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The Effects of a Discourse Community Model on Promoting Intentional Conceptual Change to Increase Understanding of School Climate and Its Importance

David Parker

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THE EFFECTS OF A DISCOURSE COMMUNITY MODEL ON PROMOTING
INTENTIONAL CONCEPTUAL CHANGE TO INCREASE UNDERSTANDING OF
SCHOOL CLIMATE AND ITS IMPORTANCE

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for
the degree Doctor of Education

By

David A. Parker

May 2009

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David A. Parker

2009

DUQUESNE UNIVERSITY
SCHOOL OF EDUCATION
INTERDISCIPLINARY DOCTORAL PROGRAM FOR
EDUCATIONAL LEADERS

Dissertation

Submitted in Partial Fulfillment of the Requirements
For the Degree of Doctor of Education (Ed. D.)

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March 10, 2009

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INTENTIONAL CONCEPTUAL CHANGE TO INCREASE UNDERSTANDING OF
SCHOOL CLIMATE AND ITS IMPORTANCE

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ABSTRACT

THE EFFECTS OF A DISCOURSE COMMUNITY MODEL ON PROMOTING
INTENTIONAL CONCEPTUAL CHANGE TO INCREASE UNDERSTANDING OF
SCHOOL CLIMATE AND ITS IMPORTANCