pre-Common Core levels, growth also decreased or remained stagnant over the last three years. While SMS has earned the status of "Exceeds Growth" each year for this indicator, the label does not tell the whole story. The amount of growth has decreased steadily. Based on this trajectory, I predicted that in school year 2016-17 SMS would earn the status of "Expected Growth," a change in level that is not unexpected as SMS only exceeded growth by a small amount in 2015-16.

Table 1 documents the initial data that led to the study, showing that test scores have remained stagnant or have decreased slightly over the last four years. Table 1 indicates the SMS overall average of students across all three grade levels. This is what is typically reported by the state on

Table 1

Student Achievement Scores—Average Percent of Students Passing EOG (Levels 3, 4, and 5)

By Grade	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
ELA					
Grade 6	86.4	60.1	65.1	69.0	NA
Grade 7	80.8	68.2	73.9	69.8	NA
Grade 8	88.0	58.7	73.9	69.8	NA
SMS Overall	85.0	60.0	71.0	70.0	NA
Math					
Grade 6	92.9	51.7	60.1	59.1	NA
Grade 7	89.5	48.3	58.8	63.1	NA
Grade 8	92.4	51.7	67.3	68.1	NA
SMS Overall	92.0	51.0	62.0	63.0	NA
Science					
Grade 6	NA	NA	NA	NA	NA
Grade 7	NA	NA	NA	NA	NA
Grade 8	90.0	77.0	NA	84.0	NA
SMS Overall	90.0	77.0	NA	84.0	NA
Growth Index	Not calculated with this Accountability Model	Exceeds Expected Growth	Exceeds Expected Growth	Exceeds Expected Growth	Not Available
Principal ID	A	A	A	B	C

the School Report Card each year. The scores are also disaggregated by grade level. Note that the Science EOG is only given to grade eight students. The data span an interface in the North Carolina testing regime, as 2011-2012 was the last year of testing related to the NC Standard Course of Study, and 2012-2013, 2013-2014, 2014-2015 were the first, second, and third years of the Common Core Standards testing. Data for 2015-2016 were not released for publication at the time Table 1 was constructed at the beginning of my study. Table 1 also identifies the school principal of SMS at each data point.

School Leadership Environment

As suggested in Table 1, I suspect that the leadership changes at SMS are associated with the student achievement changes. Principals A, B, and C are the three principals who were the instructional leaders of SMS over the period of time covered by Table 1. Principal A was a male, veteran principal who had a six-year tenure at SMS. He was considered by staff to be very data driven. He was also reported to be very supportive of his teachers. Principal B was male, and he was in his third year of being a principal, although SMS was his second school. He was at SMS for only one year before accepting a position as a high school principal in the same county. He was reported to be very supportive of the teachers, and teachers report that he trusted their instructional decisions. I am Principal C, the current principal, a female, veteran principal who transitioned to SMS after having worked as the principal of one of the feeder elementary schools for 7 years. I am very visible in the school and the community. Teachers report that I provide inconsistent support for my teaching staff.

As alluded to above, Table 1 intimates that a change in leadership may have compounded the impact of the major change in the instructional context over this time. According to Peterson and Deal (1998), “it is up to school leaders – principals, teachers, and often parents – to help

identify, shape, and maintain strong, positive, student-focused cultures” (p. 28). The principal’s essential role is also emphasized by Lee and Li (2015), who stated, “the school principal is the creator or re-shaper of a school’s teacher culture and influences not only the actions of the school staff, but also their motivations and spirit” (para 7).

Demographic Context

SMS is in an area of the state that is seeing strong growth in population, and the county in which SMS is located is one of the fastest growing counties in the state. Consequently, SMS has seen a major change in the population and demographics of the school. SMS was built to house 750 students. It was originally built as the high school for the area, and buildings were added to the campus as the population grew. The oldest building on the campus was built in 1975, and the newest building was built in 2009. SMS currently houses over 1,000 students. According to City-data.com, the locality has seen an influx of families since 2000. At 17,769 in 2013 and just over 11,000 residents in the year 2000, this reflects a growth of over 6,000 residents since the year 2000. The children of these new families have brought with them a range of expectations and needs that Deal and Kennedy (1983) long ago acknowledged as potentially conflicting with established expectations and values when they declared that “communities sometimes change rapidly while school cultures stay the same, resulting in a mismatch between internal and external beliefs and values” (p. 15).

As pointed out above, SMS has had a history of student academic excellence, and this has drawn a parent population from out of state and from other counties who demand rigorous classes and high-quality school communication. Many of the newest members of the community are drawn to the easy rhythm of coastal life, but they come from states where schools are strong,

and expectations are high. They want schools with high expectations, up-to-the-minute technology, and effective teachers.

Impact of Demographic Context on Leadership Environment

Against this background, in SMS, it appears that a sequence of changes in leadership, increased teacher hiring due to increased student enrollment, and uneven pedagogical understanding related to the Common Core curriculum has disrupted the previously stable teacher culture. Sixty-seven percent of the staff at SMS have worked less than four years at SMS. These teachers, who are new to the school, especially have difficulty discovering the prevailing culture partly because of changes in staff and administration. If culture is defined as “unwritten rules to which group members conform in order to remain in good standing with their colleagues” (Gruenert, 2008, p. 57), new staff struggle to find what those unwritten rules are. Exacerbating this state of flux, the staff overall is a veteran staff, with 69% having between 5-19 years in the profession. However, many are not veterans of SMS. Consequently, they bring with them the unwritten rules of a different school, and, at least partly because of the changes in administration and the timing of when those administrators were hired, incoming veteran teachers inadvertently contribute to the state of flux. Depending on the mentor, teaching team, grade level, or subject, different processes and procedures are practiced, all in the name of “that’s the way we’ve always done it.” There is a sense of uncertainty and mistrust of any changes, and teacher morale has suffered.

Teacher morale is one indicator of school climate. School climate indicators can be used to identify school culture. In this case, conversations with teachers have unearthed a general sense of wanting the environment in the school overall to be more positive. The emergence of the Sunshine Committee (a teacher-led effort to improve school climate) in 2016-2017 shows the

teachers' willingness to make a change for the better. Improving teacher morale may help with the school climate, but there is still the issue of creating a school culture that is focused on student achievement. Creating this type of school culture may result in changes being made that take teachers out of their comfort zone, so having a Sunshine Committee working to create traditions and ceremonies may very well be one strategy towards improving the overall school climate. My strong belief that underpins my study is that if teacher morale is high, teachers are more likely to engage in effective teaching practices, which will in turn lead to higher student achievement.

I have summarized this relationship in Figure 1, indicating that morale leads to climate and climate leads to school culture.

Teacher Characteristics

The overall teacher skill level at SMS is already high. This is validated by the official teacher evaluation process. Teachers are evaluated on five standards by SMS administrators on the North Carolina Evaluation document. The five standards include leadership, environment, content knowledge, facilitating learning, and reflection. Teachers receive an overall score on each of the areas based on administrator and peer observations and other artifacts. The scale begins at Developing, then progresses to Proficient, then Accomplished, with the highest score on the scale being Distinguished. Table 2 illustrates the breakdown of the scores for teachers in SMS according to the 2015 North Carolina School Report Card data.

Note that there are few teachers who fall in the Developing range, and that most teachers are ranked Accomplished or Distinguished, with the majority of the teachers achieving an Accomplished rating. This is one indicator of the very strong teaching staff that is present at this school.



Figure 1. Conditions leading to school culture.

Table 2

Teachers in SMS Achieving Each Level on Evaluations in 2015

Standard	Developing	Proficient	Accomplished	Distinguished
1. Leadership	0%	13.7%	78.5%	7.8%
2. Environment	0%	5.9%	80.4%	13.7%
3. Content Knowledge	2.0%	7.9%	76.5%	13.7%
4. Facilitate Learning	2.0%	3.9%	86.3%	7.8%
5. Reflection	0%	11.8%	80.4%	7.8%

However, there is a sense of frustration over lack of common purpose and vision. Qualitatively, this frustration can be observed in the conversations between teachers and the demeanor at staff meetings and Professional Learning Community (PLC) meetings. Quantitative data supporting a lack of common purpose and vision includes teacher perception of their working conditions. The North Carolina Department of Public Instruction administers a climate survey to certified staff in each school in the state every two years. This survey, the North Carolina Teacher Working Conditions Survey (NCTWS) asks certified staff to rate the school on climate indicators that include Community Engagement and Support, Teacher Leadership, School Leadership, Managing Student Conduct, Use of Time, Professional Development, Facilities and Resources, Instructional Practices and Support, and New Teacher Support (achievement score data confidential to the school). A comparison of the overall school working condition scores at SMS indicate that scores have dropped in most areas since the 2014 survey. The survey is administered biannually, so a score for 2015 is not available. Less positive scores are another indicator that the school culture, at least as perceived by the teachers as working conditions and environment, has decreased. For purposes of this study, indicators in Teacher Leadership, School Leadership, and Instructional Practices and Support will be identified as possible indicators of teacher morale. Table 3 illustrates the changes from the 2014 NCTWS to the 2016 NCTWS on indicators selected from the three sections: Teacher Leadership, School Leadership, and Instructional Practices and Support. A comparison of these scores shows that teachers' perceptions of these working conditions decreased in the two years, indicating a decrease in teacher morale.

My action research intervention is founded on the point of view espoused by Gruenert (2008). He compared the culture of an organization to its personality, and the climate of an

Table 3

2014 and 2016 NCTWCS: Teachers Who Agree or Strongly Agree on Select Indicators

Indicator	2014 Teachers	2016 Teachers
Teachers are trusted to make sound professional decisions about instruction.	89.8%	76.3%
Teachers are effective leaders in this school.	91.8%	75.9%
Teachers feel comfortable raising issues and concerns that are important to them.	83.7%	58.6%
Teachers are held to high professional standards for delivering instruction.	100%	91.5%
The school leadership makes a sustained effort to address teacher concerns about instructional practices and support.	93.9%	77.4%
Teachers believe almost every student has the potential to do well on assignments.	95.8%	75.4%
Teachers collaborate to achieve consistency on how student work is assessed.	85.1%	71.4%

organization to its attitude. In this sense, Gruenert (2008) averred, “it is much easier to change an organization’s attitude (climate) than it is to change its personality (culture)” (p. 58). Gruenert (2008) went on to contrast climate and culture in a table which I have adapted and reproduced as Table 4.

In summary, based on past performance, SMS has the potential to become one of the highest-ranking schools in the state. Developing a strong school culture that facilitates academic excellence within SMS, through strategic interventions based on teacher morale indicators, may result in improved student achievement measures (Cohen, Pickeral, & McCloskey, 2009; Cohen, Shapiro, & Fisher, 2006; Deal & Kennedy, 1983). An improvement in student achievement measures at the middle school level will benefit the students as they matriculate through high school and college. Traditionally, students from this area attend local community colleges and state universities. However, there is an emerging trend, fueled by newer families to the area that want their children to be competitive in the world market, focused on the preparedness of high school graduates to attend schools in other parts of the country and the world. SMS’s culture does not currently support this push toward academic excellence, and change is imperative.

School Culture and Student Achievement

Figure 2 is a literature map which summarizes my exploration of the literature on school culture and student achievement. A review of the literature for this study led to my developing seven categories: School Culture; Principal Leadership; Culture and Climate; Teacher Culture and Collaboration; How to Shape School Culture; Student Culture; School Climate. The findings of the research in each category have implications for the purposes of this study, although some are more relevant to the study than others. The research findings in each category contribute to

Table 4

Contrasting Climate with Culture

Climate	Culture
Monday versus Friday	Gives permission for teachers to be miserable on Mondays
Attitude or mood of the teachers	Personality of the school
Engenders a frame of mind	Limits or expands a way of thinking
Flexible, open to change	Takes years to evolve
Based on perceptions	Based on values and beliefs
Pervasive (feel it when you enter the building)	Teachers are unaware of it because they are immersed in it
All around us	Part of us
The way we feel around here	The way we do things around here
First step to improvement	Determines if improvement is an option
It's in your head	It's in your head

Note. Adapted from “School Culture, School Climate: They Are Not the Same Thing” by S. Gruenert, (2008), *Principal*, 87(4), p. 58.

an overall understanding of the concept of school culture, and the following seven sections contain my succinct perspective on the featured papers in each category.

School Culture

The most pertinent concept for my study is school culture (see Figure 2, top-left hand rectangle), and I chose to feature two papers. Both Deal and Kennedy (1983) and Gruenert (2000) defined and explained school culture and its importance to a school. Both papers are relevant to the study in that they are excellent overall summaries of the concept of school culture. Deal and Kennedy (1983) explained that the elements of culture are “shared values and beliefs, heroes and heroines, rituals and ceremonies, and an informal network of priests and priestesses, storytellers, spies, and gossips” (p. 14). They further explained each of the elements, and then they offer pragmatic questions and ideas for understanding a school’s culture. Gruenert (2000) described school culture as the “context in which the whole educational process occurs” (p. 14) in a school. Shared values and beliefs, rituals and ceremonies, and informal storytelling echo Deal and Kennedy’s (1983) elements of school culture.

Both Deal and Kennedy (2013) and Gruenert (2000) included questions that can be used by members of a school community to understand their own culture. Gruenert (2000) also included a list of six factors that contribute to a collaborative school culture: Collaborative Leadership, Teacher Collaboration, Professional Development, Collegial Support, Unity of Purpose, and Learning Partnership (p. 16). Gruenert (2005) further used these six factors in a survey while conducting a study of 81 schools in Indiana. The results of the Gruenert’s (2005) study lent strong support for the claim that collaborative teacher cultures positively impacting student achievement.

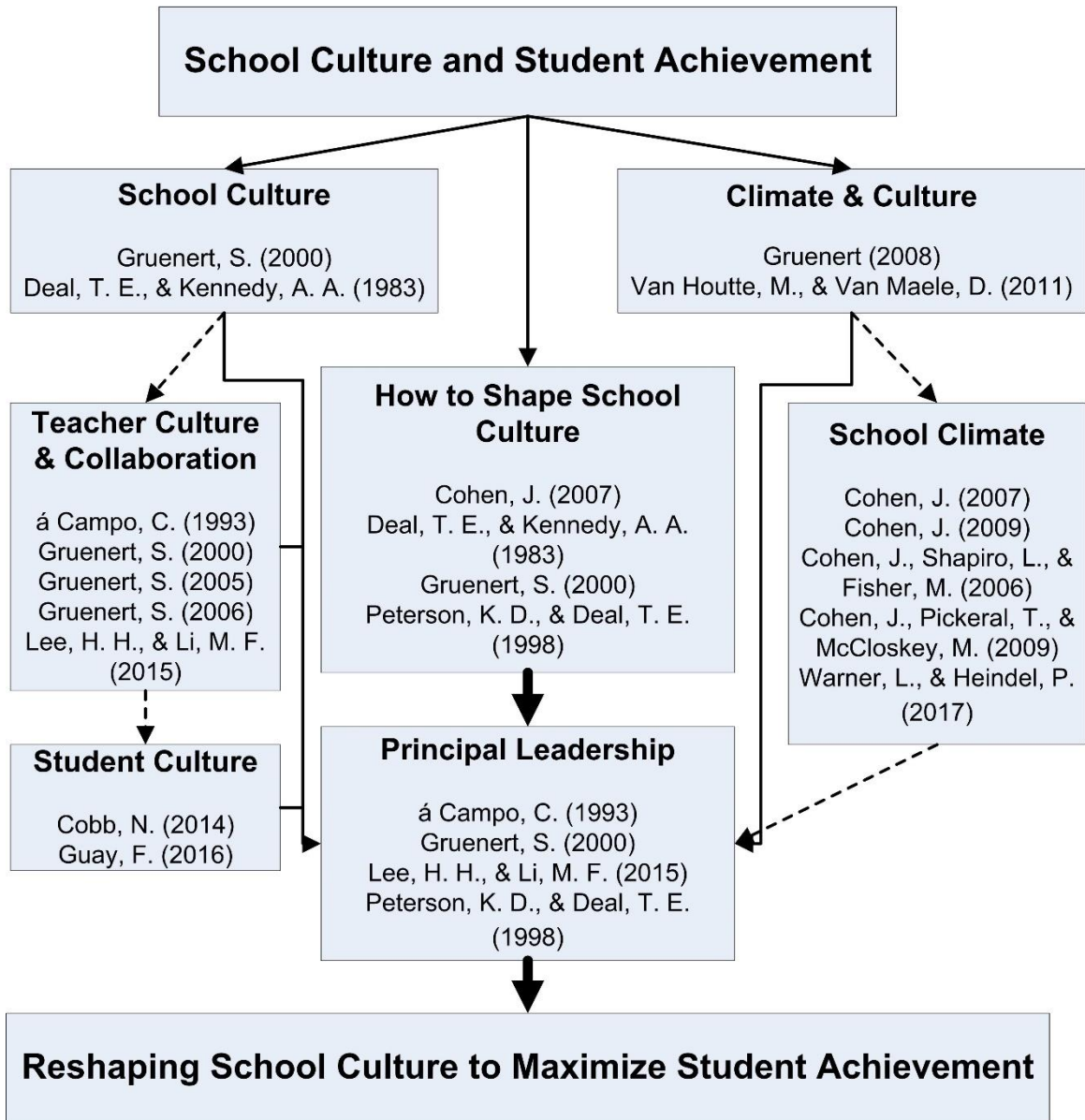


Figure 2. Literature map of problem of practice.

Principal Leadership

I conceptualize principal leadership as the collection point of all the input focused on reshaping school culture to maximize student achievement (see Figure 2, bottom rectangle). The principal plays an essential role in understanding, building, shaping, and maintaining school culture. Each of á Campo (1993), Lee and Li (2015), and Peterson and Deal (1998) outlined reasons and practices that will help a school leader with this essential function. A common thread was the collaborative and reflective practice that must accompany any school leader's attempt to address school culture. They all agreed that principals must model the core values and beliefs of the school and maintain a focus on the overall vision of the school. Furthermore, Gruenert (2000), citing Deal and Peterson (1999), stated that "shaping school culture is not for the timid and it takes a long time, five to seven years" (p. 18).

On a more optimistic note, Gruenert (2000) suggested that "becoming aware of 'how things are done' should allow for leaders to get things done" (p. 18). Focusing on the crucial role of leadership, á Campo (1993) declared that "although the principal alone does not make *the* difference, she certainly can make *a* difference" (p. 125). In the process of making a difference, Gruenert (2005) demanded that leaders should not "lose sight of the bigger picture of creating the social conditions necessary for student and teacher success" (p. 51). The seminal concepts outlined by these authors constitute a framework for leadership which will serve as a point of reference for myself as the principal as well as for various school leadership teams as my study progresses.

Culture and Climate

Balancing the impact of school culture, in the top right-hand corner of Figure 2, I have focused on culture and climate. A discussion of the difference between school culture and school

climate is inevitable since they are so closely intertwined and sometimes used interchangeably to describe the same concept. This is relevant to the study because reshaping school culture is the purpose of the study, and care must be taken not to merely change the climate.

Gruenert (2008) warned that culture and climate are not the same thing, and “school leaders who want to address morale in their buildings must know the distinction between culture and climate” (p. 56). He discussed the differences between culture and climate (briefly, climate is analogous to attitude, while culture is analogous to personality), and warned against addressing climate issues without understanding that any changes to climate have to be filtered through the culture of the building. For example, if a principal should try to increase teacher morale by bringing doughnuts on Friday—an extrinsic reward—it will not have an effect on the overall culture of the building, which relies more on the intrinsic beliefs and values of the school community. He did comment, however, that “it is much easier to change an organization’s attitude (climate) than it is to change its personality (culture)” (Gruenert, 2008, p. 58). In light of that, he asserted that school leadership must remain aware of anything that will challenge the culture and be prepared to create optimal working conditions for their staff.

Highlighting the distinction between culture and climate, Van Houtte and Van Maele (2011) developed methods to study each separately. In their study, they set out to compare perceptions and assumptions quantitatively to see if there was any correlation. Perceptions are related to the climate while assumptions are related to the culture. As they asserted, “assumptions are seen as a complex set of shared tacit understandings about the nature of things” (Van Houtte & Van Maele, 2011, p. 511), an assertion which is in keeping with other definitions of culture. In their study, they measured one indicator of school culture (competition) through the use of a scale that measured attitude (climate) by asking questions that elicited teachers’ perceptions

about other teachers in the school, and questions about teachers' personal beliefs and actions (culture). They found that there was very little correlation, supporting the proposition that culture and climate are distinct. They concluded by maintaining that examining school culture will provide the best information about a school. Studying school culture systematically will bring to light the various subcultures that exist within any culture. Van Houtte and Van Maele's (2011) study supports a search for an individual description of each school's culture. Only when those attempting to implement changes in a school clearly understand the school's culture will true and sustainable reform take root.

Teacher Culture and Collaboration

In Figure 2 (left-hand side), I used a broken line to break school culture into two subcomponents: teacher culture and collaboration, and student culture. An important subculture in any school is the teacher culture, which, in the optimal case, embraces collaboration. A collaborative school culture had been identified as an important aspect of an effective school (e.g., á Campo, 1993; Gruenert, 2000; Gruenert, 2005; Lee & Li, 2015). However, positive teacher morale is also important because "one negative teacher can impact an entire school" (Gruenert, 2006, p. 61). The literature on teacher culture and collaboration effectively grounded my study because I focused on building teacher morale as a means of reshaping overall school culture.

Collaborative school culture is the focus of á Campo's (1993) work on principal leadership for collaboration. Her focus was the role of the principal and the strategies that would have the most beneficial effect on positive teacher culture. She identified four practices that are essential to a collaborative culture: teacher talk, joint planning, teacher observation, and teachers teaching. These four practices provide an insight into teacher morale, and a key to understanding

the climate of SMS. á Campo also provided specific suggestions for principals as they work to engender a collaborative culture: (a) gather information regarding teachers' motivation and commitment using means that are perceived as beneficial to the students, teachers, and school, (b) generate a vision of what the school would look like if it was operating optimally and make this vision visible and audible, (c) involve teachers in decision-making, (d) reflect on his or her own behavior and actions, and (e) provide adequate resources for collaboration. These suggestions will help guide reflective practice for myself and the various leadership teams during the study.

Gruenert (2000, 2005) echoed á Campo's (1993) assertion that collaborative culture is an essential aspect of overall school culture, declaring that "a collaborative school culture has been identified as an effective context for student and teacher learning" (p. 2). Gruenert (2000) identified six factors that contribute to the collaborative nature of a school: (a) collaborative leadership, (b) teacher collaboration, (c) professional development, (d) collegial support, (e) unity of purpose, (f) learning partnerships. These six factors will provide points of reference in my assessment of the culture of SMS.

Finally, Lee and Li (2015) highlighted the importance of a collaborative culture through their study of an award-winning teaching team. Their research led them to conclude that the school had a strong culture of collaboration and innovation. Teacher leaders and the principal played a role in maintaining teachers' focus on the learning community.

Student Culture

Student culture is situated directly underneath teacher culture and collaboration in Figure 2. This graphic arrangement is not intended to indicate that student culture is subordinate to teacher culture. While the focus of the study is on overall culture, primarily on indicators of

teacher morale, student culture must be considered. As an example, I chose to include a paper by Guay (2016), who studied the multicultural impact of immigrants in Canadian schools. His treatment of culture in general was insightful. One of Guay's (2016) more compelling assertions was that "ultimately, culture is about context, that is, where a given group of individuals have shared common experiences" (p. 155). His assertion puts overall school culture into perspective. In other words, the whole school community shares the common experience of school, and, because of that, everyone's perspective is important. Cobb (2014) shared this sentiment, declaring that a positive school climate and culture will ultimately make schools emotionally and physically safe for students.

How to Shape School Culture

The discussion of my selected literature on school culture leads to a crucial question (see Figure 2, the central rectangle): how does one shape school culture? Several of the authors whose papers I selected as seminal to my work included guidance for changing and shaping school culture, as I will proceed to discuss. They outlined processes, questions, methods for collecting data, and ideas for implementation of strategies to improve school culture. This body of literature is extremely valuable, as it provides structure to the processes of my study.

For example, Gruenert (2000) identified four steps to foster a collaborative culture, including (a) learning about the current culture through the collection of pertinent data, and (b) subsequently providing support for collaboration through facilitating opportunities and rewards for collaboration. As mentioned previously, Gruenert also indicated that interventions should be specific to each individual school and allow for an individual and personal approach to school culture. This understanding will guide the specific interventions I instigate to influence teacher morale at SMS.

Both Deal and Kennedy (1983) and Peterson and Deal (1998) provided questions that can be used to reflect on current culture and provide insight regarding possible steps to take to foster lasting change. Along the same lines, Cohen (2007) provided guidance for leaders who are focused on improving school climate. As already discussed, the overall focus of the study is on school climate, so Cohen's description of the process toward school improvement is helpful. He explained, as did Deal and Kennedy and Peterson and Deal, that taking the time to evaluate the current reality is an essential first step toward promoting lasting change in school reform. In this study, analyzing teacher morale will provide insight into the climate, which is the current reality of the school culture.

School Climate

School climate is placed underneath the culture and climate rectangle in Figure 2 to highlight its role as the refinement of a broader cultural context. I have highlighted on numerous occasions in the discussion to this point that schools are context-specific. School climate is the accessible means (Gruenert, 2008) by which I intend to implement change in SMS. Making an impact on school climate will enrich the overall school culture, and the work of the authors I have selected validate that paying attention to school climate will ultimately help improve overall school culture. Cohen et al. (2006) identified 10 essential dimensions of school climate and outlined a plan for making needed changes. The 10 essential dimensions included (a) environmental, (b) structural, (c) safety, (d), teaching and learning, (e) relationships, (f) sense of school and community, (g) morale, (h) peer norms, (i) school-house-community, (j) learning community (p. 28).

Cohen (2009) summarized educational and psychoanalytical perspectives on school climate in the introduction to a series of papers focused on transforming school climate. He

stated that “positive school climates powerfully promote student achievement and positive youth development” (Cohen, 2009, p. 100). He went on to suggest that it is difficult to summarize all of the specific elements of school climate, but identified four major areas: (a) safety, (b) relationships, (c) teaching and learning, and (d) environment. While psychoanalysts have not focused specifically on school climate, Cohen (2009) referenced the work of Anna Freud in examining “how the culture and climate of the environment that children live within powerfully shapes social emotional growth” (p. 101). He also referenced the work of Bion, who “recognized the inherent anxiety-provoking nature of group life” (Cohen, 2009, p. 101). The combination of understanding a transformative school climate together with the underlying psychoanalytic context constitutes a strong case for developing a student-centered school climate.

Finally, Cohen et al. (2009) made an argument for supporting the whole child through creating a safe, connected and engaging school climate, and Cohen (2007) proposed a process for principals and school leaders to follow for creating an improved school climate. According to Cohen et al. (2009), the process included procedures to measure school climate, to understand and support efforts to educate the whole child, to develop school improvement efforts based on the perspectives of the stakeholders, to collaborate as a school community and promote partnerships in and outside of the school community. They summarized their position by asserting that school climate must consider more than academic achievement data because “when we use only academic achievement data to understand learning and school improvement efforts, we ignore a fundamental truth: The goals of education go far beyond linguistic and mathematical learning” (p. 48). The process they outlined formed the basis of much of my study in regard to student achievement. However, my study focuses more on the perspectives of the teachers and how improving teacher climate will result in gains in student achievement.

I used the NCTWCS as the measure of teacher climate, and then used a series of initiatives to help the teachers focus on the needs of the students. Educating the whole child means that students must be “healthy, safe, engaged, supported, and challenged” (Cohen et al., 2009, p. 46). Throughout my study, there was a definite sense of working towards improvement of school climate as well as student achievement. This is in line with the Cohen et al. (2009) insistence that school improvement efforts require “coordinated, sustained, and intentional efforts to create learning climates that promote students’ social, emotional, ethical, and intellectual abilities” (p. 46). My study engaged teachers in a collaborative cycle of improvement, which addresses the Cohen et al. (2009) suggestion that school improvement efforts should be collaborative.

Purpose of Study

The major purpose of my study was to identify the teacher morale indicators within the school climate in SMS that seemed to be the most problematic for the culture of the school. As I made clear above, I regard school climate as contributing to the overarching culture of the school. Consequently, once those problematic teacher morale indicators were identified, I implemented a collaborative problem-solving approach using teacher leaders and teaching teams, with the aim of enhancing the school climate, intending to eventually enrich the school culture, and eventually ushering in a return to the previous high levels of student achievement within the school. Such a collaborative problem-solving approach is in line with current research. For example, Gruenert (2005) found that “collaborative cultures seem to be the best setting for student achievement” (p. 50). Predating Gruenert’s finding, á Campo (1993) asserted that “in fostering school improvement and growth, collaborative cultures appear to be the most desired and constructive” (p. 120).

I addressed this problem of practice through a series of initiatives intended to improve the climate of the school by addressing teacher morale. The initiatives related to teacher morale that I designed and implemented included professional development for administration and teachers, as well as focused and strategic walk-through observations. Professional development on data-driven instruction, and the use of data in making instructional decisions was a focus. The Inquiry-Action Cycle described by Militello, Rallis, and Goldring (2009) guided the collaborative process and led to specific initiatives, which I anticipated would in turn lead to changes in practice. Finally, I collected data to determine whether the responses of teachers to the selected subset of the teacher working conditions survey improved. In addition, I collected and analyzed student assessment data throughout the duration of my study.

As intimated above, my study constituted a convergent, parallel mixed-method design, as described by Creswell (2014), and included both quantitative data and qualitative data. The aim was not to show causality, but to postulate and support an associative juxtaposition of a range of intertwined indicators and outcomes. Hence, I integrated the results at the interpretive stage. The dependent variables were student achievement data and data from quarterly working conditions surveys. The independent variables were the interventions and initiatives that I implemented throughout the study.

The quantitative data I collected and analyzed consisted of student achievement data and data from a quarterly teacher working conditions survey conducted on a locally administered subset of items from the full North Carolina Teacher Working Conditions Survey (NCTWCS). Since the full NCTWCS surveys are conducted bi-annually, I conducted my own surveys locally, focusing on items directly related to teacher morale, which, as I made clear above, in this study, is envisaged as contributing to school climate and, ultimately, to a school culture focused on

student achievement. The quantitative data were intended to provide insight into how much/whether the school climate was improving, and how much/whether student achievement was improving.

At the same time, I gathered qualitative data from interviews, other qualitative surveys, field notes, and observations of teacher meetings, to be integrated with the quantitative data. My ongoing synthesis was enriched by a side-by-side comparison of the data after both sets of data were complete. The qualitative data were intended to define and develop the interventions necessary to improve the climate throughout the course of the year. Through analysis of the qualitative data, I developed grounded theory (Corbin & Strauss, 2015) to support an associative relationship from teacher morale, to school climate, to school culture.

Overall, analysis of the quantitative data provided an empirical benchmark of progress, and analysis of the qualitative data enriched the perspectives of the SMS administrators based on their day-to-day engagement with the teachers. Collectively, the data initiated reflection by administrators and teachers, leading to insights that will be discussed in Chapter 4.

To return to the study design, the convergent parallel mixed method design is optimal for this study because the data do not indicate a clear cause-effect relationship between school climate and student achievement, even though research findings suggest a correlation between the two (Cohen et al., 2006). Minimally, enhanced student achievement is attained in the context of a strong school climate, but, in this study, school climate is conceived of as related to school culture, which is in turn related to teacher morale.

Simultaneous collection and analysis of the data was facilitated by frequent reflection and dialog among the teachers and administrators throughout the study. While there is a tendency to rely only on measures of teacher perception of the climate and culture, this approach is not

optimal. As described by Van Houtte and Van Maele (2011), the validity of teacher perception data relies on the commensurability of participants' definitions of the measures and the uniformity of their experiences, and "individual perceptions are not independent of individual experiences" (p. 509). In aggregating teacher perception data, there is a temptation to highlight similarities and overlook differences. As indicated above, for this reason, I collected my subjective perceptual data through field notes and interviews, and I supplemented these with more objective measures, such as observations, surveys, and student achievement data, to yield a more comprehensive picture of the culture of SMS.

Figure 3 is a graphic representation of my study, as adapted from Creswell (2014), and based on the parallel convergent mixed methods design.

Table 5 provides a logic model that outlines the basic design of my study and its projected short, medium, and long-term outcomes. The quantitative data to begin the study are a part of the commonly collected school data, and these existing data will be analyzed through a collaborative process with teachers and administrators at the beginning of the study. Ongoing quantitative and qualitative data will be collected throughout the study using a variety of methods.

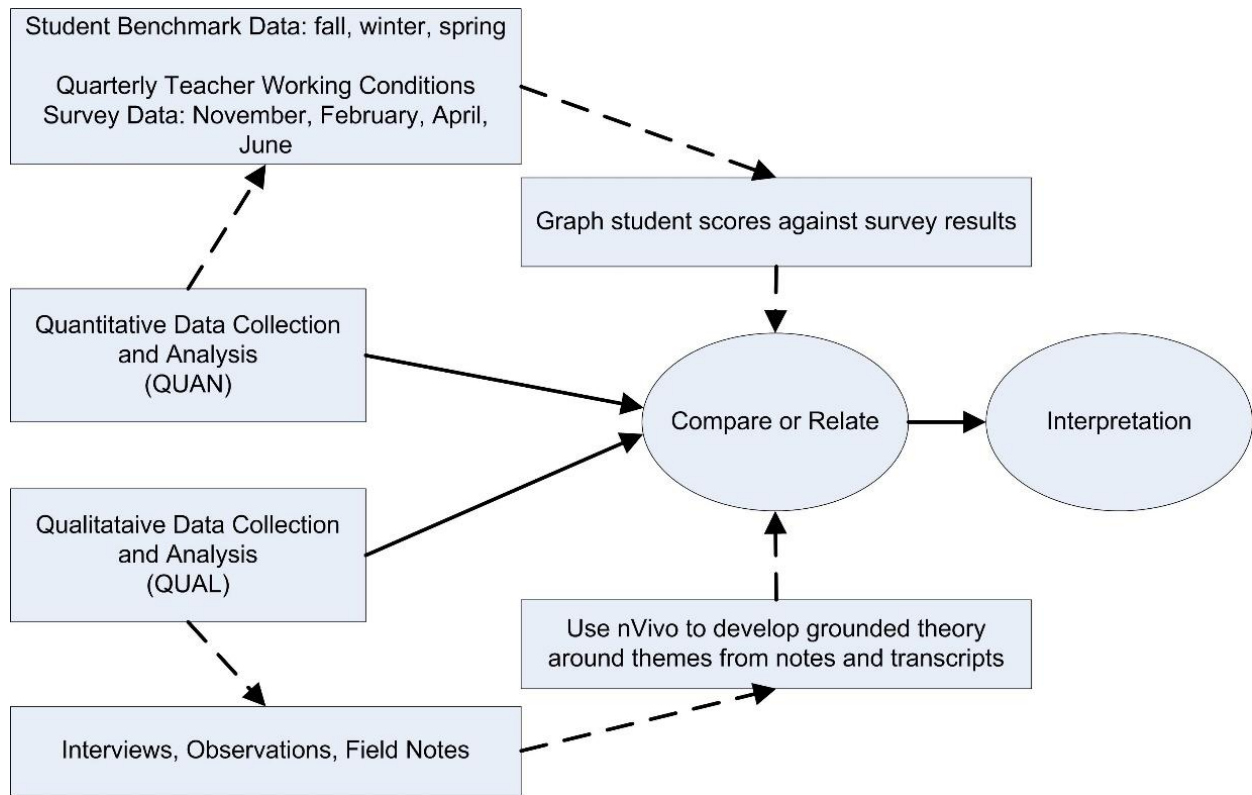


Figure 3. Graphic representation of my study’s design.

Table 5

Logic Model for Problem of Practice

Resources/Inputs	Outputs		Outcomes		
	Activities	Participation	Short-term	Medium-term	Long-term
TWC Survey results for 2016. Results of collaborative discussion regarding TWCS.	Meet with teachers to discuss TWCS and identify factors that will improve climate.	Administrators, teachers	Identify 6 factors to provide focus.	Provided structure to data collection for quarterly surveys.	Provide structure to overall school culture. Improved scores on 2018 TWCS.
<i>nVivo</i> to code qualitative data.	Collect qualitative data through observations of teacher meetings, classroom observations, interviews with new and veteran staff, and discussions. Collect quantitative data on quarterly researcher-developed TWCS.	Principal, teachers, administration.	Identify common assumptions and values through what is done and said. Identify areas of concern and brainstorm interventions to address them.	Provide feedback to school staff on their beliefs, assumptions, and values. Celebrate collaboration and reward accomplishments.	Provide a template for a well-articulated school vision that embraces the prevailing culture.

Table 5 (continued)

Resources/Inputs	Outputs		Outcomes		
	Activities	Participation	Short-term	Medium-term	Long-term
2016 EOG scores for all students as well as any other data to triangulate student achievement. English and Math Benchmark scores, student grades	Facilitate data discussions about student data and achievement. Provide teacher development as needed for intervention strategies.	Principal, teachers, administration, through the use of leadership and grade-level PLC meetings.	Preliminary understanding of student needs and strengths.	Conversations will focus on student achievement in collaborative meetings. Teachers will share and use new strategies to address weaknesses.	Overall school culture will reflect a focus on student and teacher learning in a collaborative structure.
	Use existing SIP data-collection structure to collect student achievement data.	School Data Team, which will present results quarterly to staff. This data will be used by teachers in PLC meetings for instructional decisions.	Awareness of student growth and achievement.	Understanding that collaborative work results in greater student achievement.	Collaborative teacher culture will improve student achievement scores.
	Analyze 2017 EOG data.	Administration and teachers, SIP team.	75% overall proficiency by 2017.	80% overall proficiency by 2018.	85% overall proficiency by 2019.

CHAPTER 2: IMPROVEMENT GOAL

I set out with two end results in mind. First of all, I anticipated that I would be able to find that improved school climate was related to improved student achievement. Data for this goal was primarily qualitative, and these data supported my development of grounded theory (Corbin & Strauss, 2015). The qualitative data included transcription and analysis of interviews, field notes, and teacher observations—the analysis of which was facilitated by utilizing *nVivo Pro for Windows*, Version 11.

I anticipated that improved school climate would be documented through more positive interactions with teachers related to their instruction and the positive achievement of their students on the one hand, and fewer negative interactions with teachers relative to their students' failure to achieve academically.

Secondly, I expected overall student achievement to improve. The students in some classes already reach target levels of achievement, but my expectation was that more students in other teachers' classes would become academic achievers too. As noted before, EOG scores have been stagnant or dropping. I anticipated that data from benchmark assessments, grades in the classroom, and quarterly assessments would provide the means for monitoring progress throughout the year. Such progress data are necessary because the EOG is administered at the end of the school year, and data must be analyzed throughout the year to determine whether my interventions are working. It has long been acknowledged that the difficulty of using only EOG data to make instructional decisions is precisely that EOG tests are, by definition, administered at the end of the academic year, giving teachers no time to use the data to address student needs because that group of students has moved on. However, EOG data help to generalize student needs by grade level. Individual EOG data is available to be used by teachers the following year

to identify each individual student's general level of understanding. Based on student demographics and prior year scores for my school, proficiency levels in the 80% range should be expected. My plan was that throughout the course of my study, frequent, strategic data collection would keep teachers and the school community focused on achievement. Therefore, I set a short-term goal: to increase overall student proficiency on English/Language Arts and Math across Grades 6-8, to 75% on the 2017 EOG tests. My medium term goal was to increase overall student proficiency on the 2018 and 2019 EOG tests to 85% on English/Language Arts and Math across Grades 6-8.

Teacher morale indicators are part of existing SMS data through the results of the 2016 NCTWS. The NCTWS is limited to teacher perceptions of working conditions, and directly related to teacher morale. In my study, specific questions from the NCTWS were identified as teacher morale indicators in order to monitor and collect data. I used these questions to develop a quarterly survey that I invited teachers to complete. Not all of the items on the NCTWS are relevant to my study because not all of them correlate with the specific teacher morale indicators that impact student achievement. For example, teachers may like working at a school (as indicated by a single item, "overall, my school is a good place to work and learn"), but they may not exhibit behaviors that positively impact student achievement. As indicated previously, the specific indicators will be taken from Teacher Leadership, School Leadership, and Instructional Practices and Support, as these areas directly impact student achievement. A major advantage of using excerpted questions from the NCTWCS is that since this survey is already a part of the existing school data, teachers are comfortable with analyzing the results, and perceptions of teachers are important to any change process.

I determined that a selection of literature from my initial review was relevant to my improvement goals. Figure 4 is a subset of my complete literature map focusing on the most pertinent literature for my study.

In Figure 4, note that the relationships between Principal Leadership and the other two categories are directly correlated. Principal Leadership impacts school climate and school climate has a direct impact on the role, responsibilities and work of the principal. Similarly, shaping the culture of the school is impacted directly by the actions of the principal. Conversely, the principal's roles and responsibilities are determined by the needs of the changing school climate, and therefore by the changing school culture.

Shaping school culture is the main focus of one body of research, and my study focuses on changing school climate. This is a valid body of research for shaping school climate since school culture will be reshaped and improved when the climate is improved. The authors of this literature offer helpful interventions towards changing school climate and ultimately, school culture. Warner and Heindel (2017) offer insights into understanding and changing school climate, and Cohen addresses a helpful process for school improvement.

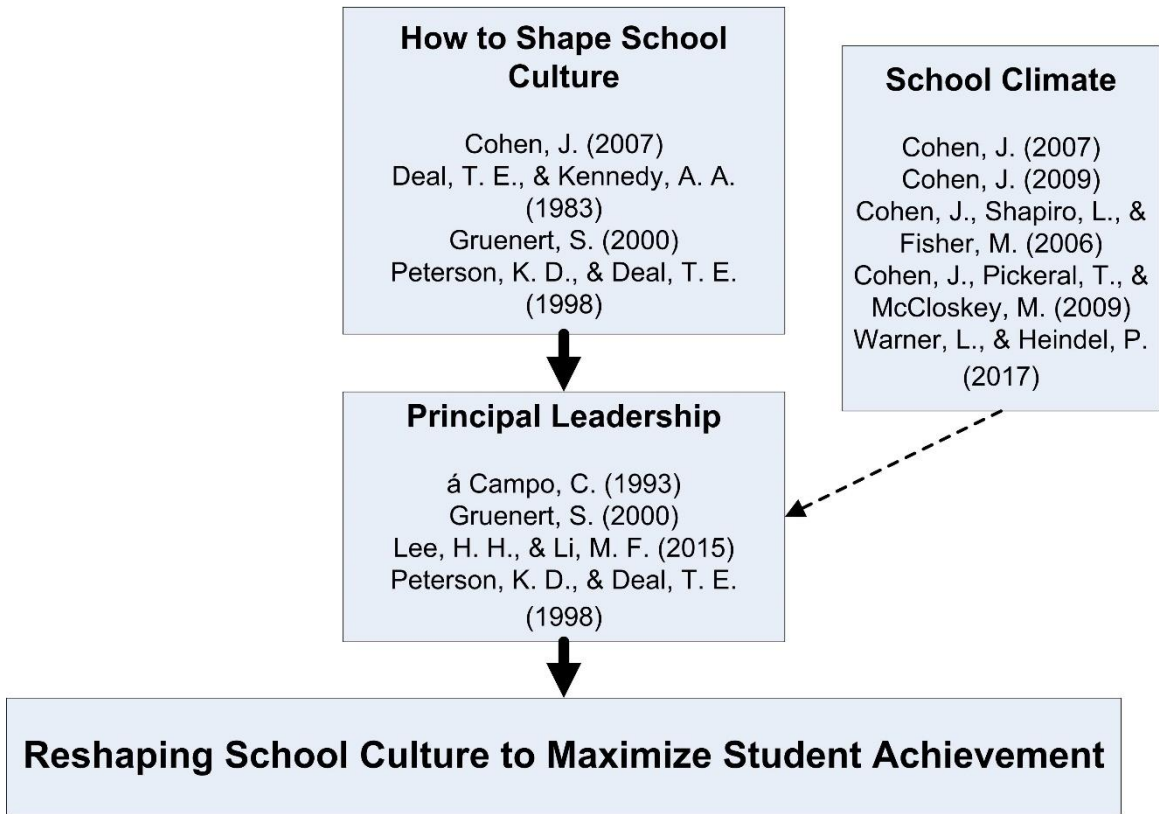


Figure 4. Subset of literature map particularly relevant to my improvement goals.

CHAPTER 3: STUDY DESIGN

Research Questions and Tasks

Any study of school climate and school culture is necessarily broad and extensive. For the purposes of this problem of practice, I have narrowed the focus to the following questions which target the specific needs of SMS, while also providing a lens for conducting further research.

Research Question 1

Is there a correlation between school climate and student achievement? Previous researchers have suggested that there does seem to be a correlation, but not a causal relationship. Discussions of school climate have yielded a wealth of information regarding the improved achievement of students who feel safe, engaged, and challenged due to a strong school climate (Cohen, 2007; Cohen, 2009; Cohen et al., 2009; Cohen et al., 2006).

Research Question 2

What are the indicators that the climate must be changed? To focus on specific indicators, I explored research on school climate, based on the assumption that school climate indicators would contribute to overall school culture and provide a basis for school improvement efforts. As detailed above, Cohen et al. (2006) identified 10 essential dimensions of school climate that could potentially be used as a starting point for identifying specific indicators for working towards improving overall school culture, and several surveys already exist to measure school climate, while measuring school culture seems to be less specific.

Gruenert (2008) and Van Houtte and Van Maele (2011) warn that culture and climate are not the same thing and that the terms should not be used interchangeably. Gruenert (2008) stated that “climate is the main leverage point for any culture, which means if school leaders want to

shape a new culture, they should start with an assessment of the climate” (p. 58). Accordingly, Van Houtte and Van Maele (2011) argued that different strategies must be used to measure culture and climate, as culture involves underlying assumptions and climate involves perceptions of others within the organization. All three of Gruenert and Van Houtte and Van Maele declared that improving the school culture is the most effective way of addressing school improvement. In my project, it is through understanding and attempting to improve climate indicators that the overall school culture will be impacted. Consequently, teacher morale indicators must be measured to understand the climate, and these indicators will enable me to describe and define the overall culture of SMS. The teacher morale indicators will serve as a scaffold for the deeper understanding of my data.

Research Question 3

What are the best methods to use to shape or reshape climate? Several authors (á Campo, 1993; Cohen, 2007; Deal & Kennedy, 1983; Gruenert, 2000; Militello et al., 2009; Peterson & Deal, 1998) have proposed specific steps for those who are interested in improving, shaping, and reshaping school culture to take. They all advised giving it a lot of time, focusing on creating a culture of collaboration, and taking time to understand the prevailing culture before putting a plan into action. There is no one-size-fits all model as school culture is pertinent and personal to each individual school. While the authors I have cited at the beginning of this paragraph focused on school culture, their theories are relevant to interventions designed to address climate as well. For example, Militello et al. (2009) addressed creating a cycle of continuous improvement through the implementation of Communities of Practice. This is an innovative approach that addresses collaboration as well as featuring a focus on student achievement. The formation of

Communities of Practice may take some time to foster, but they will enhance the climate by providing an environment in which teachers can work together toward a common goal.

Study Plan

The overarching research questions on which my study focuses are:

1. Is there a correlation between school culture and student achievement?
2. What are the indicators that a school culture must be changed?
3. What are the best methods to reshape a school culture?

The answers to these questions required both quantitative and qualitative data. For this reason, my study was developed as a convergent parallel mixed-method design, as described in Creswell (2014). The results were integrated at the interpretive stage. The quantitative data collected and analyzed included student achievement data and data collected using a subset of questions from the NCTWS. At the same time, qualitative data from interviews, surveys, field notes and observations of teacher meetings, were collected to compare to the quantitative data that will be collected periodically throughout the study. A side-by-side comparison was conducted after both sets of data are complete, and the results were interpreted in a final evaluation.

Participants

The participants were the certified and non-certified staff of SMS. I was the researcher and the principal of SMS. Thirty-eight staff members were core content area teachers (Math, English/Language Arts, Science, and Social Studies). Outside of the regular core content area, there were seventeen teachers. Among these, two were music teachers, three were physical education (PE) teachers, one taught art, and five were Consumer and Technology Education (CTE) teachers. In addition, there were six teachers of students with special needs (EC). We also

had one media specialist. Certified staff in administration included two school counselors, two assistant principals, and one principal. Non-certified staff included four teacher assistants, a receptionist, a school nurse, a data manager, and a bookkeeper. Of the 75 adults who contributed to my study, 13 were male and 62 were female.

Among the members of the school staff who contributed to my study, there was some diversity of job experience in education. Most of the teaching staff at SMS had more than 10 years of experience working in education. This was important to my study because their experiences affected their perceptions of the culture. Participants' gender also influenced their world view which was reflected in their perception of the culture of the school. I anticipated that I will detect gender differences among the qualitative data from one-on-one interviews I conducted.

At SMS, administrators practiced a representative collaborative model of leadership and communication. Teacher leadership teams disseminated information, solved problems, and developed policies and procedures at the school level as representatives of the grade level and content level teams. Collaboration was accomplished primarily through meetings of these leadership teams. The teams included the School Improvement/Data (SIT) Team, the Positive Behavior Intervention and Support (PBIS) Team, the Student Support Team (SST), and the school Leadership Team. These teams were comprised of representatives from each grade level, non-classroom teachers (music, PE, CTE, and EC teachers), at least one member of administration, at least one counselor, and non-certified staff. As a regular practice at SMS, teachers were required to meet with a grade-level and/or content-level PLC at least weekly to discuss student achievement data and instructional practices.

SMS was structured as a professional bureaucracy, where key personnel (teachers and staff members) were given general guidelines and professional training. Teachers had a good deal of discretion in how they went about teaching students. This level of discretion was appropriate in this environment because the students were diverse, and the teachers must attend to their individual learning needs. A standardized curriculum, schedule, and grading system were in place, but the teachers developed their own lessons, assessments, and classroom management systems.

The study was conducted throughout three semesters on a traditional school calendar. Data were collected concurrently through a series of activities in five phases, as follows.

Phase 1: Analysis of NCTWCS Results (6 weeks)

In this first phase, staff worked in collaborative groups with their leadership teams and PLC groups to analyze the 2016 NCTWCS results for SMS. Using tools made available through the North Carolina Department of Public Instruction (NCDPI) designed for this purpose, staff agreed on the nine indicators on the survey in the areas of Teacher Leadership, School Leadership, and Instructional Practices and Support. As indicated before, these are priorities for improving teacher morale. This phase helped to focus the staff on what they feel is affecting teacher morale and which indicators they felt they could most impact. The indicators were to be utilized by members of the School Improvement Team to develop goals for the School Improvement Plan (SIP). Analyzing NCTWCS data was on the agenda for small group PLC meetings, school leadership committee meetings, and general staff meetings.

The SIP's goals outline strategic steps towards reaching school community goals. The SIP is developed by members of the school community to improve aspects of the school including culture and student achievement. The plan's strategic steps may include professional

development plans, plans for communication of stakeholder groups, and plans for regular data collection. For the purposes of this study, a survey was developed with similar items to the 2016 NCTWCS to collect data on staff perception of these teacher morale indicators. This will be explained further in Phase 4.

These indicators were used to develop interview questions on overall, general school culture for one-on-one interviews with staff, which provided the qualitative data collected in Phase 3.

Phase 2: Promoting Student Achievement (36 weeks)

Phase 2 occurred concurrently with the beginning of Phase 1 and continued throughout the school year. Teachers worked in collaborative teams to analyze EOG data from 2015-16 to determine student needs. The analysis informed the School Improvement Plan goals which address student achievement. Additional data were collected through benchmark assessments at specific periods during the school year, concluding with 2017 Fall Benchmark scores, and including the 2017 EOG scores.

Student achievement on the EOG is reported each year as a measure of the total percentage of students who pass the standard. Initial data is taken from the EOGs in English/Language Arts, Math, and Science. The average scores on the different standards tested are not typically reported as a measure of achievement. However, average scores on the EOG are useful data for teachers to determine the academic needs of the students relative to the standards tested on the EOG. As part of their common data analysis, teachers use average scores to make instructional decisions about the specific standards students may have struggled with at the end of the previous year. This analysis drives their instruction at the beginning of the new school

year as they review to prepare for new information. For this reason, both average scores and total percent of students passing were collected as data.

Students at SMS regularly take a benchmark assessment in English/Language Arts, Math, Science, and Social Studies in September, December, and April. This benchmark assessment is comprehensive, covering the whole of the curriculum taught in each grade level. The assessment is developed and administered by the Local Education Agency (LEA) for all schools and students in the LEA in the core content areas in grades 3-12. The benchmark assessment is a computer-based test developed using the SchoolNet program. The test is written by a collaborative leadership team at the LEA level comprised of teacher leaders from each school in each content area. Prior to spring of 2017, students took the same test each time, fall, winter, and spring. However, the benchmark test items were changed prior to the spring 2017 test administration. The test was designed to assess cumulative knowledge on the curriculum standards, so any significant changes in scores due to changes in the make-up of the questions on the spring 2017 assessment should be minimal based on the fact that it was the final test on the year's curriculum.

Typically, each student takes the assessment during regular class time during a specified testing window determined by the LEA. The testing schedule for benchmark testing for school year 2016-17 was as follows: Fall – September 9-September 30; Winter – December 1-18; Spring – April 3-21, and Fall, September 8-23.

The School Improvement Team and grade level PLC teams at SMS were required to determine the standard for showing proficiency on the taught content for each administration of the assessment. According to the goals of the SMS SIP developed for school year 2015-2016, students who pass the assessment with 30% in September, 50% in December, and 75% in April would be considered proficient on the curriculum taught up to that point in the year. The goal

was for students to achieve an 80% proficiency on the EOG overall, across all three grades, in Math and ELA, by the end of the school year, and the benchmark assessments provide a tool for assessing progress towards the grade level standards tested on the EOG. While the SIP is revised each year, these goals did not change during the course of the study.

Scores for the benchmark assessments are reported by the SchoolNet program as the average score for each item and as the average score of the students overall. In general, teachers use the average score for their students to determine specific student needs in the content areas. For example, if the average score for a particular item is less than 80%, a teacher would know that additional instruction is needed for that content. If the average score is over 80%, teachers know that enrichment can be provided to the students for that item.

Therefore, in this phase of data collection, the average of the actual student scores on the benchmark tests were collected. The scores were disaggregated by grade level. Figure 5 displays the Excel spreadsheet to record this data. The goal for the benchmark scores was that the average score would change to reflect growth in the taught curriculum (30% in the fall, 50% in the winter, and 75% in the spring). Any difference between the expected average and the actual average would be analyzed and reviewed by teachers. They could then develop specific instructional strategies or interventions to address the difference.

Phase 3: Interviews, Observations, and Conversations (36 weeks)

The data collection for Phases 1 and 2 were completed simultaneously within their time frame. Phase 3 began after Phase 1 had been completed. In Phase 3, open-ended interview questions were developed to explore the staff's perception of the school culture at SMS and school culture in general. The questions were of a general nature in order to allow the

	A	B	C	D	E	F	G
			Average Score on benchmark -- Fall, 2016 (Goal 30%)	Average score on benchmark - Winter, 2017 (Goal 45%)	Average score on benchmark - Spring, 2017 (Goal 70%)	Average Score on Benchmark -- Fall, 2017 (Goal 30%)	Average Score on Benchmark -- Winter, 2018 (Goal 45%)
1	Grade Level	Subject					
2	6	Math					
3		ELA					
4	7	Math					
5		ELA					
6	8	Math					
7		ELA					

Figure 5. Excel spreadsheet used to collect student achievement data on benchmark scores

participants to feel comfortable being creative and not feeling as though there would be a judgment based on their answers. The following questions were asked, with Question 3 added to the original set of questions due to data collected in Phase 1 regarding teacher working conditions.

Open-ended questions for interviews. The following open-ended questions were developed for use in the one-on-one interviews.

1. Describe the role of the teachers in our school culture.
2. Describe a school that works for teachers and students.
3. What about the inevitable conflict that exists when people are asked to work together?
4. Describe the traditions and celebrations that are important to our school community.
5. What would help our school's positive environment?
6. How does a positive teacher affect student achievement?

Phase 3 was introduced at the March, 2017 staff meeting. This staff meeting was a general meeting where staff had the opportunity to discuss and analyze the results of the NCTWS for 2016. After working in collaborative groups, I explained the Problem of Practice and the data collection that will be included in the year's work.

At the beginning of the school year, 2017-18, I asked staff members to consider if they would like to participate in one-on-one interviews with me on an optional and voluntary basis. If they would like to volunteer, they will do so by leaving a note for me in my mailbox. The staff received a copy of the interview questions as well as a copy of the informed consent documentation in an email requesting volunteers for the interviews. The interviews took between six and twenty minutes, and a mutually agreeable time was selected for the interview. An

interview protocol, recommended by Creswell (2014), standardized the interview process. This interview protocol was used for each of the 1:1 interviews (see Appendix B, Interview Protocol).

I explained that a voice recording would be made of the interview in order to provide a transcript for the *nVivo* software. The voice recording and transcripts would then be uploaded into the *nVivo* software, where they would be coded for concepts and trends to develop a grounded theory about the school culture. No identifying information would be gathered beyond the letter of the alphabet chosen by the interviewee from a selection of alphabet cards. This letter was used to identify the interview within the software.

nVivo is a powerful software program designed to assist with qualitative data analysis. Information from interviews, including voice transcripts, videos, field notes, and observations were added to the data base. Using a coding process such as that described by Creswell (2014), each artifact was coded for constructs, concepts, central phenomenon, and content. With this program, the researcher can then look for trends, similarities, differences, and nuances that will help develop a grounded theory about the question. In this case, the principal was able to collect data to share with staff and to develop a grounded theory about the prevailing school culture.

Observations in meetings. Several formal and informal meetings were held in various offices and classrooms with varied groups of teachers. Field notes were taken from these meetings and added to the data base in *nVivo* when items related to school culture and climate were observed.

Conversations and informal observations. I took field notes during informal observations and conversations with teachers and staff when discussing school culture. The field notes were included in the *nVivo* data. I maintained anonymity in my field notes and recorded the date and content of the conversation. For example, this comment from a teacher during an

interview process for a new teacher on her team: “In our team, we always celebrate birthdays with cookies, so whoever we hire has to have the right birthday so we can have cookies every month,” was included in my field notes and coded in *nVivo*. I anticipated that my analysis would show a trend towards celebrating life events within grade level teams. Such an observation would be collected and coded in *nVivo* as a field note. Collecting field notes on this type of conversation also helped me focus on teacher morale, climate, and, eventually, school culture during my day-to-day activities.

The purpose of collecting this type of qualitative data was to develop a grounded theory regarding teacher morale, climate, and culture. The insight gained from this grounded theory allowed administration and teacher leadership teams to develop strategies to address negative aspects of the culture and to reinforce and encourage positive aspects. Sometimes just being aware of negativity may help bring about positive change. Similarly, a positive aspect, such as the birthday cookie celebration, would be something that could be extended to include all staff, perhaps in a central location, and an announcement made to celebrate the special day. This type of celebration may positively impact teacher morale.

Phase 4: Quarterly Climate Survey

Phase 4 involves a collection of quantitative data in late January, early April, early June, and late October, based on the 2016 NCTWCS data for SMS. In Phase 1, the data were analyzed and specific indicators were selected as those that would most improve the climate of the school. In this phase, a survey of nine short answer questions was developed and administered to all staff for voluntary completion.

The survey was administered through *SurveyMonkey* in order to respect the anonymity of the staff. All staff was asked to complete this short survey, and an open-ended question (What

else do you have to say about the culture of the school at this time?) was provided. Answers from the open-ended question were coded in *nVivo*, and the other multiple-choice answers were downloaded into an *Excel* spreadsheet through the *SurveyMonkey* program.

The survey was to be administered in late January, early April, and in early June before the staff left for the summer, and again the following year in late October and late January in preparation for the 2018 NCTWCS in March (see Appendix C, “Sample Quarterly Climate Survey”). The questions were developed from NCTWS questions that were selected by teacher teams in Phase 1 of the study.

Data were kept on an *Excel* spreadsheet and analyzed quarterly to identify if the numbers are changing. If the number of responses in the *Strongly Agree* and *Agree* categories increased, and the number of responses in the *Disagree* and *Strongly Disagree* categories decreased, this indicated that the school culture was making a positive change. Conversely, a negative change would be indicated by decreasing numbers in the *Strongly Agree* and *Agree* categories and increasing numbers in the *Disagree* and *Strongly Disagree* categories.

All data from the quarterly surveys were shared with staff in various ways, through general staff meetings, small group PLC meetings, and teacher leadership teams.

Phase 5: Interpretation and Analysis of Quantitative and Qualitative Data

This phase was the final phase of the study and was completed when all data were collected. In a convergent parallel mixed method design, the data are collected simultaneously and then interpreted. The interpretation of the data in this method lends itself to collaboration by the participants. In this study, the collaboration is an essential part of the study. The staff must have a vested interest in creating and keeping a vital school culture focused on student achievement, and the results of the data can and should be used to engage staff in reflective

problem-solving dialogue around the concept of school culture. A positive correlation between school culture and student achievement were considered and substantiated through comparing the quantitative data. Trends, theories, and other conclusions led to developing a grounded theory about the school culture that helped to inform a plan for future success.

Table 6 indicates the key elements of my study and the dates associated with each element.

Table 6

Study Plan: School Climate and Culture

		Project Start Date:	9/1/2016 (Thursday)			
WBS	Task	Start	End	% Done	Work Days	
1	Beginning Steps					
1.1	Complete Articles for IRB	Thu 9/01/16	Sat 10/01/16	100	22	
1.2	Complete IRB process	Sun 10/02/16	Wed 11/30/16	100	43	
1.3	Present to School Board	Thu 12/01/16	Thu 12/15/16	100	11	
1.4	Present to Staff	Wed 1/04/17	Thu 1/05/17	100	2	
1.5	Begin Data Collection Baseline: TWC	Tue 2/21/17	Sun 2/26/17	100	5	
1.6	Begin Data Collection Baseline: Student Achievement	Tue 2/21/17	Mon 2/27/17	100	6	
2	Data Collection					
2.1	Interviews	Thu 10/19/17	Wed 12/10/17	100	52	
2.2	Staff Survey #1	Mon 4/17/17	Friday 4/21/17	100	3	
2.3	Field Notes from meetings and conversations	Tue 2/21/17	Thu 11/30/17	100	7 months	
2.4	Student Winter Benchmark Data	Fri 1/20/17	Thu 1/26/17	100	5	
2.5	Staff Survey #2	Mon 10/16/17	Tue 10/23/17	100	3	
2.6	Student Spring Benchmark Data	Thu 4/20/17	Thu 4/27/17	100	7	
2.7	Staff Survey #3	Mon 1/01/18	Sat 1/06/18	100	5	
2.8	Student EOG Data	Thu 6/01/17	Mon 6/12/17	100	12	
2.9	Student Fall Benchmark Data	Sat 9/30/17	Sun 10/15/17	100	15	
2.10	Student Winter Benchmark Data	Mon 1/15/18	Fri 1/19/18	0	4	

50

Table 6 (continued)

		Project Start Date:		9/1/2016 (Thursday)	
WBS	Task	Start	End	% Done	Work Days
3	Data Analysis				
3.1	Transcribe Interview and Field Notes into nVivo	Fri 12/01/17	Mon 1/01/18	100	43
3.2	Analyze growth in Benchmark Scores for student cohort	Tue 10/16/17	Sat 10/20/17	100	4
3.3	Analyze growth in EOG scores for student cohort	Tue 10/16/17	Sat 10/20/17	100	4
3.4	Analyze change in teacher perception surveys	Mon 1/22/18	Wed 1/24/18	100	13
4	Prepare and Defend Dissertation				
4.1	Complete Writing	Sat 1/12/18	Fri 2/2/18	100	19
4.2	Present to Committee	Fri 3/08/18	Thu 3/08/18	100	5

CHAPTER 4: DATA COLLECTION AND ANALYSIS

My study was a convergent, parallel mixed-method design, as described by Creswell (2014), and included both quantitative data and qualitative data. My aim was not to show causality, but to postulate and support an associative juxtaposition of a range of intertwined indicators that collectively delineate school climate and outcomes (primarily, student academic achievement).

The quantitative data I collected and analyzed consisted of student achievement data, and the quarterly teacher working conditions survey data on my locally administered subset of items from the North Carolina Teacher Working Conditions Survey (NCTWCS)—as I discussed above. Since the NCTWCS surveys are conducted bi-annually, I conducted my local administrations to focus on items directly related to school climate and, ultimately, to a school culture focused on student achievement. Throughout my study, I gathered qualitative data from interviews, other qualitative surveys, field notes, and observations of teacher meetings. In keeping with the parallel design, in this chapter, I integrated data from my qualitative sources with my quantitative data so that each perspective informed the other in order to support my hypothesis that, just as has been shown in other instances, a strong school culture in SMS results in higher student achievement. As intimated above, my ongoing synthesis was enriched by a side-by-side comparison of my quantitative and qualitative data.

The quantitative data have provided me with numerical insights into how much/whether the school climate improved, and how much/to what extent student achievement improved. The qualitative data have helped me to define and develop the interventions necessary to improve the climate throughout the course of the year. Through analysis of the qualitative data, I developed

my grounded theory (Corbin & Strauss, 2015)—which I have entitled “hasten slowly”—to support an associative relationship from teacher morale, to school climate, to school culture.

My analysis of the quantitative data provided an empirical benchmark of progress, and my analysis of the qualitative data enriched the perspectives I elicited from the SMS administrators, based on their day-to-day engagement with the teachers. Collectively, all my data served to initiate reflection by administrators and teachers, and it led to insights into how to engender improvements in the school climate, and, ultimately, give rise to a stronger school culture that supports student achievement.

Initiatives Overview

As discussed in Chapter 3, I implemented several initiatives during the second half of the 2016-17 school year and throughout all of the 2017-2018 school year. These initiatives were designed to address specific indicators of teacher morale and school climate. They addressed furthering a collaborative model of teacher leadership that was already somewhat in place, and the distribution of teacher leadership equally across the school. Some of my initiatives consisted of strengthening already-existing structures, while other initiatives made changes to already-existing structures. Some were completely new processes in the school. Table 7 shows a side-by-side list of the initiatives.

A few of these initiatives were completely new to the existing culture of the school, but several of them involved changing or strengthening existing processes to address student achievement more directly. All my initiatives were developed to respond either to a specific indicator of teacher morale on the TWCS, or to impact student achievement directly, as indicated in the last column. Furthermore, each initiative was designed either to address the Multi-Tier

Table 7

Side-by-Side List of Initiatives across 2016-2017 & 2017-2018

2016-17	2017-18	Strengthen/Change/New	Climate or Achievement
Be My Guest Board	Be My Guest Board	New in 2016, strengthen in 2017	Climate and Achievement
Sunshine Committee	Sunshine Committee	New in 2016, strengthen in 2017	Climate
MTSS Cohort 2 Self-Assessment Measure	MTSS Cohort 2 Examine the Core	New in 2016, continuing with next steps in 2017	Achievement
SST committee to examine Tier 3 students	SST Committee to examine data for Intensive interventions	Strengthen and regroup in 2016. Strengthen and add interventionist and data collection in 2017.	Climate and Achievement
ThinkLab Intervention and Enrichment Block	ThinkLab Intervention and Enrichment Block	New in 2016, continued in 2017	Achievement
PLC meetings every week in grade/content level teams	Community of Practice meetings when needed in mixed grade/content level teams based on continuous improvement cycle.	PLC Strengthened in 2016 to address MTSS expectations. New Community of Practice in 2017.	Climate and Achievement
PBIS Team addresses schoolwide behavior.	PBIS Team addresses classroom behavior with introduction of Step Plan.	Strengthened in 2016 with additional training. Continued in 2017 with next steps.	Climate
Teacher Leadership Team in place.	Team-building with Teacher Leadership Team.	Strengthen in 2016, develop strategies in 2017.	Climate

System of Supports (MTSS) process directly (impacting student achievement), or to enhance teacher leadership and well-being (impacting teacher climate).

In order to understand the outcomes of these initiatives, it is important to examine the quantitative findings. After that, I will discuss the initiatives and their impact based on these findings.

Selecting Relevant Indicators

The first step to identify the climate indicators for which I would collect data was to identify them as a staff. Nine indicators from the 2016 NCTWCS were identified by the staff at a staff meeting in March, 2017, as the focus indicators for the interventions and initiatives. During this staff meeting, four collaborative groups were asked to identify five to seven indicators that they felt were most impactful and that they felt should be the focus for the following school year. The collaborative groups were developed by the administrators to include an equal number of teachers and support staff from each grade level, content area, and Exceptional Children Department staff. The staff had worked with these groups previously in other staff meetings and professional development opportunities, so I anticipated that this fact would help the group participants feel comfortable with expressing their honest opinions. I referred to the groups as NEWS groups (an acronym developed from the points of the compass—intended to avoid any implication of priority that could be associated with numerical or alphabetic group designations). After considerable discussion, the staff agreed on nine indicators. The nine indicators were:

1. Non-instructional time is sufficient.
2. Teachers are protected from duties that interfere with instruction.
3. The physical environment supports teaching and learning.
4. There is a broad range of professional support personnel.

5. Administrators consistently enforce rules.
6. Administrators support teacher's efforts.
7. There is an effective process for making group decisions.
8. There is an atmosphere of trust and respect.
9. Follow-up is provided for Professional Development (this comes directly from the NCTWCS and indicates that teachers are expected to follow through with professional development and that administrators facilitate that follow through)

Change of Plan

I planned to administer an interim TWCS in March, 2017, on the nine indicators selected through the process I have just described. However, the school district issued an intensive stakeholder survey for the accreditation process at the same time. This stakeholder survey was mandated, and it was quite time-consuming to complete. I believed that giving two surveys within the same time frame would be perceived as redundant and overly burdensome by the staff, so I went ahead and administered the district's stakeholder survey and decided to look for any correlation with the nine indicators on the interim TWCS that I had originally planned.

The drawback to my politically expedient decision was that the survey questions on the stakeholder survey were not directly correlated to our nine indicators, but there were two that I felt were relevant and could be used. One was the question about instructional time. This correlation appealed to me simply because it was included in a survey given to assess many aspects of the school in general. It was one of only two correlations that I could find in the data between the district survey and the nine indicators that my staff selected on the TWCS. This told me that instructional time should receive some attention when studying overall school climate, and subsequently, culture.

Another interesting correlation was the question about the physical environment on the district survey. SMS is an older building that was originally built for 750 students. With the growth in student population to over 1,000 students, there has been an increase in the number of portable classrooms. Older parts of the building have deteriorated, and we have had increasing issues with electrical items, air quality, and water issues.

Interim Survey Findings

An interim survey was issued at the end of the first quarter, October, 2017, and at the end of the semester, in January, 2018. The results of these two interim surveys and the district stakeholder survey discussed previously are shown in Table 8.

Scores are recorded in percent of teachers who strongly agreed or agreed with the statements based on a five-point Likert scale, with five indicating strongly agree, four indicating agree, three indicating neither agree nor disagree, two indicating disagree, and one indicating strongly disagree.

As can be seen in Table 8, there was little movement in perception in two areas, and the percentage steadily dropped in seven other areas at the October administration. Scores from the January administration show some improvement in most areas over the October interim survey and the March 2015 NCTWCS. A significant increase was recorded in “Administration supports teacher’s efforts” from 73.20% in 2016 to 91.18% in January, 2018. Another increase of note was in “Effective process for group decisions,” from 58.60% in 2016 to 70.59% in January, 2018. These indicators were both addressed directly with the interventions that will be discussed in more detail, and the increase indicates some measure of improving teacher climate. However, concern still exists over “Admin consistently enforces rules,” with an increase from 49.10% in 2016 to 55.88% in January, 2018. This is a small increase, but it still indicates that just over half

Table 8

Selected Teacher Working Conditions Survey Results

Result	March 2016 %	April 2017 %	October 2017 %	January 2018 %
Time: Non-instructional time is sufficient (2.1d)	57.60	48.93	37.50	64.70
Protected from duties that interfere with instruction (2.1g)	58.60	NA	42.50	55.88
Physical Environment supports teaching/learning (3.1i)	84.70	72.34	67.50	79.41
Broad range of professional support personnel (3.1f)	67.20	NA	47.50	64.71
Admin consistently enforces rules (5.1d)	49.10	NA	51.28	55.88
Admin supports teacher's efforts (5.1e)	73.20	NA	67.50	91.18
Effective process for group decisions (6.1e)	58.60	NA	45.00	70.59
Atmosphere of trust and respect (7.1a)	44.80	NA	40.00	55.89
Follow-up for PD (8.1i)	53.80	NA	53.80	41.17

of the staff perceives our administration to respond consistently to student behavior issues. Another area of concern is the indicator regarding mutual trust and respect. While the score showed an increase from 44.80% in 2016 to 55.89% in January, 2018, it indicates that just over half the staff agrees, which could be the cause of potential climate issues within the staff. Both of these indicators were areas that were addressed, either directly or indirectly, by the interventions. I have theorized about the continued low participation rate subsequently.

Student Achievement Data

All of my interventions were developed in the spirit of a continuous improvement model to address both teacher climate (as measured on the TWCS) and increased student achievement. For this reason, Student Achievement Data were collected, beginning with baseline EOG scores in 2015 and continuing with EOG scores in 2016 and 2017. Additionally, benchmark scores were collected throughout the study.

EOG Scores

Table 9 compares EOG scores for each grade and subject area as well as the total score for SMS as a school. Comparing the data from one year to the next will show the change in proficiency levels from one year to the next. If more students score proficiently, this indicates higher student achievement. Lower proficiency scores indicate lower student achievement. The desired trend is to see proficiency levels increasing each year. This would indicate that students have mastered more of the curriculum and have improved their achievement. It is important to note that North Carolina Department of Public Instruction reports EOG scores in two categories. College and Career Ready (CCR) indicates the percent of students who passed the test with a score of Level 4 or Level 5, with Level 5 being the highest. Grade Level Proficient (GLP) considers students who passed the test with a Level 3, Level 4, and Level 5. GLP is used for the

Table 9

Proficiency Levels on EOG Tests

Year	Grade Level	ELA (% Grade Level Proficient)	Math (% Grade Level Proficient)	Overall (% Grade Level Proficient)
2015	6	69.0	59.1	64.1
	7	69.8	63.1	66.5
	8	69.8	68.1	73.9*
2016	6	66.2	64.2	65.2
	7	70.6	62.7	66.7
	8	69.0	63.4	72.9*
2017	6	76.8	67.9	72.3
	7	74.1	66.2	70.1
	8	70.7	64.1	73.3*

Note. *Overall GLP in 8th grade includes Science EOG scores, which are not given at other grade levels.

purposes of this study for several reasons. First of all, this is the score that is reported to the public on the School Report Card, which is distributed to the public each year and includes data from EOG scores as indicators of overall school success. Second, this is an indicator of students who are successful on grade-level curriculum, which, in keeping with research findings over a number of years, is a better indicator of overall student achievement than just including those students who are considered to be above proficient on grade-level standards (Deno, 1985; Ford, Missall, Hosp, & Kuhle, 2017; Fuchs & Deno, 1991; Hosp, Hosp, & Howell, 2016).

Table 9 shows that overall proficiency in sixth grade increased 8.2% from the 2015 administration to the 2017 administration. Overall proficiency in seventh grade increased 3.6% in the same time period. In 8th grade, a decrease of -0.6% was made between the 2015 and 2017 administrations.

In addition to providing information on the total percent of students who achieved proficiency on the EOG tests, the state provides a measure indicating the amount of growth students achieved from year to year. The growth measure indicates whether students made high growth, expected growth, or less than expected growth. This measure is included in the data as a value-added measure of teacher effectiveness. Students are expected to show one year's growth for each year in the classroom. This means that students who are not proficient on the test may still exhibit positive growth because they scored higher than expected. Likewise, students may show a high level of proficiency on the test but may not exhibit positive growth because they did not meet their expected proficiency level. Table 10 is a summary of the growth indices of the EOG scores from the three years covered by my study. The index value is the growth measure divided by its standard error, and it provides a signal as to whether the progress estimate is significantly different from the expected growth. The index value also standardizes growth

Table 10

Summary of the Growth Indices of the EOG Scores

Year	Grade Level	Grade		Average Growth Measure	
		ELA	Math	Over All Three Grades: ELA	Over All Three Grades: Math
2015	6	0.3	-0.1	0.3	2.2
	7	1.7	2.3		
	8	-0.9	4.3		
2016	6	-1.8	-1.3	1.6	0.5
	7	0.5	2.6		
	8	1.7	0.0		
2017	6	0.8	0.1	0.7	1.4
	7	2.6	2.1		
	8	1.4	0.5		

measures across different models, subjects, grades and/or years for a more equitable comparison than the growth measure alone and ranges from -2 to +2.

EOG Achievement Outcomes

Student achievement increased overall and within each grade level from the 2015 test administration to the 2017 test administration, which are the years that served as boundaries to my study, as measured by the ELA and math EOG scores for Grades 6 and 7 and remained the same for Grade 8 over the same timeframe. Students also maintained growth over time, as determined by the growth index. While they fluctuated from year to year, they remained in the “High Growth” range each year.

The attainment of proficiency on the EOG tests is considered an indication of an individual student’s ability to respond correctly to items pertinent to the standards, and growth is an indicator of the teacher’s “value added” effect on the student in the classroom. In both areas, SMS recorded gains, indicating that student achievement was being adequately supported.

Benchmark Scores

Data from benchmark tests in ELA and Math provided me with on-going data throughout the year leading up to the ELA and Math EOG tests at the end of the year. Because the benchmark tests are comprehensive tests of the total curriculum for the grade, students are expected to increase their percent correct each time they take them. For the purposes of my study, I expected students to answer 30% of the questions correctly in the fall benchmark test administrations, 45% in the winter administration, and 70% in the spring administration to be considered proficient and on track to achieving proficiency on their EOG assessments. They should know something about each subject matter from previous years when they enter in the fall, so I expected them to achieve around 30% on the fall benchmark. By the time the winter

benchmark is administered, I expected that they will have learned close to half of the curriculum, so a score of 45% or higher is accepted as proficient. In the spring, the benchmark tests are given at the end of the third quarter, and students should have learned at least three-fourths of the curriculum. A score of 75% on the benchmark test, therefore, is considered proficient.

At SMS, content area teachers in different grade levels determine the benchmark for grade-level proficiency based on their knowledge of the pacing and instruction of their curriculum. Their cut scores may vary somewhat by grade level and content area. My cut scores for this study, then, are a reasonable representation of the expectations in different grade and subject areas. Teachers at SMS analyze the data, looking for trends and patterns. They then plan instruction and intervention to address the students' needs. If more students achieve proficiency—indicated by higher than expected average scores—teachers may use these data to leap ahead to a more difficult concept in the upcoming curriculum, or to provide intervention and instruction to those students who were not able to achieve proficiency.

By examining the overall average for each administration of the test, I can monitor whether students are becoming more proficient as a group. My expectation is that the average percent correct of all the student scores on the test will increase from one administration to the next. It follows that if a certain number of students achieve proficiency in the fall (achieving 30%), and then the same students achieve proficiency in the winter (achieving 45%), the average percent proficiency will increase. Similarly, if the same group of students achieve 75% in the spring, the average of all scores will increase again. This progressive average is also monitored by the instructional staff at the district level to determine whether interventions are needed in a particular grade level, content area, or school.

Assumptions about Benchmark Test Scores

My conceptualization of the purpose of benchmark testing rests on two assumptions. First, I assume that the number of students who are proficient in each administration should not decrease. An increase is not only desirable, it means that instruction is being delivered appropriately in the classroom if more students are proficient each time. I assume that the converse is true also. If there is a decrease in the proficiency rate, it means that instruction is not aligned with the curriculum, or that it is being delivered ineffectively in the classroom. My second assumption is closely associated with the first. It is that the average percent of items to which students respond correctly will increase with each administration of the test, since students who are successful on grade level curriculum will answer more questions correctly with each subsequent administration. Both of these are important to my study because these statistics are proxy measures of teacher effectiveness with respect to the curriculum and instruction.

To see how sustainable my two assumptions are in practice, Figures 6 through 8 illustrate the average scores on Math and ELA benchmarks that were conducted over the course of my study. The scores are separated by grade level with Math and ELA scores for each grade level on each bar graph.

Benchmark Outcomes

In general, the graphs show some progression of growth over time as determined by the overall average percent correct, but there is by no means uniform growth. Students' performance was greater than I expected in both subject areas and all three grades in the fall administration, indicating that they appear to be well-prepared on grade-level content from the year before. However, from what appears to be a strong foundation, the scores diverge from my expectations across the three the grade levels in both Math and ELA.

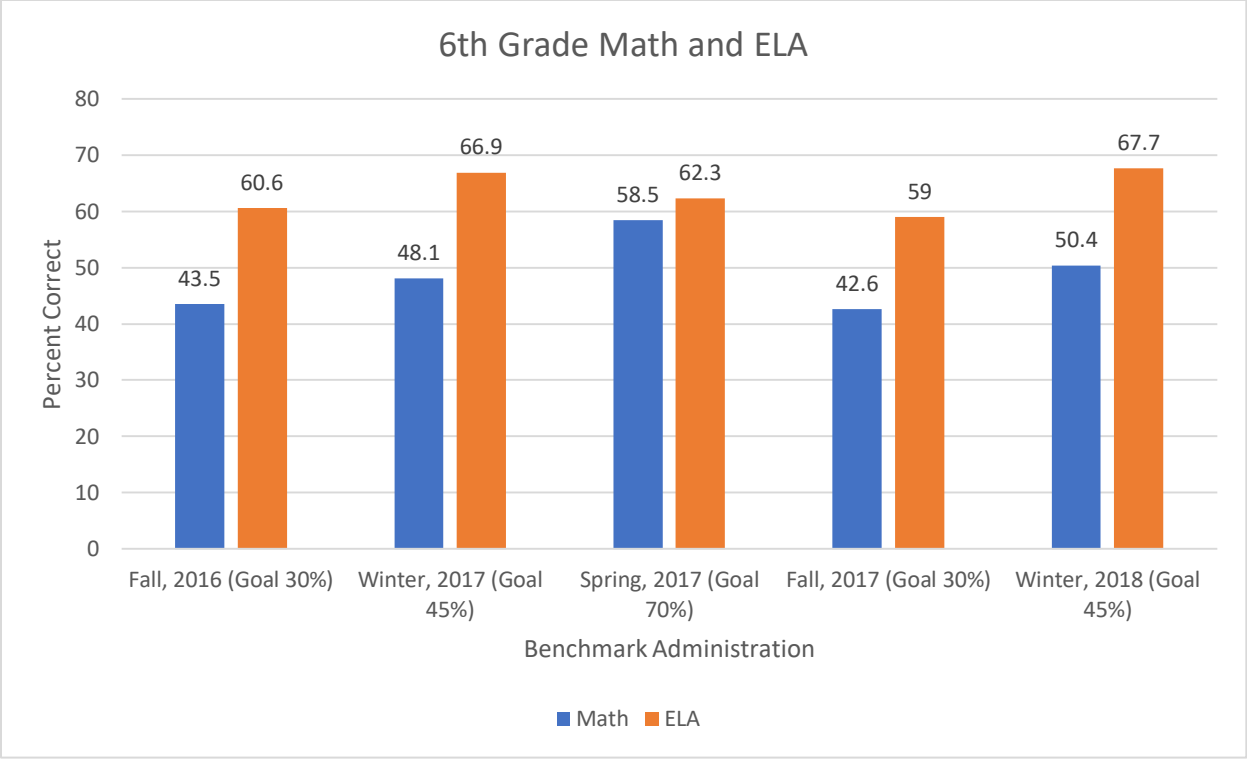


Figure 6. Average scores on benchmark tests for Grade 6.

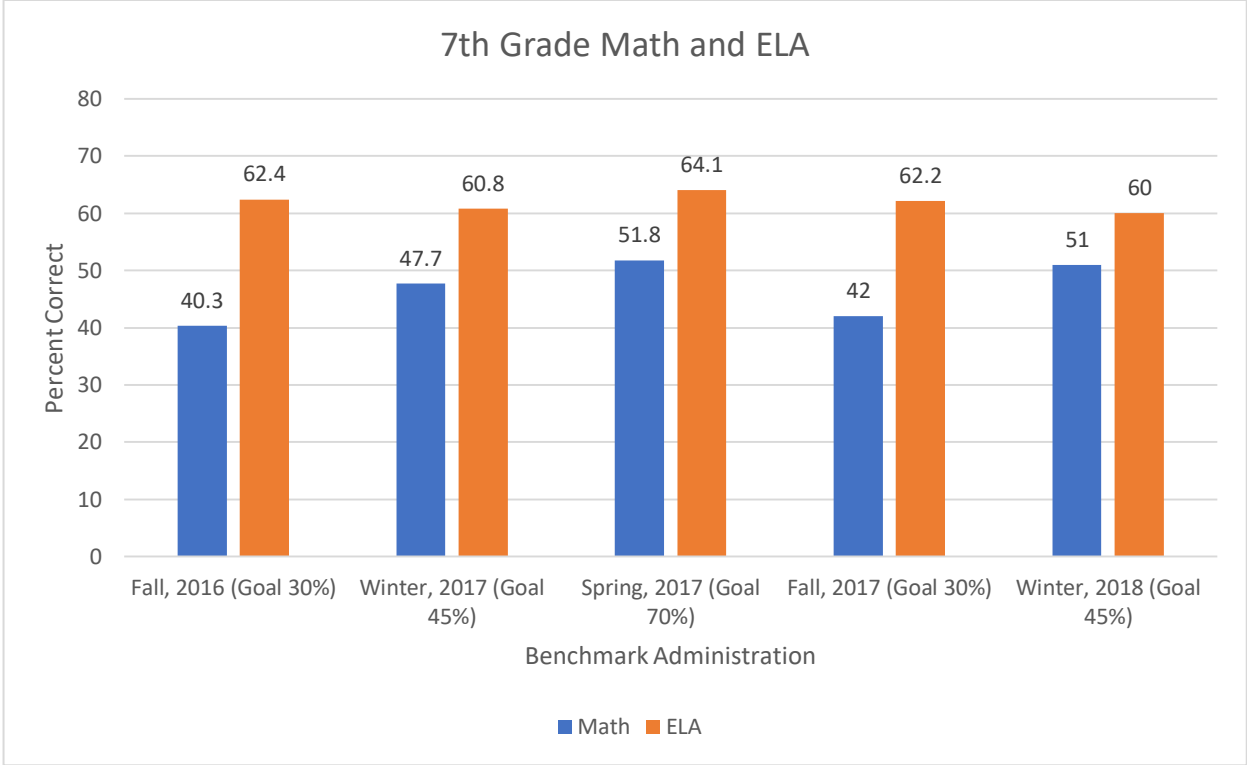


Figure 7. Average scores on benchmark tests for Grade 7.

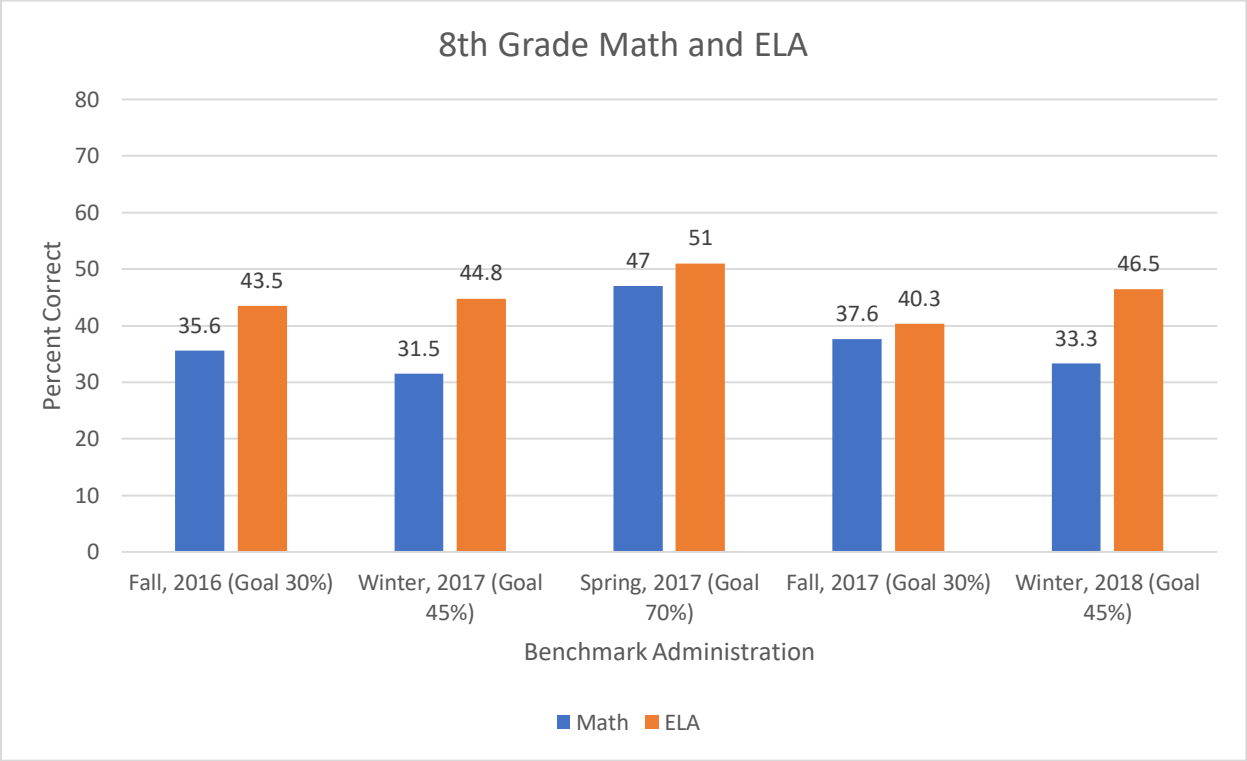


Figure 8. Average scores on benchmark tests for Grade 8.

These results are important for monitoring the overall performance of students at SMS, and they bear reflection and analysis by my staff. For the purposes of my study, the benchmark scores indicate that the students are on-track for maintaining the expected levels of performance on their EOG scores because they have shown progress on their test scores. The proficiency scores show a general increase from one test administration to the next. They are similar from one year to the next. Since EOG scores increased in 2017, and benchmark scores were similar to those in 2018, it is reasonable to expect that they will have similar EOG scores. Therefore, they are on track this year, insofar as the benchmark scores help to predict the EOG scores.

Achievement and Climate

The series of interventions I introduced were intended to increase student achievement and were directly related to implementing the MTSS process at SMS. While addressing student achievement directly, they also addressed issues related to climate. The correlation between achievement and climate is inherent in my hypothesis that both are important to creating a strong school culture. The following discussion of these interventions will provide a richer understanding of their impacts on both student achievement and climate.

Introducing the MTSS Process

North Carolina adopted the MTSS process for all schools in the state because of the impact that research has shown it to have on student achievement. For example, according to Averill and Rinaldi (2013), “MTSS offers the potential to create systemic change, which results in improved academic and social outcomes for all learners” (p. 2). They asserted that the MTSS model effectively weaves Response to Intervention (RtI) and Positive Behavior Intervention Support (PBIS) models to address students’ academic and social needs. They portrayed MTSS as relying on a system of analyzing data to determine student need, developing research-based

strategies to address those needs, and analyzing the effect of these strategies by regularly monitoring student progress.

SMS was chosen to participate in the Cohort 2 MTSS professional development at the district level, which started in January, 2017. The first part of the professional development focused on implementing the Self-Assessment Measure (SAM) that is integrated into the MTSS process in order to determine the initial “next steps” the staff at SMS should take. The second part of the professional development occurred in August, 2017, when the MTSS team for SMS was coached to examine core instruction through the lens of PBIS. The schoolwide MTSS team included teachers from each grade level and Encore Team, a member of the Exceptional Children (EC) department, both counselors, the AIG coach, and the principal.

Renewing the Student Support Team (SST) process within MTSS. Under the umbrella of MTSS, addressing student academic need is accomplished through analyzing core instruction within the school, ensuring that all students are taught the standard course of study, and that a robust Student Support Team (SST) process is in place. The SST is considered a key component of MTSS within the school. The SST process is used when students show they are struggling with core instruction and need additional support to remain abreast of the standard grade level curriculum, which is referred to as the core curriculum. Once a student is identified for assistance, the SST process is initiated with a meeting of teachers, administrators, and parents to develop strategies to help the student. Data are collected frequently throughout the process to ensure that the intervention strategies put in place by the SST are working.

At SMS in 2015, the SST was no longer functioning well, and did not provide individualized assistance to students. Therefore, in the winter of 2017, professional development was provided at the district level and at the school level to renew the process. The new SST at

SMS is comprised of one teacher from each grade level, one teacher from the Exceptional Children Department, one teacher from the Encore Department, one counselor, and the principal. The SMS MTSS team realized that a stronger SST process would address student needs more effectively and help SMS with implementation of the MTSS model in the school. The SMS SST and MTSS teams met in summer, 2017, to develop a standard protocol for meetings, interventions, and data collection.

Providing additional student support has resulted further in higher student achievement, as indicated by the EOG and Benchmark scores. Overall, the renewed SST has been a positive intervention for student achievement. However, it requires that teachers attend meetings every six weeks for each student, that they provide a specific intervention during class time with that student, and that they maintain records of progress monitoring data for each student. As a consequence, teacher members of the SST have to forego considerable amounts of non-instructional time that would otherwise be available to them because of the meetings and additional preparation. The SST intervention, then, has the potential to work against positive teacher climate while positively impacting student achievement. Interestingly, “time” was not something mentioned in my interviews regarding school culture, yet it continues to be mentioned in surveys and anecdotal notes as a significant indicator of teacher satisfaction.

Positive Behavioral Interventions & Supports (PBIS). Another important aspect of MTSS is a strong Positive Behavioral Intervention & Supports (PBIS) team. At SMS, the underlying PBIS structure was in place, with schoolwide behavior expectations established and shared with staff and students. The problem was that rules and expectations were reinforced inconsistently at best in the classroom, and this resulted in inconsistent treatment of behavioral infractions by administrators. The staff at SMS had received the initial training in PBIS several

years ago, but most of the members of the original committee who had received the training had since left the school. This change in staff included losing the Assistant Principal who had been trained in both the SST process and in the PBIS process. This meant that staff at SMS needed a refresher course in the initial professional development sequence associated with PBIS. To facilitate this, my assistant principals and I selected a new PBIS team comprised of grade-level representation, one teacher each from Encore and EC, and the Assistant Principal. This team was given initial and follow-up professional development in the PBIS model in 2016-17. As a result of their professional development, they have developed a protocol specifying escalating consequences for classroom infractions (see Appendix D, Step Plan) and a school wide plan to address tardiness and absences (see Appendix E, Schoolwide Attendance Plan). A list of major and minor infractions is in the process of being developed.

Achievement Intervention

The teachers at SMS designed an intervention to increase student achievement, and the timing of this intervention coincided with my study. Since the initiative was created by the teachers, there was buy-in and support for it since the start. The initiative addressed the precepts of MTSS as well. The following discussion illustrates how this intervention addressed overall student achievement. However, the discussion also takes into account climate indicators that surfaced from the implementation, actions taken towards reconciling the climate concerns, and the outcomes of these actions.

Intervention and Enrichment Block (ThinkLab)

Further addressing the MTSS model, SMS implemented an intervention and enrichment block (ThinkLab) period in the master schedule. The MTSS model is dependent on students receiving instruction on the core curriculum, with the understanding that students may require

different levels of support to appropriately benefit from the core curriculum. Teachers at SMS had been developing their ThinkLab program specifically to address the needs of struggling learners, and to provide enrichment and acceleration for advanced learners prior to my first year as principal there. The teachers at SMS had researched the process and created the program, beginning their research process in 2014-15. They developed the process in 2015-16, and they prepared for full implementation in 2016-17, which occurred on schedule. It is important to emphasize that, while ThinkLab was implemented under my leadership, it was implemented only after research and buy-in from the teachers at SMS.

In 2016-17, each rotation of ThinkLab lasted six weeks on an alternating daily schedule (A/B days), with three or four weeks in between to allow for additional classroom instruction during the ThinkLab time in the schedule. These non-ThinkLab weeks were essential to the process because they allowed for teachers and administrators to regroup students based on benchmark and classroom assessment data. There were four rotations in 2016-17. The staff voted at the end of the 2016-17 school year to have three rotations of seven weeks, rather than four rotations of six weeks, with four weeks in between, in 2017-18. The ThinkLab schedule is still conducted on an alternating A/B schedule, with students attending one class on A days and a different class on B days. There is a wide diversity of classes on each day: about half of the student body is in an ELA or Math class, with instruction developed for the group depending on their achievement data, on either day, with the other half in enrichment classes.

In the context of ThinkLab, teachers elect to teach either an “intervention” group (a class that specifically addresses ELA or Math content at a level designed for the needs of the group) or to develop and teach an enrichment class. The enrichment classes are required to address and enrich the ELA or Math curriculum. Teachers fill out an application for consideration to teach an

enrichment class (see Appendix G). The ThinkLab period is forty-five minutes, and it is held in between the first and second period of regular instruction in the classroom day. This period of time was agreed upon by the teachers because they felt if we scheduled ThinkLab at the very beginning of the day, some students may choose to arrive at school too late to attend their intervention class. Likewise, scheduling it at the end of the day would provide an opportunity for students to check out of school early if they felt that ThinkLab was an “extra” or constituted unimportant time.

Adjusting the bell schedule for ThinkLab was difficult. The bell schedule in previous years had allowed for seventy-minute classes with a four-minute class change. In order to implement ThinkLab, we had to adjust that already-established bell schedule. Regular classes would have to be shortened in order to provide a block of time for ThinkLab. Since the teachers had determined that forty-five minutes would be optimal for ThinkLab classes, we subtracted an equal number of minutes from each of the six regular periods, then we added a four-minute class change by ringing the first bell in the morning four minutes earlier than in previous years. This would guarantee that our bell schedule would still allow for the number of minutes expected for instruction by the district. After we had proposed a bell schedule to the teachers, we discussed whether we would keep the same schedule all year long, or if we would revert to the “regular” schedule that we had used in the previous year when ThinkLab was not operating. In order to keep the schedule consistent, the teachers decided to keep the same bell schedule for every day of the school year. This left us with the problem of having an extra 45-minute period in the daily schedule in the weeks between ThinkLab rotations.

Table 11

Extended Core Instruction (ECI) Daily Schedule

Day of the Week	6 th Grade	7 th Grade	8 th Grade
Monday	1 st Period	2 nd Period	2 nd Period
Tuesday	3 rd Period	1 st Period	3 rd Period
Wednesday	4 th Period	4 th Period	1 st Period
Thursday	5 th Period	5 th Period	5 th Period
Friday	6 th Period	6 th Period	6 th Period

The solution we developed was to send students to their regular classes each day of the week for additional instruction in the content areas during non-ThinkLab weeks. This would also give teachers an additional planning period one day a week when their students were scheduled to attend their Encore classes. The ThinkLab period during non-ThinkLab weeks is called Extended Core Instruction (ECI). Table 11 shows the ECI schedule for each grade level.

Students attend four core classes (ELA, Math, Science, and Social Studies) and one encore (elective class, such as technology, band, music, art, or PE) class each day. The encore classes are run on an alternating A/B schedule. There are six periods on our bell schedule. Students are scheduled for lunch during one of the periods. Grade 6 has lunch during second period, Grade 7 has lunch during third period, and Grade 8 has lunch during fourth period. We set the ECI schedule for each day starting with second period on Monday, third period on Tuesday, fourth period on Wednesday, fifth period on Thursday and sixth period on Friday. Students attend their homeroom (first period) class on the day that corresponds to their lunch period. This explains the differences in the schedule, with first period appearing at a different time during the week, on Monday, Tuesday, and Wednesday, for each grade level.

The ECI period returns instructional minutes to teachers who are not sure that the time taken from the regular instructional schedule for ThinkLab is an effective use of instructional time. This climate issue was addressed in this way to gain buy-in from teachers who were initially skeptical about the effectiveness of this initiative, and who felt that they were hard-pressed already to teach the established curriculum in the time they had available. Table 12 is the daily bell schedule at SMS, which includes ThinkLab and ECI time.

Intervention. ThinkLab was designed to provide time to implement academic intervention and to initiate educational enrichment for all students in the school. The academic

Table 12

Daily Bell Schedule Including ThinkLab/ECI Period

Team	1st Period 8:25-9:30 (5 min HR)	ThinkLab/ ECI 9:34-10:14	2nd Period 10:18-11:18	3rd Period 11:22-12:22	4th Period 12:26-1:26	5th Period 1:30-2:30	6th Period 2:34-3:35
6th Grade	CORE	THINKLAB OR ECI	LUNCH/ PA	CORE	CORE	ENCORE	CORE
7th Grade	CORE	THINKLAB OR ECI	CORE	LUNCH/ PA	CORE	CORE	ENCORE
8th Grade	CORE	THINKLAB OR ECI	CORE	ENCORE	LUNCH/ PA	CORE	CORE
77 Encore	PLAN	THINKLAB OR ECI	SST/ LUNCH	8TH GRADE	SST/ LUNCH	6 TH GRADE	7TH GRADE
EC 1	CO-TAUGHT MATH, 2- MAN	THINKLAB OR ECI	LUNCH	CO-TAUGHT ELA, 2-MAN	CO-TAUGHT MATH, 4- MAN	PLAN	CO-TAUGHT ELA, 4-MAN
EC 2	SS- 8 TH MATH	THINKLAB OR ECI	CO-TAUGHT MATH, 7TH	LUNCH	CO-TAUGHT MATH, 7TH	SS-6/7 TH MATH	PLAN
EC 3	CO-TAUGHT 7 TH ELA	THINKLAB OR ECI	SS-ELA 7th/8th	LUNCH	SS-ELA 6th	CO-TAUGHT- 7th ELA	PLAN
EC 4	CO-TAUGHT MATH	THINKLAB OR ECI	CO-TAUGHT MATH	PLAN	LUNCH	CO-TAUGHT ELA	CO-TAUGHT ELA

Table 12 (continued)

Team	1st Period 8:25-9:30 (5 min HR)	ThinkLab/ ECI 9:34-10:14	2nd Period 10:18-11:18	3rd Period 11:22-12:22	4th Period 12:26-1:26	5th Period 1:30-2:30	6th Period 2:34-3:35
EC 5	CO-TAUGHT 6th ELA: Botkin	THINKLAB OR ECI	CO-TAUGHT 7th ELA: Reeves	LEARN LAB, 8TH	LUNCH	LEARN LAB, 6TH A DAY/ PLAN B DAY	LEARN LAB, 7 TH B DAY/ PLAN A DAY

intervention component is built around providing appropriate support for each student based on his or her level of understanding of grade level core curriculum. ThinkLab relies on data analysis of student achievement, primarily EOG test scores from the previous year, to determine whether students need core instruction, supplemental support, or intensive support. Students who passed the prior year's EOG tests with Levels 3, 4, or 5 on ELA and math are identified as "core." Students who received a Level 2 on their EOG tests are identified as "supplemental." Students who failed their EOG tests by achieving a Level 1 are identified as "intensive." Once students have been identified, they are scheduled for instruction in math and English/language arts during the ThinkLab period. Students who are identified as core are placed in classes with other core students, while students with supplemental and intensive needs are placed with others who have similar needs. Core classes have 25-30 students, supplemental groups are limited to no more than 12 students, and intensive groups are limited to no more than 8 students. The faculty members refer to these intensive classes as "academic intervention" classes, in the sense that students who have achieved at a high level on their EOG tests deserve to have additional instruction in ELA and math as well as the students who have need for additional below-grade level instruction. While the orientation of the high achievers' instruction may appear to be enrichment, as the following section discusses, it is distinct from enrichment in our concept of ThinkLab since it is curriculum-related instruction that is designed specifically for higher achievers. Likewise, middle and lower achievers receive instruction that is designed to address their curriculum-related unique needs in ELA and Math.

Enrichment. The enrichment component of ThinkLab includes a series of enrichment electives which must, in their design, incorporate math or ELA instruction. However, the enrichment classes are diverse, giving teachers free reign to create and implement a class with

little testing accountability. Teachers are encouraged to be creative and to think outside of the box, however they do have to document an English/language arts or math component within their enrichment class. A representative sample of the types of classes available during ThinkLab is included as Appendix H, “ThinkLab Enrichment Classes.”

Process for scheduling students. For each rotation, each student is placed in one math or ELA academic intervention class based on his or her previous year’s EOG scores. His or her academic intervention class alternates from one rotation to the next. For example, students who received math academic intervention in the first rotation will receive ELA academic intervention in the second rotation, and then they will receive math academic intervention again in the final rotation. The students do not select their academic intervention classes. Administrators and teachers collaborate to place students appropriately in intervention classes for each rotation.

Prior to the beginning of each ThinkLab rotation, students take an on-line survey to select three enrichment classes of their choice. Administrators then hand-schedule the students for each of the classes, using student choices as much as possible to schedule them in one of their choices. Administrators then provide class lists to teachers, and also maintain data for each rotation.

ThinkLab was designed to address student achievement in two ways. First of all, students receive instruction at their level on the specific standards and objectives in ELA and math. This is in keeping with the MTSS model, which outlines the three categories of support for students: core, supplemental, and intensive. Within our context, we suggest specific strategies and interventions to address these needs, and staff members are trained in strategies for each level. Second, students receive instruction in a class of their choosing that will strengthen their understanding of ELA and/or math in context. Since they are working in a class they choose, with a teacher who is excited about the subject matter, there are few discipline issues. Students

remain in class longer and pay more attention to the topic. Students also appear to be more engaged and active in their learning in these enrichment classes. Students receive a Pass or Fail grade for their ThinkLab classes. This procedure was developed by the teachers for data collection and to provide accountability for the students.

Outcomes on climate and achievement. Anecdotal information from teachers and students indicate that ThinkLab is engaging and effective. The previous discussion of student achievement data shows an increase in student achievement overall.

However, data from an interim TWCS indicates that teachers are beginning to be “burned out” by the extra planning and getting to know new students during each rotation. This is supported by the quote from one of the surveys,

From what I have heard/observed and my own experiences, ThinkLab is ‘burning’ teachers out quickly. It is taking away from the regular duties teachers are asked to perform. Many teachers at this school already are teaching multiple core subjects. As a staff, we voted on whether or not to start ThinkLab, and the vote failed. I know ThinkLab is considered a "non-negotiable", and this awesome staff will continue to teach ThinkLab. However, I feel it is important for you to know it wearing us out. (October, 2017, interim TWCS)

ThinkLab is an intervention that will take time to implement with fidelity. It was an initiative with strong staff support. The staff developed the program, and they voted to implement it for at least three years. This quote was surprising because of the process of votes that we had taken throughout the implementation of this initiative. It is important to understand our voting process to understand the perspective of this respondent’s comment.

An initial vote was taken in January, 2016 to delay the implementation to the beginning of the school year in September, 2016. At that time, implementing ThinkLab was not the issue. The vote was taken to decide when the initiative would begin. In January, 2016, teachers on the ThinkLab development team were excited about starting ThinkLab, and they proposed at a staff meeting to start it immediately during second semester of 2015-16. In the ensuing discussion, the timing of the initial implementation was questioned. If we started it second semester, we would have to work through the implementation processes in just three weeks, as we were nearing the end of the first semester. Several staff members felt that not enough time had been given to the processes and procedures necessary to implement it well. They expressed concern over their lack of preparation and professional development. They felt that if we implemented it too early, we might fail because we were not truly ready to start. The staff voted against starting it in the middle of the 2015-16 school year. This was the vote which was referred to in the quote about the staff voting for ThinkLab and failing. The very next vote at that same meeting was to start it at the beginning of a school year rather than in the middle, allowing for additional training and support for staff during the summer of 2016. The program was implemented in September, 2016, with its first rotation.

The staff reviewed the implementation of ThinkLab after the second rotation in the 2016-17 school year, in January, 2017. They were cautiously optimistic about the program, and it was determined at that meeting, by a majority vote, that the program should continue beyond the 2016-17 school year. In fact, they voted to continue the program for at least a total of three years. The teachers felt that the work they put into it deserved more than one year's trial, and they wanted to see the cumulative results of student achievement for the current sixth graders, who started the program as sixth graders, at the end of eighth grade. The teachers believed that this

would make a full cycle, after which we would reevaluate the initiative by examining student achievement data to determine the effects of the program.

Following the first rotation in 2017-18, I took several steps to alleviate the stress of time and extra planning for the teachers as well as for those conducting the scheduling process. The first step was to allow academic intervention teachers the option of keeping one or more students for each rotation, and to request the levels they wished to instruct during academic intervention. In this way, they would be able to work consistently with some students for more than one rotation, maximizing the relationship and continuing the work seamlessly from one rotation to the next. This also resulted in fewer student moves in their schedules. Another step was to provide teachers with their class rosters more quickly. This allowed them to collect data about the students' instructional levels and to alert administration if students were placed incorrectly in their classes. Because teachers were keeping more of their students in their academic intervention courses, the scheduling process was shortened. This allowed for student rosters to be developed earlier in the process, and facilitated better communication with the teachers regarding students selected for their classes.

A critical step for enrichment class teachers was to eliminate any students who were repeating their course. By ensuring that students take different courses in each rotation, enrichment class teachers were able to reuse their lessons for each rotation because they have different students. This means that they can plan one seven-week unit for the year and implement it several times.

In summary, ThinkLab is a program that needs time to develop and to start to see the results. Changes were made in 2017-18 based on feedback from the staff over the course of the

implementation period, 2016-17. However, a comment from the same person quoted above on the interim survey indicates that we still have much work to do. The comment was

I knew teaching would be difficult, and it has been at other schools I have taught at, but I never felt overwhelmed like I feel teaching here at SMS. ThinkLab and SST have added so much more work to a job that is already extremely tough. While ThinkLab was created out of the desire to help students, the needs of the teachers also need to be met if they are going to continue successfully educating students. (Interim TWCS, October, 2017)

Climate Initiatives

Other initiatives were designed to directly affect teacher morale and school climate. While I assumed that they would indirectly affect student achievement, the purpose of these initiatives was to alleviate concerns over trust and respect among staff members. This was one of the lowest percentages on the NCTWCS of 2016, with only 42% of respondents agreeing or strongly agreeing with the statement, “In my school, there is mutual trust and respect between staff.” After interim surveys, it appears that these initiatives may be too little too late, based on declining or stagnant numbers of teachers who agree with the statement, with a score of only just under 56% of respondents agreeing or strongly agreeing with this statement on the January, 2018 interim survey. However, an in-depth view of each intervention may help to develop further action to increase that score.

Be My Guest

The “Be My Guest” board is an attempt to facilitate teachers watching teachers teach, an important feature of effective schools (a Campo, 1993). Teachers may invite others to visit their classrooms by placing their invitation on the “Be My Guest” board in the front office, and other

teachers may choose to visit them during this time frame if they have a planning period or if they ask for coverage from administration.

The “Be My Guest” initiative was started late in spring 2017, and it continues in 2017-18. Teachers were required to leave a quick note for the teacher they visited, responding with “I noticed” and “I wonder.” A padlet in spring 2017 was used to monitor the program initially, but it was discontinued due to lack of participation. (A padlet is an on-line bulletin board forum where responses are posted for others who are invited to the forum, allowing for two-way communication between participants in a class or discussion).

Beginning with the second semester in 2018, I developed an incentive program. There will be a drawing for a gift card to a local coffee house at the end of each month. Teachers enter the drawing either by visiting another teacher’s classroom or by inviting teachers to visit them. There is a form that can be used by teachers to leave feedback for a teacher they visited or to provide information on the “Be My Guest” board. The form also serves as an entry form for the drawing (see Appendix H).

Anecdotal feedback at the beginning of my study indicated that teachers did not know how other teachers were teaching in their classes, and this “Be My Guest” initiative grants teachers permission to visit other classrooms. Figure 9 illustrates how straightforward the “Be My Guest Board” process is. Teachers post an invitation in the appropriate block to indicate when they would like to be visited and what teaching strategies can be observed in that class period in their room.

This was intended to create an atmosphere of respect among the teachers in the building by encouraging them to value other content specialties. A common theme throughout the



Figure 9. Be My Guest board.

interviews I conducted was “respect,” and that people wanted to feel valued or to know that they “mattered” to others. For example, one participant in the October, 2017 interim TWCS stated,

A problem that I see is that a lot of the core teachers do not seem to value the encore classes. I think that we all work very hard, but unfortunately do not get the support from the core teachers (not all, but most). Many times my students will say that their core teachers say that they can miss my class because it is "only encore." This affects the school climate because their (sic) is a divide with some of the teachers and the students see it. (TWCS, October, 2017)

Communities of Practice

Another initiative I introduced was a restructuring of the Professional Learning Community (PLC) process. PLC meetings have been a part of school structure for several years. In the SMS context, PLC meetings were designed to analyze data and address student needs. In the past, teachers were required to attend at least one PLC meeting each week. As I attended PLC meetings in 2016-17, I noticed that there was a very strong interest in student data and data-driven instruction. However, there was no cohesive process to plan and implement changes in teaching practice as a result of the data analysis that occurred in those meetings. At best, teachers would plan to review or re-teach according to the student assessments. At worst, nothing would be done to address any deficiencies. The meeting structure served merely as a review of information, and the meetings frequently became business meetings at which discussion of administrative items, such as duty schedules and field trips, became the norm.

In 2017-18, I introduced a new model intended to address in a meaningful way the students’ needs by promoting changes in practice as a result of analyzing data during PLC meetings. This model was the Community of Practice (CoP) model outlined by Militello et al. (2009). This year

at SMS, teachers have been required to participate in at least one CoP Meeting each quarter. The meeting structure roughly followed the format of analyzing and identifying a problem based on the analysis of student achievement data, creating a strategy, trying out the strategy, monitoring the progress with data, and then analyzing how well the strategy worked. I created a form to both guide the process and serve as an agenda for a CoP meeting (see Appendix J). The CoP meetings should assist the teams in collaborating successfully to address student learning needs based on analyzing relevant data.

I anticipated that enhancing the successful collaborative team process by connecting it to student achievement data would affect teacher morale positively. I believe that it is also important for teachers to experience their principal as a teacher. By providing the training myself, I was modeling my own teaching skills, which might also impact the climate. In fact, Participant P stated in an interview about building a positive school culture, “a culture that works for the students and teachers would be one in which administration would do training with the teachers on how to connect with each other and their students” (Personal communication, November, 2017). The PLC/CoP processes addressed this need for collaboration as well as the need for a common vision, as further stated by Participant P, “I feel it's important for teachers to work together to create a shared sense of purpose and direction towards our mission and our vision for our school at SMS” (Personal communication, November, 2017). The Community of Practice, additionally, has the potential to impact student achievement directly by allowing teachers to participate in an on-going cycle of data-driven improvement, as described in Militello et al. (2009).

Leadership Training

An initiative was needed to address the low score on the 2016 NCTWCS indicator, “there is an effective process for group decision-making.” Because of the size of the SMS staff, it is difficult to make decisions in large-group staff meetings. For this reason, I instituted the representative leadership team approach in 2015-16. At SMS, representative leadership teams are used for most decisions. I provided leadership professional development for each of the leadership teams, especially in the areas of conflict management and communication.

I began the leadership professional development with the School Leadership Team, a group that is an essential part of SMS’s school culture. The team is comprised of one lead teacher from each grade level, one from the Encore Team, one from the EC team, two assistant principals, the bookkeeper, two counselors, the Academically and Intellectually Gifted (AIG) coach, the Media Specialist (librarian), and the principal. The teacher leader (also known as the grade level chair) is selected by the represented group. This team was already in place in 2015. Membership on the School Leadership Team from each grade or content area had changed each year since 2015. In 2017-18, the team was composed of new members in all areas except for one counselor, the bookkeeper, librarian, AIG coach, EC representative, and the administration representatives. The School Leadership Team meets each year in August, prior to the first day of school, for a half-day to align processes and procedures. In 2017-18, I invited the team to a full day meeting in early August. The purpose of the meeting was to give me a chance to facilitate professional development for the team to develop leadership strategies and group norms that we would need to be effective members of the group and effective leaders of their represented group. It is interesting that Participant P alluded to the need for this type of training for team

leaders. In her interview, regarding training in conflict management and leadership skills, she stated,

I think that would help, I think... it would be helpful for our team leaders to maybe get some of that training, because a lot of times in our PLCs, sometimes they will, you know, bring up an issue, and then there's some conflict among staff, so it might helpful for the leaders to get that training. (Personal communication, November, 2017)

Prior to the August team meeting I provided each team member with a copy of Lencioni's (2002) book, *The Five Dysfunctions of a Team*, with the expectation that each would read it prior to meeting. The first item on the agenda was a group discussion of the book. The team found it to be relevant to their work as a leadership cohort, and they decided that they wanted to focus on one of the dysfunctions at a time. They also asked for time to develop the strategies they would need, and they asked that the focus remain the same until the group was ready to move on. The team determined that building trust would be the initial focus for the leadership team, and that the focus would change in subsequent years until the team was comfortable with all of the indicators of a strong team outlined in the book.

The members of the leadership team collaboratively wrote a vision for ourselves as part of the team-building process, and the vision is written at the top of each agenda and reviewed at each meeting (see Appendix J). The agenda for each meeting is collaborative and open as a Google doc for any of the team members to add items. The team meets every two weeks, with the expectation that decisions made will be carried forth to their represented group. The change here was not the team itself, but the fact that there was now a stated purpose and vision. Through the leadership professional development, school leaders learned how to take a message out to their groups positively and confidently. Time is spent at each meeting to discuss how the

message will be delivered to the represented groups, in response to feedback that the leadership team has not, in the past, always agreed on issues and decisions. We had decided as a result of our leadership professional development and focus on trust that we would respond as a team in public, even if we disagreed in private. Additionally, we provided a summary of each of the items on our agenda to deliver the same message to each of the grade level teams.

Sunshine Committee

The Sunshine Committee was developed by staff in 2015-16 to respond to concerns over teacher morale. Teachers reported that this committee had existed in the past, but that the staff had become too big and it had just fallen away. The work of this committee in 2015-2016 included small notes of encouragement in teachers' boxes, regular treats in the teacher's lounge, and occasional planned outings. I was concerned that the committee would not be sustained when the leader of the committee left the school in the summer of 2017. However, two teacher leaders continued the committee in 2017-18. In 2017-18, this committee is now considered one of several leadership teams at SMS. They have regularly scheduled outings, responded to significant life events, and encouraged teachers in small but meaningful ways.

Outcomes on Climate

As was evident in the interim survey results, results of the initiatives I have taken in an effort to improve climate have been inconclusive. While there has been an increase in a few of the climate indicators, there is still little to no increase in others.

Qualitative Data

Based on the assertion that a system behaves precisely as it is designed, Organization as Organism is a metaphorical theory that makes sense in describing SMS. Morgan (2006) asks us to consider organizations as living systems that exist in an environment on which they rely for

sustaining their needs. Schools are, by their nature, filled with human needs, desires, fears, and wants. The educational environment changes quickly, and schools that can adapt quickly will meet with success. Understanding how the organization works to sustain itself in this environment, and especially how it is able to adapt to a rapidly changing environment, is key to making any changes to strengthen the organization. Because I am the principal of the school and I have the desire to create and maintain a well-run, functional organization, I have the moral imperative to understand the organization at its very basic level. Morgan's metaphor presents a model for understanding, and his explanation of contingency theory based on the organismic model provides a framework for analyzing my qualitative data.

Overall, the staff in the organization is dedicated and motivated to help students succeed. While there are a few staff members who are there from bell to bell, the majority of the staff, including leadership, works very long hours. Table 13 explains how Maslow's Hierarchy of Needs (Morgan, 2006, p. 37) is being addressed by the organization for staff and students.

While each of the needs is addressed by the organization, it is clear from this table that there are needs that can be met more fully, such as in the areas of social and ego for staff and students and self-actualizing for students. Table 13 provides a deeper understanding of how the culture might be strengthened for all in the building. Understanding that the organization is made up of people, and understanding how to manage this system, is an important part of the organization as organism metaphor. It is the beginning of human resource management, where "employees were to be seen as valuable resources that could contribute in rich and varied ways to an organization's activities if given an appropriate chance" (Morgan, 2006, p. 36).

Qualitative data supports the assertion that meeting the needs of social and ego can be strengthened for students and staff, and that this will create a more focused culture. Meeting the

Table 13

How the Organization of SMS Addresses Maslow's (1943, 1954) Hierarchy of Needs

Need	For Staff	For Students
Physiological	Regular salaries and wages Safe and pleasant working conditions (administration responds immediately to concerns about air quality, classroom temperature, cleanliness)	Grades on a quarterly basis, with midterm reports. Safety from bullying behavior. Clean environments, lockers and areas to safely store items.
Security	Fair evaluation process, changes in schedules communicated ahead of time, expectations are clearly shared, leadership opportunities	Consistent schedules, fair discipline procedures
Social	Team planning time, team gatherings, emphasis on shared leadership and collaboration	Clubs, activities, PTO events, competitive sports
Ego	Work enhances feelings of self-worth and success, recognition on weekly newsletter, peer recognition through staff emails and personal cards	Grades, awards ceremonies
Self-Actualizing	Job is more than a job to most people working at school, it's a career and vocation.	

needs of the staff and students addresses climate. It allows the employees to be seen as valuable resources, and it helps them to develop autonomy and creativity. This in turn strengthens a culture based on student achievement. The qualitative data I collected addresses both culture and climate.

Staff members were invited to voluntarily participate in one-on-one interviews with me. Interview questions (see Appendix K) were shared with staff ahead of time so they knew what they would be asked. Each staff member who was interviewed completed a consent form, and the interview protocol (see Appendix B) was followed for each interview. The interviews were recorded, then transcribed and transferred to the nVivo program for coding and analysis. Anonymity was preserved by having participants choose a letter of the alphabet, and this letter was used to identify responses in subsequent data analysis.

In addition to interviews, I took field notes from meetings with staff members and added those as sources in nVivo. I also included the short-answer responses to the open-ended question in the interim TWC surveys as sources in nVivo.

Once all sources were added to nVivo, I looked for themes within the responses. I used the program to code the different responses for those themes, and then I synthesized the themes into categories. Table 14 shows the themes, the number of sources for each theme, and the number of references to each.

Table 14 ranks the raw number of references for each theme in descending order, beginning with the theme that received the most references, which Figure 10 shows in the form of a pie chart.

It was interesting that, within the interviews, responses were much more general about “big picture” ideas about school culture, while the responses from field notes and open-ended

Table 14

All Themes, Sources, and Number of References from Teacher Interviews

Theme	Sources	Number of References
Problem-Solving Process	10	28
Student Needs	7	22
Positive	6	18
Academics	6	17
Easy Relationships	6	14
Administration	7	13
Inviting Environment	7	13
Caring	6	11
Unity	7	11
Leadership	4	10
Professional Development	5	10
Personal Celebrations	7	10
Respect	5	9
Family	5	8
Accepting Change	4	8
Behavior	5	7
Flexibility	4	7
Time	3	7
Honor	5	6

Table 14 (continued)

Theme	Sources	Number of References
Buy-in	4	6
Staff Visibility	2	5
Consistency	4	4
Trust	2	3
Student Safety	2	2
Totals	128	249

survey questions focused much more on school climate issues. The themes that emerged can be categorized for further analysis for both climate and culture. These categories were (a) student needs, (b) personnel climate and culture items, (c) values, and (d) actions. A review of Figure 10 shows that these categories were comparably represented out of the total number of references.

Focus on Student Needs

When discussing school climate, all respondents referenced student needs in various ways. Some of the responses referenced student needs directly, while others were taken in context of responding to the needs of students in a positive way. Table 15 is a list of the themes and references that can be grouped in a discussion of how school culture addresses student needs.

While there were several themes included in this category that are important to developing an understanding of this category, those that received the most references will be discussed in more depth. The value of “caring” will be discussed in an upcoming section as this theme relates to more than one category. The themes of Student Needs, Academics, and Easy Relationships will be discussed further in this category as they embody what should be the basis for any school culture. What is happening for the student should be, after all, the primary focus of school activities. Building and fostering a culture that is focused on student achievement is the purpose of the study. The qualitative data supports that the teachers at SMS understand the importance of meeting student needs, as can be seen by the number of references for this theme.

Discussion of student needs. When discussing student needs, respondents commented in a very general way about how to address student needs holistically. Respondents discussed understanding the students in their classrooms, especially their social and emotional needs. Participant R summed up the connection between academics and knowing students:

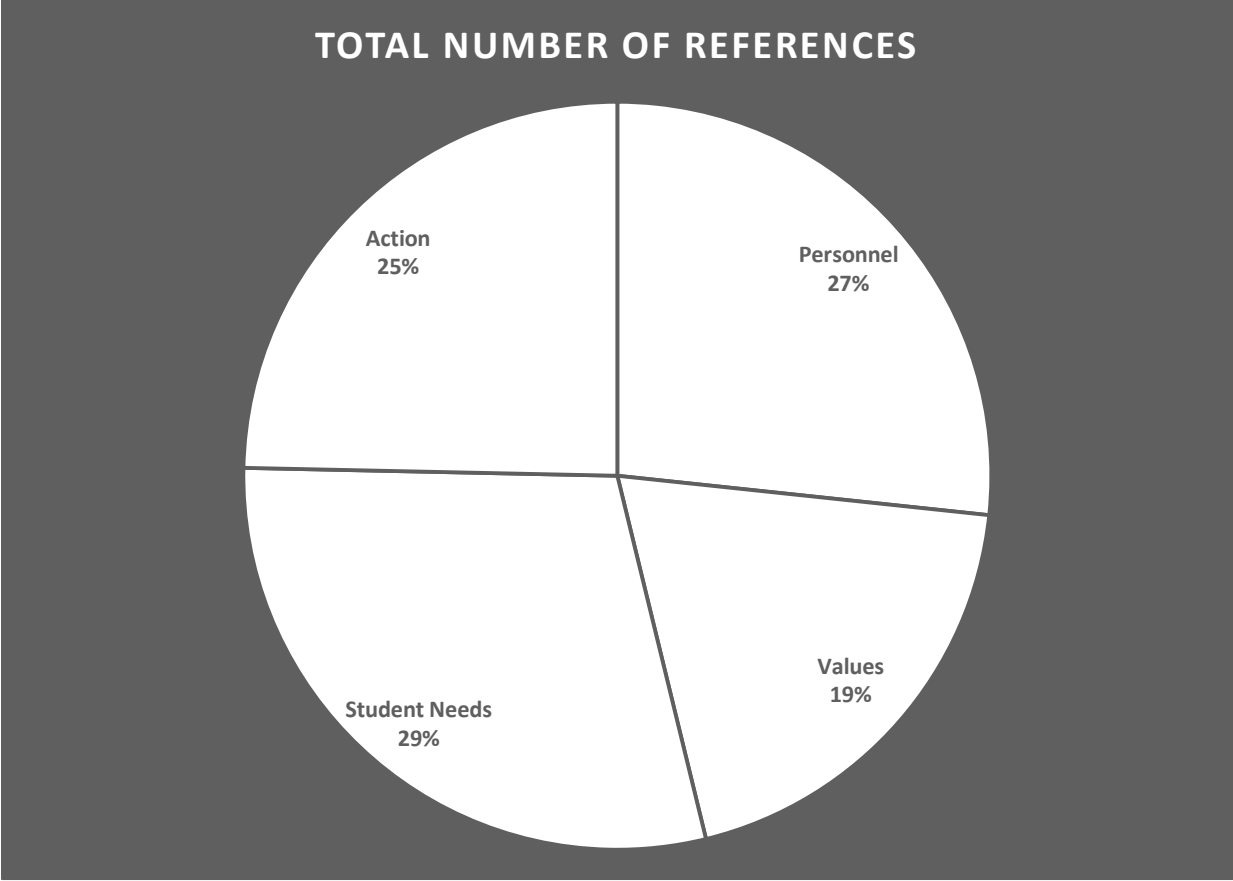


Figure 10. Categories within the total number of references.

Table 15

Focus on Student Needs

Theme	Sources	References
Student Needs	7	22
Academics	6	17
Easy Relationships	6	14
Caring	6	11
Personal Celebrations	7	10
Respect	5	9
Family	5	8
Accepting Change	4	8
Behavior	5	7
Flexibility	4	7
Honor	5	6
Buy-in	4	6
Trust	2	3
Student Safety	2	2

In middle school the kids are just trying to figure out who they are and if they have, not necessarily a buddy, but someone who will listen to them seriously, then they'll open up and work harder for teachers that way.

Comments of this type continue to point to positive teachers as an important precursor to achievement. One participant went so far as to discuss buy-in from students in order to motivate them to learn, "I try and do fun things like that because otherwise it becomes monotonous and they hate it, so it is important for us to be positive and try to have them buy into it" (Participant P). From an anonymous letter, one staff member's comment indicated the greater goal of helping students grow as people, not just as data on a test or series of tasks: "KNOWING that I am impacting my students to be better learners, to become successful adults, not pass a test" (Anonymous personal communication, 2017). These positive responses about children and students is echoed throughout many of the other themes, and it appears as though focusing on student needs may be a necessary starting point for any changes in school climate.

Discussion of academics. Digging further into the discussion of student needs, responses showed that learning and academics must play an important role in a successful school culture. Several respondents included academics in their responses, with strong comments about student achievement and the importance of learning in the purpose of the school. While some respondents felt strongly about meeting the student's emotional/motivational needs, there was an equally strong understanding of learning as the mission of our organization. Participant N connected the social with the academic by proposing as an ideal that "the student feels comfortable and they want to learn that subject matter." Participant T further emphasized the effect of a positive teacher on positive student engagement and achievement in highlighting that the point of a teacher's optimism is "so students will gravitate, you know, and will work hard for

a positive person.” Participant R summarized this theme by explaining what to tell students so they will understand their role in their education: “this is, you know, a pretty serious place where you've got to learn and be focused and be prepared to kind of be an adult.”

Discussion of easy relationships. The theme of Easy Relationships permeated responses, and it deserves discussion within the overall category of student needs. “Easy Relationships” is a theme I describe as having a level of comfort and ease of relating to others in the school environment. Table 16 lists those responses that made a strong argument for building relationships as an essential part of school climate.

This theme is included in the discussion of Student Needs rather than Personnel Climate and Culture Items because the responses related student achievement directly to relationships among all members of the school. This is a strong argument for positive relationships between and among colleagues. These data show that study participants believe that these collegial relationships between staff members affect student achievement as much as positive relationships between teachers and students. It also supports a need to intervene with the staff at SMS in the NCTWCS indicator related to mutual trust and respect. This theme had a number of powerful responses relating to establishing good relationships as a method to improve student achievement.

Personnel Climate and Culture Items

The category of Personnel Climate and Culture Items includes all of the themes that relate to staff, especially those that affect climate and working conditions. In Table 17, the themes that were included in this category are shown with the corresponding number of references.

Table 16

References to Easy Relationships as a Theme

Source	References
Participant L	It would very much be a community where people engaged in relationships with each other
Participant N	What else works for students is to have teachers who are excited about having them in the classroom, getting to know them and really developing relationships with their students.
	Actually developing those relationships first and foremost upon knowing the curriculum, but building those relationships first would be really helpful.
	We did all these things together and then it just developed these relationships with everybody, and it was deeper than just, Hey you know we're at work, you got to know people at a different level, and I think that was important.
	A school where everybody supports each other.
Participant P	We do Secret Santa, which we get to know everyone a little bit better. I really enjoy that.
Participant R	We laugh a lot of times, I want to help people enjoy their jobs better and make their jobs easier. Teachers and staff ... just letting their guard down and being personal with kids.
	Treating them not necessarily like adults, but you know, trying to just open up to them and actually listening to kids.
	Just getting to know the kids.
Participant T	They can see the teachers in more relaxed mode, dressing up and just celebrating academic success or maybe just whatever is going on the community.
	Enjoy each other's company outside the academics.
	Students see the teachers and they're interacting with each other, and it just helps build a more conducive atmosphere in the school, and the students see the teachers not in a classroom setting all the time.

Table 17

Personnel Climate and Culture Sources and References

Theme	Sources	References
Problem-Solving Process	10	28
Positive	6	18
Administration	7	13
Leadership	4	10
Professional Development	5	10
Unity	7	11
Inviting Environment	7	13
Time	3	7
Staff Visibility	2	5
Consistency	4	4

Within this category, the Problem-solving Process was the strongest theme, having the largest number of references from all sources. Relevant to the 2016 NCTWCS results, teachers gave this indicator a low score, indicating that they did not believe SMS had an effective problem-solving process. Its strong appearance as a theme in the qualitative data indicates that it is critical to school climate.

Problem-solving process. The references to Problem-Solving included the themes of Collaboration, Communication, and Conflict Resolution. All of these responses were coded as part of the Problem-Solving process. Further analysis of the comments reveals an understanding of the actions that staff members need to take in order to strengthen the Problem-Solving Process within the context of their work at SMS. Because there were so many references to this particular theme, it implies that there are actions that should be taken to strengthen the school climate relative to Problem-Solving practices.

Four categories that further characterize the problem-solving process in school culture emerge in these data. These four categories include Collaboration and Communication, Non-Judgmental Perspective-Taking, Conflict Resolution and Collegiality. Each of these categories included deep reflection by the participants of the actions that can be taken by staff to strengthen the Problem-Solving Process at SMS. The following tables contain responses that illustrate the categories more fully.

Table 18 contains responses that were coded as “Problem-Solving Process” which include references to Collaboration and Communication. In general, each of the participants identified listening, being listened to, and collaboration as essential to the Problem-Solving Process.

Table 18

Problem-Solving as Collaboration and Communication

Source	Reference
Participant L	A time when you are able to air your concerns and know that you've been heard.
Participant N	<p>Cooperation, just communication with each other, all of that, plays a huge role.</p> <p>I think communication, talking through problems.</p> <p>Having a problem about something, or just being able to talk it out I think is very important and developing a positive school culture. I think the same thing with staff, being able to talk to each other and collaborate on things like that.</p>
Participant P	Try and communicate as best we can, and try to be objective, and just make sure that we stick to our plan and look out for the better of the children.
Participant V	<p>I was listened to.</p> <p>The teacher must listen to the student, or the parent, which is an extension of the student, and given their concerns, address those concerns within the bounds of how the classroom operates.</p> <p>"I've listened to you and I'm willing to do this."</p>

Table 19 explains how participants saw the Problem-Solving Process as a non-judgmental action that involves understanding the other perspectives without making it personal.

While there was no specific question about problem-solving in the interview questions, it appears to play an essential role in school culture. An interview question about working with conflict in school culture yielded the following results relative to the Problem-Solving process. Table 20 exhibits examples of responses that relate to Conflict Resolution.

And finally, there were a number of responses that talked about the Problem-Solving Process within the boundaries of just helping each other out as colleagues. Table 21 gives statements that summarize problem-solving as Collegiality.

It appears from these themes that an effective Problem-Solving Process can be easily developed for the staff of SMS. The preliminary understanding of the respondents indicates a readiness for professional development in this process. The School Leadership Team professional development I provided was an initiative that addresses this theme directly. Based on the feedback, professional development in conflict resolutions and problem-solving skills for other teaching teams may be a logical next step towards developing a more positive school climate.

Leadership and professional development. As described previously, the school is run through a series of leadership committees or “teams,” which have representation from each of the grade level/content teams (grade levels, electives teachers, and teachers for students with special needs). This is a form of a formal matrix organization (Morgan, 2006). The decisions, discussions, and questions from the leadership teams are discussed with grade-level teams and feedback is reported back to the leadership team. I was intrigued by Morgan’s (2006) discussion of a formal matrix organization, where he implied that the strong bureaucratic structure of this

Table 19

Problem-Solving as Non-Judgmental Perspective-Taking

Source	Reference
Participant R	<p>A good resolution is respectful, a lot of times, too, I'll get in my rut, and I'll see something from their perspective and it helps me change.</p> <p>I try not to make it personal, I'll try this on myself and that way they don't think I'm attacking them or anything. Maybe I should try this.</p>
Participant T	<p>Personal feelings need not be put into the situation, so a lot of conflict needs to be worked out in a professional manner.</p>
Participant V	<p>It helped for me to realize that the person I was talking to was applying the rules they have been given, and they had no leeway to change those rules. What is the roadblock that you're having, what is the roadblock that I'm having, what is it that I'm doing that's stopping you from being able to do your job? If I know that, then I can adjust what I'm doing.</p>

Table 20

Problem-Solving as Conflict Resolution

Source	Reference
Interim TWCS, October, 2017	Teachers/Teams are often (too often) pitted against each other when decisions are made or are in the process of being made.
Participant N	They're going to have conflict and there's going to be resolution, you know. There's going to be problems, and then there's going to be positive things also.
Participant R	I kind of, I think I just kind of enjoy conflict sometimes, because you need to be somewhere else. Everything just kind of flows all the time with no bumps or no growth.
Participant V	Each conflict, in my mind, starts with listening to what each side is saying. When you're talking conflict within the grade, it's about communication.
Participant Q	Conflict resolution is such an important skill.

Table 21

Problem-Solving as Collegiality

Source	References
Comments from Interim TWCS, October, 2017	My department works well together and helps each other.
Participant B	Teachers themselves should be able to work things out and be part of that solution process.
Participant P	I think it's really important to be positive in the classroom and if there's someone on the staff or in the department that's not so positive, try and brighten their day and try and maybe point out something positive that they're doing and they in turn will be like, wow, I didn't even realize that I was doing that.
Participant R	I kind of see it as a team, coming from an athletic background, you're all together. It's my job to make everyone else's job easier, whether my job is working in a restaurant or at a school, I try to help people.
Participant V	When you're talking teacher to teacher, or teacher to administrator, the outcome is the desire for the student to be successful.

type of organization competes with a project team structure, resulting in members of the teams feeling ineffective. However, Morgan (2006) continued to say that with appropriate rewards, the tension between the bureaucracy and the project team is usually “resolved in favor of an emphasis on team commitments. Appropriate authority and rewards are stacked in ways that encourage dynamic teams” (Morgan, 2006, p. 53).

The matrix organization is new to the SMS staff, and we have definitely felt the tension and conflict that may result from this format as we develop the organization away from smaller project teams and move towards a unified system. Smaller, project-based teams were the norm when I began my tenure as principal of SMS. Grade-level or content-area teams worked independently of other teams in the school. When the bureaucratic structure of the formal matrix organization was implemented through representative leadership teams, these smaller teams may have felt less effective. This may have contributed to the low school climate results on the NCTWCS in 2016. The proactive solution to this may be to develop the capacity of staff members to be leaders with strong conflict-management and interpersonal skills. This can be done through strategic professional development for teacher leaders and setting high expectations for collegiality for all staff members.

Qualitative data supports a theory that professional development and high expectations for collegiality is needed to strengthen the culture of our organization. Professional Development was one theme that surfaced several times within the interview questions regarding conflict management. As noted previously, Collegiality was valued by the participants as a method of solving-problems. Additionally, Leadership was a theme that surfaced when discussing school culture.

Leadership as a component of school climate and culture is not surprising in itself. Within a matrix organization, leaders are needed and will emerge from within the group. However, there were several responses that strengthen the assertion that the staff is still not comfortable with this type of matrix organization. There appears to be a sense that decisions need to be made by the principal, as indicated by a response by Participant B, “Sometimes you need the principal to take charge and you don't want to wait for leadership to wait, you need the principal to take charge.” Later in the same interview, Participant B also referenced “flexibility within that leadership role,” which indicates that this participant is beginning to understand the matrix organization, but still wants to have a strong leader at the helm. Within the comments in the October, 2017 TWCS, a respondent said, “Admin needs to stand firm with decisions and defend teachers who have opposing views.” Does this mean that leadership decisions made by the school leadership teams are not considered as binding as those made primarily by administration? Does this person have the perspective that teachers who have opposing views are not treated with respect by others in the majority? This may be one insight into the continued low scores on the interim surveys regarding mutual respect between staff members in SMS.

Teacher leadership, then, appears to be an essential next step in creating a stronger school climate. Participant P thoughtfully discussed teacher leadership in her team, “I think our leadership team, it would be helpful for our team leaders to maybe get some of that (leadership) training, because a lot of times in our PLCs, sometimes they will, you know, bring up an issue, and then there's some conflict among staff, so it might helpful for the leaders to get that training.” Participant T mentions that administration (the principal) should train staff on leadership and interpersonal skills, “administration would do training with the teachers on how to connect with each other and their students.”

Other references to Professional Development are in Table 22. It is important to note that there were no questions in the interim TWCS or in the interviews that directly related to professional development, and yet this was a strong theme in the interview responses.

While the responses centered on different ideas, the call for professional development is notable because the teachers themselves have identified areas in leadership, interpersonal skills, conflict management, and instruction in which they feel they need additional training. The School Leadership Team professional development and the Community of Practice initiative were designed to address the climate issue indicated by this theme. At SMS, there is currently a very small budget for professional development in school-based funds, and very little has been allocated for this purpose by the county for each school. However, these data point strongly to a need for additional funding support for professional development for staff. A potential climate issue exists in identifying topics for professional development and the time it will take to present professional development workshops. Mandating professional development meetings for teachers on subjects determined to be important by administration may result in teachers feeling that they have to attend one more meeting. A possible solution would be to survey teachers to identify areas of interest, and then to utilize technology and implement on-line or blended on-line and face-to-face workshops that can be accessed flexibly by the participants.

Values

This category references a set of Values that crosses into any organization, and it includes both personnel and student items. References for this category were reported by all sources. Table 23 shows the number of references for Values as a category.

Interview questions specifically addressed a positive school culture, especially when discussing the impact of a positive teacher on student learning. Other values with significant

Table 22

Professional Development in School Culture

Source	References
Participant B	Professional development is important, I think that if you help teachers grow, you're going to get that growth that is important to the school.
Participant N	There should be always on-going training going on. Team-building exercises... ...team building exercises and things that we do...
Participant P	I think our leadership team, it would be helpful for our team leaders to maybe get some of that training, because a lot of times in our PLCs, sometimes they will, you know, bring up an issue, and then there's some conflict among staff, so it might helpful for the leaders to get that training.
Participant T	Administration would do training with the teachers on how to connect with each other and their students. A lot of teachers don't like team building activities, but those work because what the teachers learn in these team building activities help in the classrooms also.
Participant Q	(Do you think that teachers need to be trained in that?) YES. Conflict resolution is such an important skill. (Regarding data-driven instruction) You're missing a big piece of what it means to teach now, and that may involve training.

Table 23

Values as Themes from Responses

Theme	Source	References
Positive	6	18
Caring	6	11
Unity	7	11
Family	5	8
Flexibility	4	7
Respect	5	9
Honor	5	6
Consistency	4	4
Trust	2	3

responses included unity and caring. Values such as honor, respect, and flexibility, had fewer references but may still be worth reflection and discussion by staff and administration in creating and maintaining a school culture. “Trust” is a value that is referenced directly by the NCTWCS, so it was surprising that it wasn’t mentioned more in the interviews and field notes when discussing a positive school culture. Few respondents mentioned Trust as a theme.

The word “positive” was referenced several times, either directly or indirectly in context, enough so that it bears reflection as a theme. Respondents referred to positive teachers, positive Participant B’s understanding of students who have lost all hope. When faced with a positive, encouraging teacher, “by the end of the year, they’re going to be successful!”

“Unity” and “Consistency” may appear to be similar traits, but I coded them differently because of slight differences in the context of the references. References to consistency were related to frustrations that decisions were not carried through by administration. References to unity referred to staff members connecting to each other, to the students, and to the community. It was interesting that when asked about traditions, respondents had difficulty naming traditions that they thought were effective. Most agreed that there should be traditions because they unify the school. Participant R said, “Definitely think there’s a great place for traditions. It culture, and positive students. Table 24 contains examples of some of the rich self-reflection from the participants in building and maintaining a positive attitude and how it benefits the students.

Note that most of the references reflected on how positive attitudes and positive behavior can significantly impact a student’s performance and achievement. Especially powerful was kind of brings people together.” Most respondents identified the end of the year awards ceremony and the pep rally as positive traditions. However, unity was also referenced in terms of teachers and staff having the same goals, as Participant T summarized, “The role of the teachers in the school

Table 24

References for the Value “Positive”

Source	References
Participant B	...encouraging and positive... Even though it seems they've lost hope, by the end of the year they're going to be successful!
Participant L	Adults in the school in many ways set the tone for the, you know, attitude and for how positive things are in the school.
Participant N	It all starts with the adults in the building, I think, just being positive. If the teacher is positive and sends out that positive vibe...
Participant P	The staff being positive helps, for everyone being positive... I hope everyday my goal is to show an energy that I really enjoy and love my job because I feel that if we love our jobs, then they'll want to love our class and enjoy being in our class as well.
	If a teacher is positive and shows interest in their subject matter, then hopefully they will buy into your subject and want to participate and want to explore and kind of learn things that they're not used to learning.
	I think it's really important to be positive in the classroom and if there's someone on the staff or in the department that's not so positive, try and brighten their day and try and maybe point out something positive that they're doing and they in turn will be like, “Wow, I didn't even realize that I was doing that!”
	I try and do fun things like that because otherwise it becomes monotonous and they hate it, so it is important for us to be positive and try to have them buy into it.

Table 24 (continued)

Source	References
Participant T	<p data-bbox="431 327 1386 432">Anytime a teacher or staff member can say something positive to the students, to the staff, just being recognized for that, it makes you feel good all over.</p> <p data-bbox="431 474 1386 621">If you have a positive teacher who's encouraging you all the time, you're going to want to work harder for them. Everybody gravitates toward positive people, because they make you feel good.</p> <p data-bbox="431 663 1386 726">So students will gravitate, you know, and will work hard for a positive person.</p>
Participant V	<p data-bbox="431 768 1419 831">You have pride in the fact that "I go to that school, and I am a part of that, and I'm a positive part of that."</p> <p data-bbox="431 842 1419 905">The student is neutral, you have a positive teacher, then they're going to want to learn, they're going to see value in the learning.</p> <p data-bbox="431 915 1419 1020">If you have a positive student, if you challenge that student, they will strive to learn more and apply more of what they know, and they will show achievement.</p> <p data-bbox="431 1062 1419 1165">If you have a negative student, but a positive teacher, then you are inviting that student in, saying, "This is a safe place, all I'm asking you to do is work."</p>

culture is to connect with the students and their colleagues so we have a unified school, all working towards the same goal.” This theme, working towards the same goal, was also seen in responses to meeting student needs in academics and behavior. Apparently, any unity felt by staff does not carry over as valued traditions at SMS. Further initiatives by administration and teacher leadership teams should focus on creating traditions that are valued by the school and bring unity to the climate and culture.

The value of “Caring” as a theme was not surprising, with respondents using such words as “compassionate” and “care” in their responses. This theme was particularly strong in the category focusing on Student Needs. Participant T reflected that, “a lot of students come to school and we’re the only stable people in their lives and they just want to know that they matter.” This participant was able to identify the impact on success that caring has on the student by stating, “Building kids up like that and staff members that might be just the nudge they need to be successful.” Participant R quipped, “If you ever listen to the kids, they’re like, ‘Hey, this adult values me!’”

Values appear to be critical components of school climate and ultimately of school culture. In a large school or organization, there is an increased possibility of working with colleagues who have different values. However, the values presented in these data appear to be consistent with educators and people who work with students. As discussed previously, professional development and training is a key component towards building a positive school climate. The question remains, what kind of training is available to directly teach values to teachers and staff members in a school? It is my belief that most professionals in education already carry these values with them, based on the strength of this category in my qualitative

data. Therefore, the training that is needed must help adults reflect on their own actions and behaviors to determine whether their values are evident in their practice.

Action Items

A final category for my qualitative data is important to creating a positive school climate. This category was created from the items that most lend themselves to actionable interventions and initiatives. This category can be used to provide a blueprint for future activities at SMS. Table 25 outlines the themes, sources, and references which may guide the work of teachers and administration at SMS to develop a more positive climate and effective school culture.

Many of the themes in this category have been previously discussed, but they form their own category because they imply Actions that can be taken by staff. For example, the establishment of an effective group process to solve problems should be a priority for future initiatives based on the strength of this theme in the data. Combining this with professional development in teacher leadership provides a straightforward next step in developing a more positive climate at SMS. Creating an inviting environment can be accomplished through a collaborative process involving students, parents, and staff. This might also address the creation of the easy relationships that exist when people enjoy each other and their work.

An interesting theme in this category is that of Personal Celebrations. This theme was developed from comments about honoring such things as academic success and celebrating teachers and staff for birthdays and events. Traditions are closely related to personal celebrations. As noted previously, interview participants had difficulty with the question about traditions at SMS. They were not always able to identify traditions but were agreeable that traditions were important. At SMS, there are currently no established and consistent traditions for the entire staff to celebrate staff achievements or personal milestones, or to honor a person

Table 25

Action Items

Theme	Sources	Number of References
Problem-Solving Process	10	28
Easy Relationships	6	14
Professional Development	5	10
Inviting Environment	7	13
Personal Celebrations	7	10
Accepting Change	4	8
Behavior	5	7
Buy-in	4	6
Time	3	7
Staff Visibility	2	5
Student Safety	2	2

who leaves the staff. These traditions can be easily created and implemented, and the Sunshine Committee has begun to develop these traditions. For example, staff members receive a birthday card from the Sunshine Committee to celebrate their special day. When staff members have left the school this year, the Sunshine Committee organized a going-away “roast” for those staff members. They allowed for the grade-level and content-area teams to have some autonomy in determining their participation in the event, but they have unified the efforts to provide one celebration. Continuing to develop these traditions should positively influence staff climate.

Grounded Theory

My grounded theory is “hastening slowly,” which relates to how to make change happen in school, especially with increasing student achievement. “Hastening” carries with it the imperative to act quickly because (a) it is important that children are empowered to do the best they can academically, (b) the academic reputation acquired by a school is like a bubble when it is seen as successful and like a boat anchor when the children overall are seen as failing—even just once, and, (c) the careers of me, my fellow administrators, and the teachers are on the line.

However, a laser-like focus on student achievement may impede the development of teachers’ autonomy. Undoubtedly, allowing teachers to exercise their autonomy may furnish them with the opportunity for their interactions with their students to be poorly oriented to student achievement. Their interactions may initially orient themselves towards developing a relationship with the students because they believe that will ultimately help motivate their students to achieve at a higher level.

This “hastening” imperative is in constant tension with the reality that a change trajectory that can be maintained takes time to establish—it is a “slow” process. Just like the flight of a rocket, small changes made at the start of the trajectory can make a major difference in where the

rocket lands. Just so, small things that I do at the start of my tenure as leader may make little immediate difference, but they may establish the conditions that make it possible for growth to occur later. The urgency to change must be balanced with respecting the rate at which teachers may accept change.

Focus on student achievement provides unity (vision/mission) to the teachers, so even if the teachers are not “happy,” student achievement can still be there. This raises the question of whether it is important that the teachers are happy. I propose that few school children would be slow to answer, although current pragmatics may be less certain. Centuries ago, in 1769, the poet Oliver Goldsmith (1888) highlighted the importance of a happy teacher when he asserted of the village school master in “The Deserted Village” that “Well had the boding tremblers learned to trace / The day's disasters in his morning face” (lines 7-8). By reading their teacher’s expression, the students were able to determine their teacher’s mood, which reflected the type of day they would have in school.

Lest the concept of “teacher happiness” invoke a sense of enduring hilarity, which is neither healthy nor particularly associated with effective teaching, I choose to refer to a teacher’s sense of professional fulfillment. I also would refer to his or her acceptance by colleagues, in the first instance, and by the majority of the students, in the second instance. It is this sense of professional fulfillment that allows teachers to focus on student achievement—even in the face of a school climate that may not be effective. Conversely, when they focus on student achievement, teachers can see results, and their sense of fulfillment increases, which means that climate is improved. Teachers want students to do well. If they perceive that students are successful, they perceive that the school climate has improved. Additionally, maintaining

respectful relationships—first with colleagues and then with students—adds to a teacher’s feelings of acceptance.

Figure 11 is a diagram of my grounded theory based on my data. It shows the relationship between the themes that relate to teachers’ needs and those that relate to students’ needs. The final goal should be an effective school culture that includes both positive school climate and high student achievement.

Based on the qualitative data I collected, teachers need time, professional development, and an effective problem-solving process in their working environment. “Hastening slowly” requires that I respect their need for time, but that I also find and present relevant professional development that will enhance their teaching practices and, ultimately, student learning. By maintaining a healthy tension between time and urgency, my leadership can impact the change process positively. I can create a problem-solving process that will encourage teacher learning and risk-taking. If I successfully create this environment, teachers will feel that they have time to positively affect student achievement because their professional development will be focused on their needs, rather than on a random collection of courses and workshops that are not relevant to the needs of teachers and students at SMS.

Student needs are reflected by academic achievement and a caring environment that addresses their social/emotional needs. “Hastening slowly” implies that academic achievement is urgent, but that other factors may impact the time it takes to make the changes necessary to affect higher student achievement. The qualitative data I collected indicated that teachers at SMS believe that student needs had to be at the forefront of any school initiative or procedure. However, teachers also reported that building easy relationships with students was

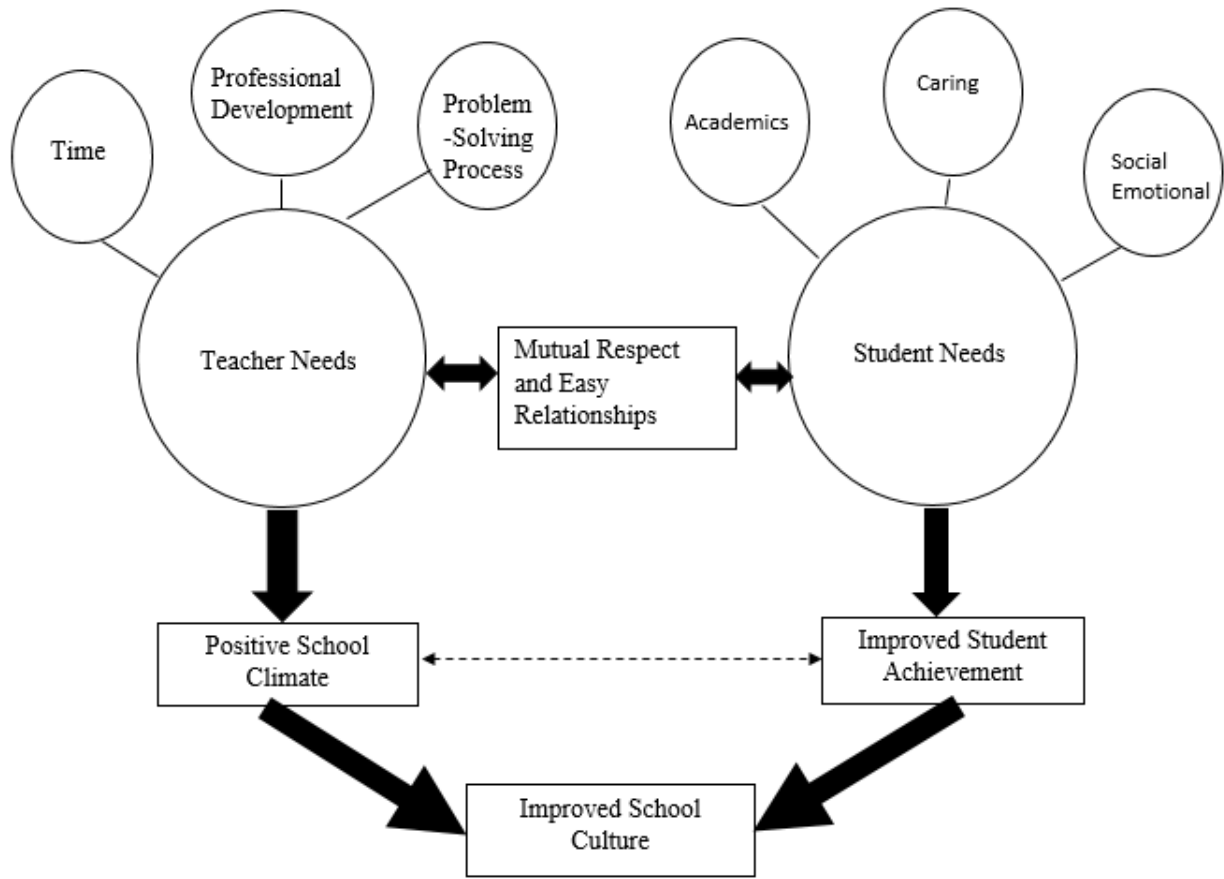


Figure 11. Improving school culture through addressing teacher needs and student needs.

necessary to motivate students toward schoolwork. Building relationships with students can be a slow process, but it is perceived to be important.

Indeed, this is the bridge between teachers' needs for positive working conditions and students' needs for increased achievement. If mutual respect exists within staff members, it allows them to show students respect. As teachers reported, students were positively affected by seeing staff members enjoy being in each other's company. This in turn was reflected in the easy respectful relationships between staff and students. The double arrows in Figure 12 show that mutual respect and easy relationships flow across from teacher to student and back again.

Meeting teachers' needs will result in a more positive school climate. Meeting students' needs will result in improved student achievement. The diagram illustrates that while there is not causation, there is a correlation between the two. While my data showed that student achievement increased at a slightly higher rate than climate, based on the results of the interim working conditions surveys, I believe that the improved student achievement created a greater sense of fulfillment in the teachers. This, in turn, created a perception of improved climate. In my study, focusing on student achievement was a catalyst for teachers to direct their efforts in one common direction. When student achievement increased, there were small but noticeable increases in teacher perception of working conditions. A trajectory toward change has begun at SMS.

The final piece of the diagram is improved school culture that is based on student achievement within an effective working environment.

CHAPTER 5: SIGNIFICANCE AND REFLECTION

In writing about the complex problem of the lack of teachers in key subject areas in certain regions of the country, Viadero (2018) quoted Goldhaber as asserting that “if we try to apply a generic solution to what is a nuanced problem, we’re not going to move the needle very much” (p. 4). In many ways, Goldhaber’s emphasis on the nuances involved in teacher shortages and his reference to moving the needle speak directly to the problem of practice I set out to address in my study. I have confronted nuances at every turn, but, through my own personal resilience and my ability to draw out the best from among those I lead, together we have moved the needle on the scale of school culture an encouraging amount.

As I have discussed at length, my interventions had a dual focus: improving school climate and promoting student achievement. School climate may seem, initially, to be a nebulous concept—too abstract to make a difference. However, that school climate is very real to teachers is elegantly illustrated in Viadero’s (2018) short article. In answer to the question “what would make you remain in your current job?” a 2017 nationally representative sample of 500 teachers responded to an online survey as shown in the partial screen shot that I have included here as Figure 12.

As shown in Figure 12, school climate is a very pertinent factor in teachers’ decision to remain in their current job—second only to salary. While exactly what the survey respondents understood by “school climate” is unclear in Viadero’s (2018) survey, I used my modified version of the TWCS to tap directly into school climate as it is operationally defined at the North Carolina state level.

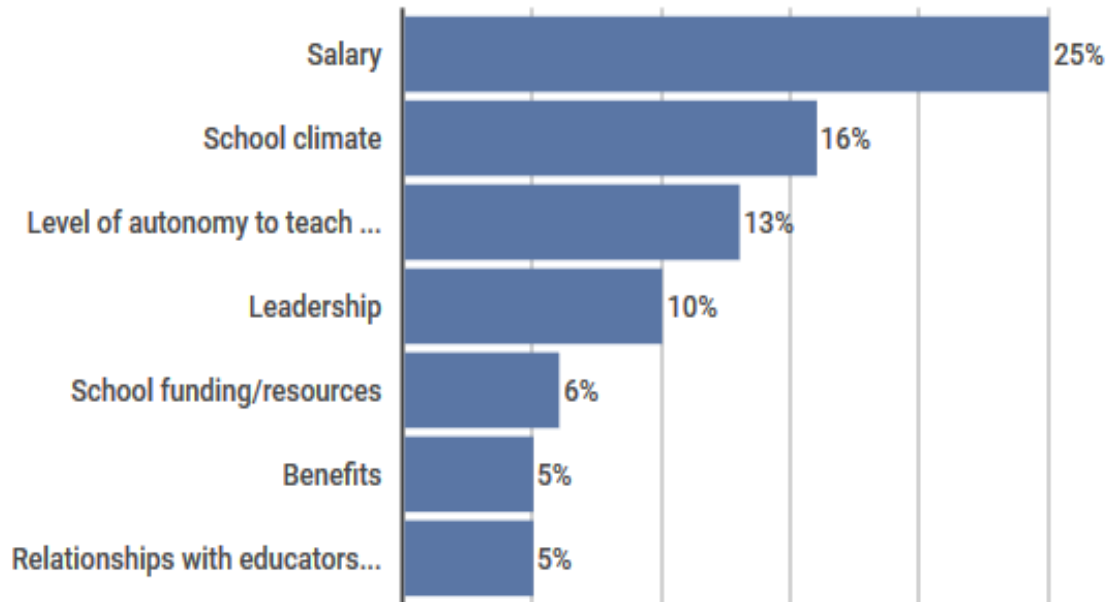


Figure 12. Partial screen shot of “remain in current job” survey response (truncated at the 5% response rate level).

The potency of school climate becomes even clearer when Viadero's (2018) participants responded to the complementary question: "what would make you leave your current job?" as shown in Figure 13.

When the perspective changes from "remain" to "leave," the importance of leadership emerges as being a much more salient factor. As I will go on to discuss, this speaks directly to my findings. However, the dramatic change in the relative importance of salary and school climate highlights in a compelling way the enormous potential for poor school climate to impact teacher equanimity: a teacher for whom the pertinence of salary is on a par with the pertinence of school climate is unlikely to be immersed in the welfare of students and contributing maximally to the effectiveness of the school.

The dramatic change in school leadership with three principals in three years was just one of the factors that I originally indicated had an impact on the deteriorating school climate at SMS. Throughout the course of the study, I noticed that teacher leadership was just as important to the overall leadership structure of the school as my administrative team. Implementing professional development to develop strong leadership skills within the teacher leadership structure will positively affect the teachers' needs for an effective problem-solving process and their need for strong leadership.

Analysis of Study Questions

I now turn to reflecting on my analysis of my data in the context of each of my study questions. The points I make in the following have been prefigured in Chapter 4, but, in the following, I take a wider view of my earlier reflections.

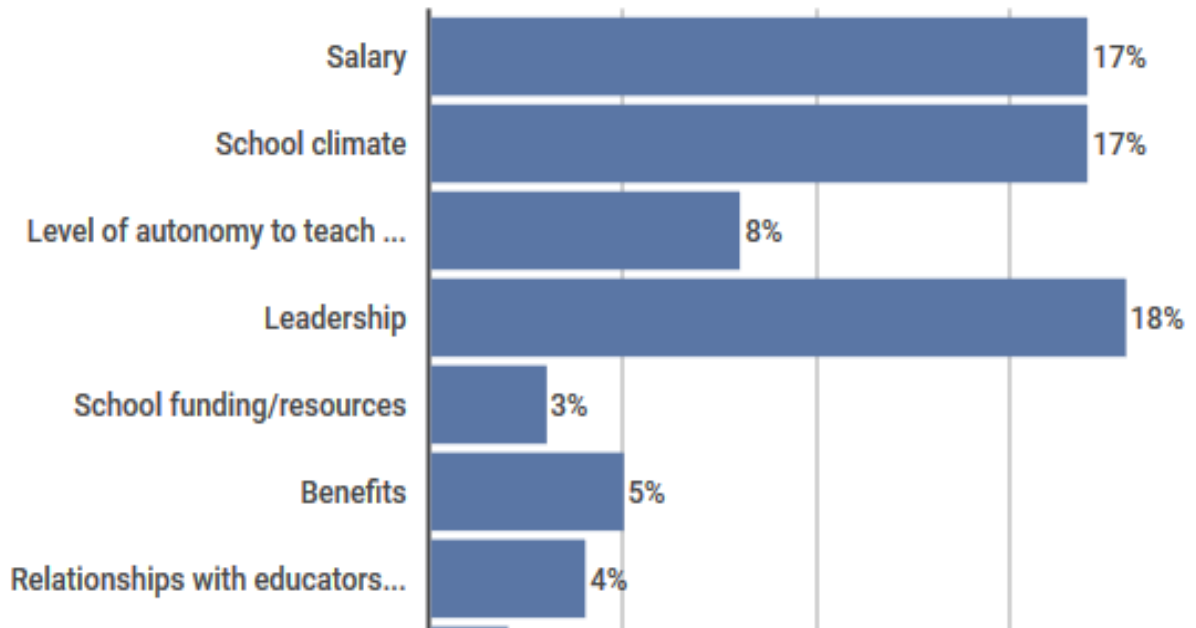


Figure 13. Partial screen shot of “leave current job” survey response on the same set of items shown in Figure 12.

Question 1

Is there a correlation between school climate and student achievement? As indicated by my grounded theory, there is a close correlation between school climate and student achievement. I did not expect to find causation, but rather a correlation. As teachers felt more fulfilled, the climate indicators began to improve. As student achievement increased, teacher fulfillment increased, and this contributed to an improved climate.

Question 2

What are the indicators that the climate must be changed? My study focused on the indicators developed for the NCTWS as measures of school climate. It was the low scores on several indicators that initially caused me to realize that the climate was no longer positive. However, throughout the course of the study, I had the opportunity to listen to teachers and develop an understanding of what needed to change. When I began my tenure as principal almost three years ago, I tried to “hasten” the change process much too quickly. This resulted in a negative effect on a school culture that was already struggling with other changes. My study helped me to slow down to address the climate indicators specifically.

Question 3

What are the best methods to shape or reshape climate? Any strategies to shape or reshape climate must be considered for their impact on a specific school culture. What is best for one school may not be effective for another school. I found that the best strategies were those that were developed with the collaboration and hard work of the entire staff. Academic intervention strategies were implemented to address the imperative for increased student achievement. These strategies had a positive effect on student achievement. Initiatives to improve teacher climate were less successful, but still resulted in encouraging gains in teacher

climate. Initiatives focused on students' needs were moderately more successful than those focused on teachers' needs. However, any climate initiatives should directly address teachers' needs for mutual respect within a collaborative problem-solving process, continued professional development, and time.

Implications for School Leaders

The implications of my study for school leaders are clear: allow for and respect the time needed by staff to change their practice while maintaining an appropriate amount of focus on student achievement. School leaders have an imperative to hasten towards creating a positive environment that is focused on student achievement. However, by moving too quickly, a well-intentioned school leader can inadvertently create a culture that undermines the best practices of their staff by implying that their practices must change, as if their existing practices were all somehow "wrong."

A second implication for leaders is that school climate can be difficult to pinpoint, and there is no one-size-fits-all solution that will lead inevitably to improvement. There is a clear role for teacher leadership in creating and maintaining a positive school climate. That role combines the qualities of listener, counselor, motivator, cheerleader, and solution-finder. Creating an effective problem-solving process is a positive step in the right direction when trying to change school climate, and this requires a well-developed leadership structure.

Another implication is the importance of an on-going and collaborative improvement process. Closely tied to a problem-solving process, this will require staff training and time to make changes in practice. Having a clear vision for increasing student achievement will create a cycle of higher student achievement that leads to greater feelings of fulfillment in teachers. This will lead to an improved school climate, and ultimately, an improved school culture.

My study involved a school culture that was already formed within the context of a school community that had changed over time. The school culture at SMS may not have adapted well to rapid changes in demographics, student population, and leadership. However, throughout my study, it was clear that the entire staff understood and wanted to make the necessary changes to improve our school's climate and culture. In a different scenario, school leaders may be tasked with opening a new school as a consequence of increases in population. Another scenario may involve two schools that merge into one because of a decline in population. In both of these cases, the job of a school leader extends beyond the challenges of the physical plant, and gathering and distributing resources. The overall school culture must be considered before the doors open for the first time.

My findings provide a guide for these similar scenarios where the school climate and culture has not yet been established. First, the principal must consider and guide the staff towards understanding their students' needs—both academic and social/emotional. The staff must then work collaboratively to develop a program to address these student needs. In order to facilitate this collaboration, teacher leaders must be trained in conflict-management and effective leadership skills. They must develop an effective problem-solving process that keeps the focus on student achievement while also respecting each individual teacher's need for time to respond to the expectations. An atmosphere of mutual respect and easy relationships must be developed early on, between and among students and teachers. This can be facilitated by establishing basic traditions to honor personal celebrations and milestones. It is the task of the school principal to manage these interconnected variables and maintain a healthy tension between urgency and the need for time.

Implications for Further Research

“Hastening slowly” implies that any change process takes time. In this age of advancing technologies, change happens much more quickly. I have seen how rapid change in demographics, population, and leadership can affect an entire school culture. Added to the changes in the community were the changes in expectation from state lawmakers and state education leaders. The urgency created by these changes was impactful, creating a palpable tension between and within staff at SMS.

My role as principal became one of understanding and developing a healthy tension, where positive forward movement is expected, but the need for time to adapt is respected. Because I believe that changes in education will continue to occur at a rapid pace, I would like to delve more fully into change theory so that I can further understand the dynamics and psychology of change for teachers and school leaders. Are there ways to shorten the amount of time needed for change? Are there proven strategies to facilitate effective and efficient change while maintaining respect for the individual needs of the teachers?

Reflections and Significant Learning

Because this was a problem of practice, it had a direct impact and relevance to my work as a school administrator throughout the course of the study. There were many opportunities along the way for reflecting on my practice as well as for reflecting on the significance of my work in the bigger picture of public school education. The following section is designed to provide insight into my reflective practice.

Change in Hypothesis

My initial hypothesis was linear and simplistic (see Figure 1). By directly addressing teacher morale, I believed I would positively impact school climate. In this way, a positive school culture would emerge. This school culture would positively impact student academic success.

After conducting further research and upon reflection of the data, the following understanding emerged. Figure 14 is a representation of what I found to be the integration of school climate within school culture. This exemplifies a significant change in my thinking which led to a much deeper understanding the relationship between climate, culture, and achievement.

Gruenert's (2008) juxtaposition of climate and culture accords with my experience—particularly in respect to his perspective that changing the climate is the “first step to improvement” (p. 58). However, I disagree strongly with Gruenert's (2008) later assertion that “changing the climate can be accomplished without much effort, suggesting that it is somewhat out of our control” (p. 58). Indeed, my experience is that intentionally changing the climate (as outlined in the left-hand column of Table 4) requires considerable and consistent effort on the part of the principal and is very much under his or her control. However, I will also concede that external factors strongly impinge on any intentional efforts the principal may take. Figure 14 shows how I envisage the relationship among school climate, school culture, and student academic success. School climate is immersed in school culture, and collectively they contribute to student academic success, but the scroll at the beginning of the arrow represents the folding-in of many other factors that are indeed beyond the sphere of influence of the school principal (e.g., family socio-economic status, race/ethnicity, student academic ability).

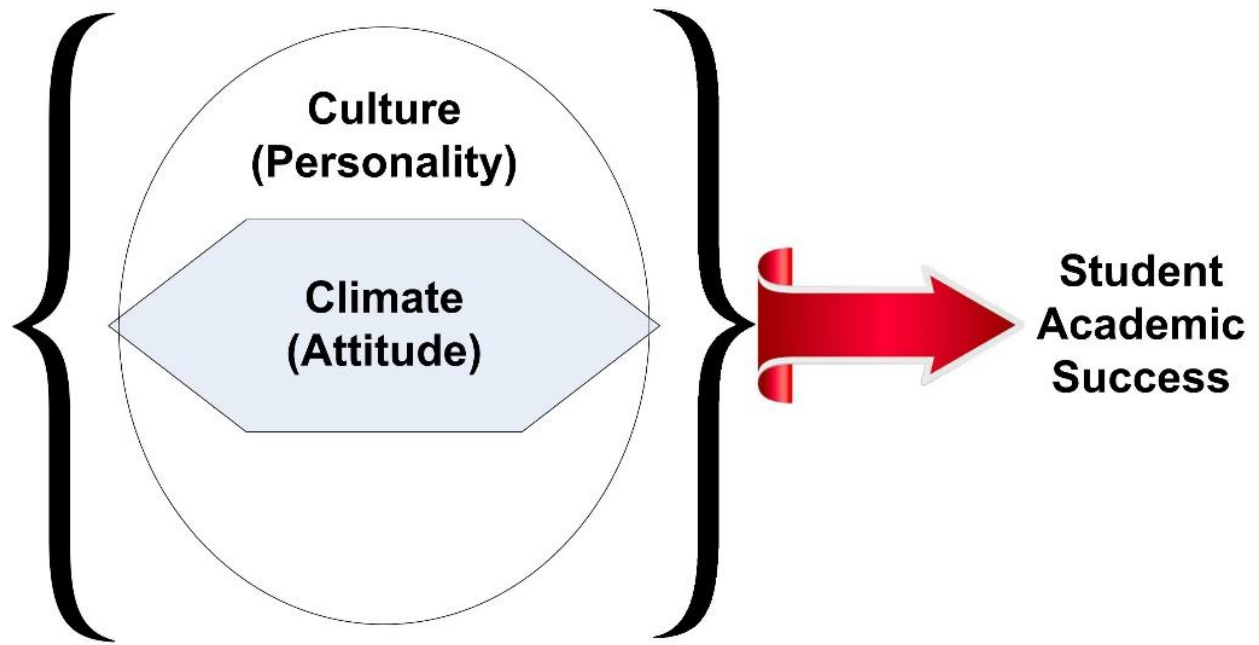


Figure 14. The relationship between and collective influence of school climate and school culture and student academic success.

In the face of the multiple factors that I cannot control, I am strongly supported in my belief that changing the school climate has the potential to impact student success by the report of Warner and Heindel (2017) who discussed the positive outcomes of an initiative of the United Way of Northern New Jersey that was directly aimed at improving the school climate. As Warner and Heindel (2017) chronicle, this massive initiative was implemented across more than 40 schools and involved some 17,000 students, resulting in measurable improvements in school climate and, subsequently, student achievement.

Conundrum

Clearly, the results I outlined in Chapter 4 were something of a puzzle. My reasonable assumption was that student achievement and school climate would be positively correlated. However, what these data show is that there is a growth in student achievement even as there is minimal growth or a decrease in teacher climate and overall satisfaction. To delve into this seeming contradiction, I analyzed each intervention and initiative and compared the effects of each on student achievement or teacher climate. Further analysis of the qualitative data that I collected provided a richer understanding of the reasons for this puzzle. Both data sets, quantitative and qualitative, helped to inform my grounded theory, “hasten slowly.” Further reflection allowed me to discover that, in fact, student achievement and school climate interact with each other in a way that impacts both.

Figure 15 is a representation of the relationship between school climate and student achievement that I surmised is the reason for the puzzling results of my data.

As indicated in Figure 15, the relationship between school climate and student achievement is cyclical, rather than linear. A focus on student achievement leads to higher student achievement. This resulting gain in student academic success impacts the sense of

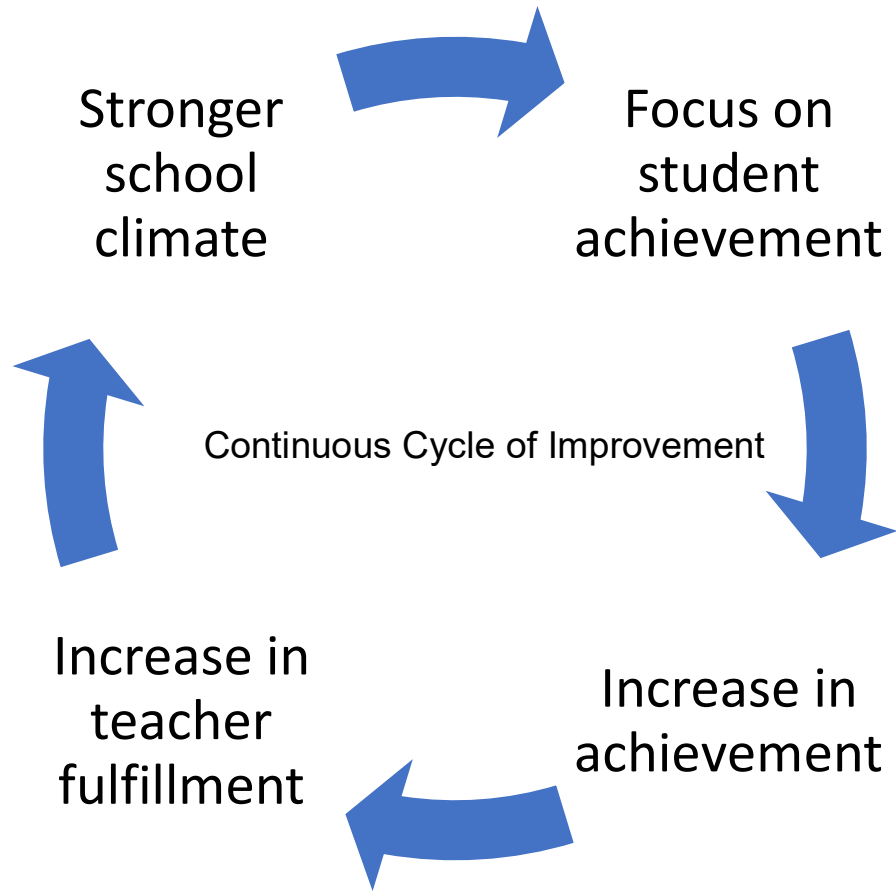


Figure 15. Relationship between student achievement and school climate.

fulfillment felt by teachers which leads to a more positive school climate. The positive school climate leads to a greater focus on student achievement, and the cycle continues. The combination of strong climate and high student academic success develops a school culture that is focused on student achievement.

This is the point at which my grounded theory, “Hasten Slowly,” moves from theory into practice. The imperative to make rapid changes to instruction because the context of the school is changing rapidly must be balanced by a respect for the time needed for teachers to adapt to change. Indeed, in high-performing schools, such as SMS, there may be initial push-back by staff who do not understand that they need to make changes to their instruction. What they’ve always done has always been enough, so why change now? In my study, increases in student achievement that resulted from the initiatives that focused on student achievement created a momentum that is seen in the smaller but visible improvements in climate based on the interim TWCS scores at the end of the study. Teachers changed their practice and achievement increased. This led to the small increases in school climate.

Further Research in Improvement Science

I am intrigued by the work of the Carnegie Foundation for the Advancement of Teaching in improvement science. Park, Hironaka, Carver, and Nordstrom (2013) discuss processes of quality improvement that I believe will fit nicely within the scope of the initiatives and changes that I have implemented as a result of my study and will provide appropriate next steps for SMS. They state that “... continuous (quality) improvement is the act of integrating quality improvement into the daily work of individuals in the system” (p. 7), allowing for differences within systems so that it is not a one-size-fits-all solution to a complex problem. In this model, failure is seen as a natural by-product of the cycle of improvement, informing the next steps of

the process. The processes also allow for collaboration and teacher leadership, which I found to be so important to the teachers in my study. They also maintain that

...quality improvement work is fully infused in the day-to-day work of individuals. The only way for quality improvement work to be truly continuous is if it is woven into the fabric of the daily work that individuals are constantly doing. Continuous improvement, therefore, cannot be a separate intervention, implemented in parallel with others. Its focus on processes (all work is a process) necessitates that individuals do not simply do the same work differently, but rather that individuals conduct different work (p. 7).

The importance of infusing improvement work into day-to-day functions of teachers and students makes this body of research pertinent and relevant to the improvement efforts I am attempting at SMS.

Reflections on the Impact of the Study on School Life at SMS

Physical environment. There was a clear correlation between the district survey and my planned interim TWCS in March dealing with the physical environment of our school. This was also one of the indicators from the NCTWCS that my staff had originally selected as impactful. The addition of this indicator on the district survey once more led me to understand that the physical environment deserves attention as a part of the overall school climate. When my staff had originally selected this indicator as one that they felt we could positively impact, I was a bit confused because I thought the building and the environment would be the last thing we had any control over. However, my staff was determined to include this in the nine indicators. In retrospect, I realize that the physical environment must be very important to the climate and overall culture of the building. Upon reflection, I believe it is one of those factors that a principal may have little control over. SMS is an older building and it requires considerable maintenance

and attention. Because of this, it is within the scope of my job as principal to intervene when necessary to alleviate major safety concerns effectively and efficiently. Quick action on my part may lead to a more positive school climate as measured by this one indicator.

Benchmark scores. Benchmark outcomes also led to deeper understanding of the overall curriculum at SMS. Overall, the student benchmark scores were lower than I had expected, especially in 8th grade. Perhaps the curriculum becomes more difficult overall in Grade 8, based on the fact that students at SMS score at the mid-30% level in the fall in Math and at the mid-40% level in ELA in Grade 8, while scoring in the mid-40% and mid-60% level in the other grades, respectively. This discrepancy can be seen in both years of administration, suggesting that a curriculum review may be in order.

I am also concerned that the students do not achieve the expected progress in math between the fall and winter administration of the benchmark assessment in Grade 8. In both years, the average percent correct was lower in the winter administration than in the fall administration. This occurred to a lesser degree in the other grade levels—the difference being that in those cases, the students’ performance remained above my expected benchmark level. In Grade 8 math, the students have failed to meet my expected level of proficiency during the winter administration in both years.

Another concern for me is the fact that, while students met the expected levels, for the most part, in fall and winter administrations, they did not meet my spring benchmark level of 70% in either subject area and in any of the three grades. There are three possibilities to be considered: (a) my expectation of 70% in spring may be too high, (b) there may be an issue regarding curriculum alignment, or (c) it may be that the benchmark assessments are not aligned to the curriculum guides as closely as could be expected. With respect to my expectation of 70%,

it may be an aspirational goal in the context of SMS, but I maintain that it is a reasonable expectation, in general.

The SST Process. The impact of an improved SST within the MTSS process appears to be an increase in the number of students receiving SST support, as supported anecdotally by teachers who have witnessed the difference in process from one year to the next. These teachers have said that they believe that the increase is a result of better identification procedures established through the professional development in which they have participated.

Restructuring PBIS. Reflecting further on the MTSS process, I obtained some insight into the impact of a strong PBIS initiative. I intended that the restructuring of the PBIS model would be an appropriate way to address concerns of teacher satisfaction, as measured by the TWCS indicator, “Administrators enforce rules consistently.” I believed that with the new procedures in place, consistency would increase. It appears to be a slow process, however, as faithfully implementing the MTSS process involves changes in thinking by teachers who are being asked to respond differently to student behaviors.

For example, without the restructured PBIS model in place, one teacher might send students out of the classroom for the most minor infractions, such as not having a pencil or standing up to sharpen a pencil. In these cases, students frequently did not know why they were sent out of class. On the other hand, another teacher would never send students to the office except for severe behaviors, while never addressing consistently disruptive classroom behaviors, such as talking to others, arguing with the teacher, or refusing to do work. Such minor infractions continually interrupted classroom instruction, but this teacher had no consistent way to address them.

Unfortunately, administrators also responded differently to students when they were sent to the office. While one administrator would have a firm conference with the student, another might call the student's parent and impose a detention or In-School Suspension. To compound matters, the teachers reacted negatively to the actions of the administration, frequently feeling that the administration did not "do enough," which sometimes translated as meaning that the administrator did not do what the teacher expected him or her to do.

This lack of clear operational expectations was borne out by the data from the TWCS, in which only about half of the teachers responded that they felt that administrators consistently enforced the rules. The lack of consistent consequences highlighted above was true even after my administrative team and I specifically discussed the protocol for students who were sent to the office. This continued to be a vague area because of the actions of the teachers and the relationships they built within their classes. What we discovered was that Teacher A would only send the student to the office as a time out, expecting that the student would be sent back after a firm talking to and redirection. Teacher B on the other hand, expected that when she sent the student to the office, severe consequences would result because she never sent students to the office. The restructured PBIS model within MTSS helped to put all students on the same playing field, gave the ownership of classroom management to the teacher, and provided for a more consistent and fair administration of the rules in the administrator's office.

With the restructured PBIS model, each teacher was expected to provide documentation that verified that classroom consequences were activated and that parent contact was made prior to making an office referral. Administrators were thus enabled to respond consistently to each student's transgression based on the protocol established by the PBIS model. When a student was sent to the office under the restructured PBIS model, that student automatically received at

least one day of In-School Suspension, with escalating consequences with each subsequent referral from the same or different classes. This change took time to implement with fidelity, but the results that I began to see included fewer classroom disruptions and more time in class for the students. Nevertheless, results on the October and January interim surveys that I administered showed that teachers were still not satisfied with the administrators' consistency in dealing with behavior referrals. This indicates that further work needs to be done towards understanding the needs of the teachers on this indicator.

ThinkLab climate issues. ThinkLab was an important initiative for both student achievement and climate. Anecdotal accounts of ThinkLab by teachers at school would indicate that they believe in its impact, but they are sometimes overburdened by the additional work they have to do. As mentioned in Chapter 4, ThinkLab was an initiative developed by the teachers at SMS prior to my leadership in the building and its implementation not only coincided with my study, it also had a significant impact. For example, teachers had input into where it would fit in the schedule. I believe that this strategic position they gave it in the schedule indicates how strongly the teachers felt that ThinkLab would be beneficial to student achievement at SMS.

Allowing for creativity in developing enrichment courses to offer students during ThinkLab was one way to address the 2016 NCTWCS indicator, "Administration supports teacher's efforts," which had a score of 73% of teachers who agreed or strongly agreed. However, my October, 2017 survey shows an even lower score for this indicator. What was the reason for this, given that teachers' efforts were being supported wholeheartedly? It is possible that teachers have a different perspective of that indicator and its meaning. Alternatively, they may feel that there is not enough material support. This topic was one for further study within the different leadership committees in SMS to determine whether this freedom to develop a class had

been considered in the overall climate or if it was seen as extra and therefore not to be considered in questions of teacher morale. An increase in this indicator in my January, 2018 survey showed that staff perception on this indicator had increased. Addressing it in discussions may have been an effective modulator for this indicator.

While teachers spend additional time in preparation for their ThinkLab classes, they appear to enjoy the challenge and have reported that the students have responded very well to the program overall. However, there are several potential climate issues with the implementation of ThinkLab. There appears to be some confusion as to whether the initiative is truly a teacher-developed one or something that was developed and implemented by administration. For example, one respondent on the comments section of the interim TWCS indicated that there had been a failing vote for ThinkLab early in its implementation. Regarding the quote from this respondent in Chapter 4, I believe that the respondent remembered a failing vote (the initial vote where we had decided to delay the implementation until the fall) and determined that the staff had actually voted not to implement ThinkLab at all. The quote is important because it illustrates the depth of the frustration that has been caused by the stress of not having enough time to prepare for core classes and ThinkLab classes, especially given the fact that the respondent remembers voting against ThinkLab overall. This would mean that this particular respondent believes that ThinkLab is an administrative initiative, not one led by the teachers.

The feedback that we have received supports the sense that there is not enough time for all of the preparation, even though teachers are allowed to create their own class. SMS is only in the middle of the second year of this initiative, and this feedback is important to the sustainability of the initiative. “Time” as a component of climate is once again apparent in the overall understanding of overall school climate. While ThinkLab was intended to impact student

achievement positively, a school climate issue such as the one intimated by the feedback regarding time to prepare could derail the initiative before we have really implemented it successfully over the agreed-upon implementation period of at least three years.

Another potential climate issue that may affect the sustainability of this initiative is the time involved in the scheduling process. Because the courses, teachers, and student schedules change so frequently, the regular student data system (PowerSchool) cannot be used to schedule students for ThinkLab. This means that students must be hand-scheduled. At this time, the scheduling process is time-intensive and difficult to understand. I have developed my own methods to schedule the students, and the process takes at least two weeks to schedule students first in their academic interventions and then in their chosen enrichment classes.

Be My Guest. The Be My Guest initiative also needs time. This intervention was new to the school, and few teachers have taken advantage of visiting or inviting others to visit. Teachers report that they do not think anyone wants to watch them, and visiting teachers are not sure that the teacher who issued the invitation really wants people to just drop in. However, for teachers who have taken advantage of visiting other classrooms, they report that they have learned from the other teacher, and changes in practice have occurred.

Leadership training. Another initiative that bears reflecting upon is the representative leadership team process of making group decisions. It was fairly new to the school and had been developed because decision-making with the whole staff had become cumbersome due to the change in number of staff because of increased enrollment. Unfortunately, because of the low score on the 2016 NCTWCS on this indicator, it appears that this approach is not working for the individual teachers. Perhaps they don't feel they have a voice in the decisions, or that their voice is not heard? Perhaps the representative leadership process was too new and different? It was

clear to me that, many times, communication or feedback was not effectively reaching all of the members of the school community. This was apparent when teachers were not aware of decisions that were made, or how the decisions were made. One comment from a teacher in the spring of 2016 played over and over in my mind, “we are just not a collaborative group. We don’t work that way. We just need you to tell us what to do and we’ll do it” (Personal communication, spring 2016). Prior to my arrival as principal, the teachers had become so large a group that making a decision was a long and sometimes combative process, based on observations of initial staff meetings early on in my leadership there at SMS. It appeared that staff had not been accustomed to implementing a collaborative problem-solving model in the past, but the NCTWCS results indicated that they did not have an effective model for whole-group decision-making. This led to the leadership training initiative. Relative to the NCTWCS in 2016, the school community does not feel that there is an effective problem-solving process in our school. The most recent interim TWCS shows that this rating has not improved. However, the School Leadership Team meetings appear to be much more positive and productive than in the past. The leaders are more confident with their decisions, and I anticipate that the professional development in which they have participated will, in time, make an impact on the school community.

Concluding Reflection on Initiatives

I am optimistic that the initiatives may yet prove to bring about more of the desired results in improving school climate, even while the results of climate as measured by the interim TWCS appear to be inconclusive. The “Be My Guest” board is beginning to attract more participants. The Community of Practice initiative is slowly gaining momentum. Professional development is on-going through staff meetings and grade-level or content-level team meetings.

I am pleased with the work of the School Leadership Team this year, as they have been much more vocal in meetings. They appear to be much more comfortable disagreeing with each other or members of the administration, and the decisions they make are respected by the school. The monthly gatherings planned by the Sunshine Committee are also gaining participants, particularly the “Friday Food and Flicks” event, a lunch potluck held on the third Friday of each month in the library where participants enjoy lunch while watching a movie.

Next Steps for SMS

I am optimistic about the gains we have made at SMS towards strengthening our school culture. Unfortunately, SMS will be undergoing another significant change next year when our district opens another middle school that will ease the overcrowded conditions at our school. SMS will be reduced by half, with a projected student population for the 2018-19 school year of just under 500. Teachers and support staff are apprehensive because the staffing decisions have not been made, and they do not know if they will be staying at SMS or moving to the new school.

Based on the study data and anecdotal observations from my daily work at SMS, I am confident that many of the initiatives that we implemented during my study will remain in place. While teachers have already started to discuss whether ThinkLab will be a possibility next year with fewer teachers in the building, they understand that the decision is theirs to make collaboratively. There appears to be a more positive acceptance of the leadership team structure, and I have begun to provide professional development for other leadership teams in the building. The Be My Guest initiative may not continue, based on current interest. However, I have seen an increased interest in other teachers’ work by their colleagues when I have embedded specific teacher observations into professional development.

Overall, I believe that the teachers have developed a sense of collaboration and collegiality that was missing when I began my study. Climate can be nebulous, and the TWCS is only one way to describe indicators to address it. However, the culture of a school can be felt, and I have felt a difference. I have noticed some positive movement towards a culture that relies on respectful, easy relationships between staff, and a focus on student achievement. For example, conversations in the hallways and in small group meetings increasingly revolve around student work and teaching strategies, indicating a greater focus on student achievement. Staff events outside of school that have been organized by the Sunshine Committee have increased participation. School Leadership Team meetings have changed positively. This is important because this is the team that participated in the professional development. Where before the leaders would sit quietly and keep their comments to themselves, especially when there were conflicting views, there are now vibrant and purposeful debates leading to conflict resolution and problem solving.

Looking ahead to next year, I would like to start with a strategic planning meeting where we outline the process of the formal matrix organization model. I would like to formalize our problem-solving process before we begin the year because this appears to be where there is the most miscommunication and confusion with teachers who are not members of the leadership teams. An effective problem-solving process was considered very important by the staff, based on both qualitative and quantitative data. By formalizing the process collaboratively, I will be “hastening slowly” towards a better understanding of the model. I can see now that I expected the staff to understand the process by just implementing it. I can slow this down by going back and explaining it and answering questions, and then allowing staff to understand their own roles in the process. This is not only respectful of their input, it is necessary to effectively make

changes if they are needed. Once this has been accomplished, we can continue to move forward with leadership strategies and relevant professional development for teacher leaders.

A new NC TWCS will be given in March, 2018. A realistic goal for the next NC TWCS will be to see an increasing number of participants who rate each item identified previously within the study “strongly agree” or “agree,” and a decrease in the number of participants who rate each item “strongly disagree” or “disagree.” These specific climate indicators were identified collaboratively with teachers through exploring the results of the NC TWCS as a regular part of data analysis. This collaboration is an important step in understanding and identifying the current culture of this school, particularly since “insight into one’s own culture may remove the defenses that allow members to accept change” (Gruenert, 2000, p.2)

Addressing teacher morale will result in changing attitudes (climate), which should change the overall personality (culture) of SMS. Based on my findings, this should improve the overall student achievement at the school and result in a culture that is focused on student achievement and positive school climate.

REFERENCES

- á Campo, C. (1993). Collaborative school cultures: How principals make a difference. *School Organization, 13*(2), 119-127.
- Averill, O., & Rinaldi, C. (2013). Research brief: Multi-tier system of supports. *Urban Special Education Leadership Collaborative*. Waltham, MA.
- Cobb, N. (2014). Climate, culture, and collaboration: The key to creating safe and supportive schools. *Techniques: Connecting Education & Careers, 89*(7), 14-19.
- Cohen, J. (2007). Evaluating and improving school climate. *Independent School, 67*(1), 18-26.
- Cohen, J. (2009). *Transforming school climate: Educational and psychoanalytic perspectives: Introduction* University of Chicago Press.
- Cohen, J., Pickeral, T., & McCloskey, M. (2009). Assessing school climate. *Education Digest, 74*(8), 45-48.
- Cohen, J., Shapiro, L., & Fisher, M. (2006). Finding the heart of your school. *Principal Leadership: Middle Level Edition, 7*(4), 26-31. doi:10.1086/597659
- Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Deal, T. E., & Kennedy, A. A. (1983). Culture and school performance. *Educational Leadership, 40*(5), 14-15.
- Deno, S. L. (1985). Curriculum-based measurement: The emerging alternative. *Exceptional Children, 52*, 219-232.

- Ford, J. W., Missall, K. N., Hosp, J. L., & Kuhle, J. L. (2017). Examining oral passage reading rate across three curriculum-based measurement tools for predicting grade-level proficiency. *School Psychology Review, 46*(4), 363-378. doi:0.17105/SPR-2016 - 0014.V46 - 4
- Fuchs, L. S., & Deno, S. L. (1991). Paradigmatic distinctions between instructionally relevant measurement models. *Exceptional Children, 57*, 488–500.
doi:10.1177/001440299105700603
- Goldsmith, O. (1888). *The deserted village*. Philadelphia, PA: Lippincott.
- Gruenert, S. (2000). Shaping a new school culture. *Contemporary Education, 71*(2), 14-18.
- Gruenert, S. (2005). Correlations of collaborative school cultures with student achievement. *NASSP Bulletin, 89*(645), 43-55.
- Gruenert, S. (2006). Are teacher bullies infecting your school? *Principal, 85*(3), 61-61.
- Gruenert, S. (2008). School culture, school climate: They are not the same thing. *Principal, 87*(4), 56-59.
- Guay, F. (2016). The virtue of culture in understanding motivation at school: Commentary on the special issue on culture and motivation. *British Journal of Educational Psychology, 86*, 154-160. doi:10.1111/bjep.12105
- Hosp, M., Hosp, J., & Howell, K. (2016). *The ABCs of CBM: A practical guide to curriculum-based measurement (2nd ed.)*. New York, NY: Guilford.
- Lee, H. H., & Li, M. F. (2015). Principal leadership and its link to the development of a school's teacher culture and teaching effectiveness: A case study of an award-winning teaching team at an elementary school. *International Journal of Education Policy & Leadership, 10*(4), 1-17.

- Lencioni, P. (2002). *The five dysfunctions of a team: A leadership fable*. San Francisco, CA: Jossey-Bass.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-96.
- Maslow, A. H. (1954). *Motivation and personality*. New York, NY: Harper and Row.
- Militello, M., Rallis, S. F., & Goldring, E. B. (2009). *Leading with inquiry & action: How principals improve teaching and learning*. Thousand Oaks, CA: Sage.
- Morgan, G. (2006). *Images of organization*. Thousand Oaks, CA: Sage.
- Park, S., Hironaka, S., Carver, P., Nordstrum, L. (2013). *Continuous improvement in education* [White Paper]. Retrieved March 8, 2018 from Carnegie Foundation for the Advancement of Teaching: https://www.carnegiefoundation.org/wp-content/uploads/2014/09/carnegie-foundation_continuous-improvement_2013.05.pdf
- Peterson, K. D., & Deal, T. E. (1998). How leaders influence the culture of schools. *Educational Leadership*, 56(1), 28.
- Van Houtte, M., & Van Maele, D. (2011). The black box revelation: In search of conceptual clarity regarding climate and culture in school effectiveness research. *Oxford Review of Education*, 37(4), 504-524. doi:10.1080/03054985.2011.595552
- Viadero, D. (2018). Teaching shortages: Many answers for a complex problem. *Education Week*, 36(18), 4-5.
- Warner, L., & Heindel, P. (2017). Student success built on a positive school climate. *Education Digest*, 82(7), 10-15.

APPENDIX A: IRB APPROVAL



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building · Mail Stop 682
600 Moyer Boulevard · Greenville, NC 27834
Office 252-744-2914 · Fax 252-744-2284 · www.ecu.edu/irb

Notification of Initial Approval: Expedited

From: Social/Behavioral IRB
To: [AnnaMaria Romero-Lehrer](mailto:AnnaMaria.Romero-Lehrer@ecu.edu)
CC: [Robert Reardon](mailto:Robert.Reardon@ecu.edu)

Date: 2/21/2017
Re: [UMCIRB 17-000049](#)
Reshaping School Culture

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 2/21/2017 to 2/20/2018. The research study is eligible for review under expedited category #6, 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
Informed Consent form for Research.doc	Consent Forms
Interview Protocol.docx	Interview/Focus Group Scripts/Questions
Open-ended questions for interviews.docx	Interview/Focus Group Scripts/Questions
Reshaping School Culture Proposal Paper -- Romero-Lehrer (final).docx	Study Protocol or Grant Application
Sample Quarterly TWCS.docx	Surveys and Questionnaires

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

APPENDIX B: INTERVIEW PROTOCOL

1. The interviewer will keep notes with a heading that includes a date, place, interviewer, and will record a random letter of the alphabet chosen by the interviewee from a set of alphabet cards to minimize the chance of bias while assisting with coding the interview.
2. The interviewer will make sure the interviewee is comfortable and will tell the interviewee
 - a. The purpose of the interview is to learn more about individual perceptions of school culture.
 - b. The results of the interview will be used as qualitative data for a study on school culture.
 - c. The interviewee will receive the results of the data including the interpretation of the results and the final product of the study as a member of the school staff.
 - d. The information gathered will be used to develop a better school culture and not as an evaluative device by the principal.
 - e. The interview will be recorded and the recording will be used to provide a transcript to be coded by the interviewer on nVivo, a software program that will organize trends and concepts from the data. No identifying information will be used, and the letter of the alphabet, picked at random, will be the only identifying device used by the interviewer to identify the interview in nVivo.
3. An icebreaker question will be asked, “Tell me what you do in our school.”
4. The questions will be asked, and the interviewer will take notes and record the interview to code later in nVivo.
5. The interviewer will thank the interviewee for the time spent in the interview.
6. The interviewer will log the interview in the field journal – date, time, place, and letter of the interviewee. The interviewer will transcribe the interview into the nVivo program within 3 days for coding. Coding will be completed throughout the data collection period.

APPENDIX C: SAMPLE QUARTERLY TWCS

For each of the following questions, please respond by indicating Strongly Agree, Agree, Neither Agree or Disagree, Disagree, or Strongly Disagree.

1. *Non-instructional time is sufficient.*
 - Strongly Agree*
 - Agree*
 - Neither Agree nor Disagree*
 - Disagree*
 - Strongly Disagree*

2. *Teachers are protected from duties that interfere with instruction.*
 - Strongly Agree*
 - Agree*
 - Neither Agree nor Disagree*
 - Disagree*
 - Strongly Disagree*

3. *The physical environment supports teaching and learning.*
 - Strongly Agree*
 - Agree*
 - Neither Agree nor Disagree*
 - Disagree*
 - Strongly Disagree*

4. *There is a broad range of professional support personnel.*
 - Strongly Agree*
 - Agree*
 - Neither Agree nor Disagree*
 - Disagree*
 - Strongly Disagree*

5. *Administrators consistently enforce rules.*
 - Strongly Agree*
 - Agree*
 - Neither Agree nor Disagree*
 - Disagree*
 - Strongly Disagree*

6. *Administrators support teacher's efforts.*
 - Strongly Agree*
 - Agree*
 - Neither Agree nor Disagree*
 - Disagree*
 - Strongly Disagree*

7. *There is an effective process for making group decisions.*
- *Strongly Agree*
 - *Agree*
 - *Neither Agree nor Disagree*
 - *Disagree*
 - *Strongly Disagree*
8. *There is an atmosphere of trust and respect.*
- *Strongly Agree*
 - *Agree*
 - *Neither Agree nor Disagree*
 - *Disagree*
 - *Strongly Disagree*
9. *Follow-up is provided for PD.*
- *Strongly Agree*
 - *Agree*
 - *Neither Agree nor Disagree*
 - *Disagree*
 - *Strongly Disagree*
10. *What else do you have to say about school culture at this time?*

APPENDIX D: STEP PLAN FOR PBIS

Student _____ Teacher _____

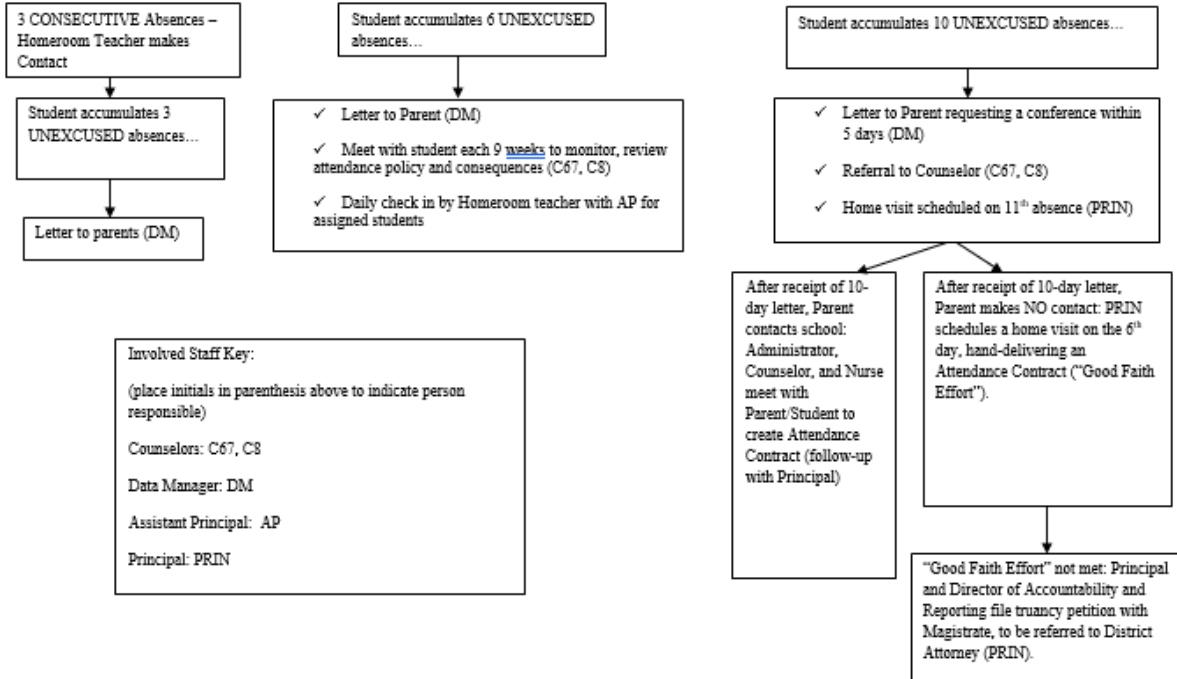
SUBURBAN MIDDLE SCHOOL BEHAVIOR MANAGEMENT PLAN

1. Written Warning	Student Initials _____ Date _____ Infraction (be specific):
2. Student/Teacher Pick	Student Initials _____ Date _____ Infraction (be specific): Consequences(please list): _____ EXAMPLES: lunch detention, phone call or email Home to parents, written assignment, other...
3. Parent/Teacher Collaboration	Student Initials _____ Date _____ Date of Contact _____ Improvement Strategies:
4. Referral	Student Initials _____ Date _____ Infraction (be specific): ***Send this sheet with your referral
This plan does NOT start over each 9 weeks ... only after completion of Step 4. Date in office _____ By _____ Administrative Action: _____	

APPENDIX E: SCHOOLWIDE ATTENDANCE PLAN

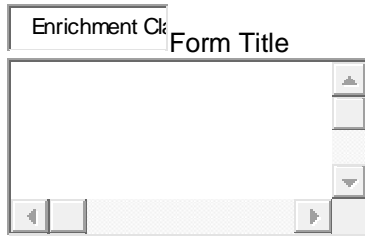
Per Board Policy & G.S. 115C-378

County Schools Attendance Intervention for Suburban Middle School



APPENDIX F: THINKLAB ENRICHMENT CLASS APPLICATION

Enrichment Class Form Title



What is the title of your course?*



What academic area will your course strengthen?

- Math
- ELA
- Science
- Social Studies
- Other:

Briefly describe your course.



How will the students be held accountable? Please describe. Assessment, project, activity, or other?



What needs will you have to teach the course?



Briefly describe how you will incorporate Math, Reading, Writing, or content areas in your course. For example, students keeping a journal, writing a paper, solving problems with a spreadsheet, etc.

Is there anything else you would like to say about your course?

Name

Grade level of the course

- 6th
- 7th
- 8th

What general category does your course fall under?

- Science
- Math/Engineering
- ELA
- History/Social Studies
- Humanities
- Other:

Maximum number of students in this class:

APPENDIX G: LIST OF THINKLAB ENRICHMENT CLASSES, ROTATION 1, 2017-18

NAME	TEACHER
ADVANCED DRAWING 8TH (A DAY)	ART
ADVANCED DRAWING 6TH AND 7TH (B DAY)	ART
ANTI-BULLYING SAIL-ERS (A DAY)	MUSIC
BE A BETTER WRITER (B DAY)	ELA
BOOK V. MOVIE (A DAY)	MATH
CHILDREN'S PICTURE BOOKS (A DAY)	ELA
CREATIVE WRITING (B DAY)	ELA
DRAMA (A DAY)	ELA/SOCIAL STUDIES
EQUINE STUDIES (B DAY)	MATH
FILM STUDIES (A DAY)	SOCIAL STUDIES
FILM STUDIES (B DAY)	SOCIAL STUDIES
GARDENING (6, 7 ONLY) (A DAY)	MATH
HISTORY OF WARFARE (B DAY)	ELA
LAW ENFORCEMENT (A DAY)	SCHOOL RESOURCE OFFICER AND ENCORE
MANNERS FOR EVERYDAY (B DAY)	MATH
MATH FRIENDS (6TH ONLY) (A DAY)	MATH
NC STATE PARKS (A DAY)	SOCIAL STUDIES
PERSONAL FINANCES (A DAY)	SOCIAL STUDIES
INTRO TO PHOTOGRAPHY (6TH GRADE ONLY) (A DAY)	SOCIAL STUDIES
PHOTOGRAPHY 2 (7TH AND 8TH ONLY) (B DAY)	SOCIAL STUDIES

PUBLIC SPEAKING (B DAY)	ENCORE
(LET'S GET) PUBLISHED (A DAY)	SCIENCE
RESEARCH PRACTICES (B DAY)	SCIENCE
SCIENCE FAIR (B DAY)	SCIENCE
SKETCHING NATURE (A DAY)	SCIENCE
SPORTS BY DESIGN (A DAY)	COACHES
SPORTS BY DESIGN (B DAY)	COACHES
US NAT'L PARKS (B DAY)	SOCIAL STUDIES
WHERE IN THE WORLD IS... (B DAY)	SCIENCE

APPENDIX H: BE MY GUEST TEMPLATES

BE MY GUEST!

Teacher _____ Room _____ Dates/Periods: _____

I'd like for you to see: _____

(Copy for the BE MY GUEST Board)

Cut here -----

BE MY GUEST!

Teacher _____ Room _____ Dates/Periods: _____

I'd like for you to see: _____

(Copy for the Drawing – put in Anna's Box by her office)

THANKS FOR THE VISIT!

My name: _____ . I visited _____ on (date)

_____. Comment: _____

(Copy for the teacher: leave on desk or put in teacher's box)

Cut here -----

THANKS FOR THE VISIT!

My name: _____ . I visited _____ on (date)

_____. Comment: _____

(Copy for the Drawing – put in Anna's Box by her office)

APPENDIX I: COMMUNITY OF PRACTICE AGENDA AND MINUTES

Date of Meeting: _____ Grade: _____

Team/Participants: _____

Define the Problem:

What information do we have?

What information do we have to collect?

Develop a SMART goal: Specific, Measurable, Attainable, Results-Driven, Time-Bound:

By _____ (date), students will _____
 _____ at _____ (%)

Achievement as measured by _____.

Action Plan for Change in Practice

Who (Adult):	Will do what:	By when:	How:	Expecting what results:

Review Meeting Scheduled: _____

APPENDIX J: AGENDA FOR LEADERSHIP TEAM MEETINGS

Vision: As leaders of the Topsail Middle School family, we believe in presenting ourselves in an ethical and professional manner. While maintaining a positive attitude, we promote trust, commitment, and respect toward each individual in our family. Leading by example is a high priority for our leadership team.

Example Agenda filled in:

Date: _____

Item	Brought up by	What to do with it	Discussion	Take back to teams
Purchase new computers	Media Specialist	Discuss	How much money do we have? Who will get the new computers?	“We will be purchasing an additional cart of chromebooks. The Media Specialist will be responsible for distributing them to the teams.”

APPENDIX K: INTERVIEW QUESTIONS

Open-ended questions for interviews

1. Describe the role of the teachers in our school culture.
2. Describe a school that works for teachers and students.
3. What about the inevitable conflict that exists when people are asked to work together?
4. Describe the traditions and celebrations that are important to our school community.
5. What would help our school's positive environment?
6. How does a positive teacher affect student achievement?

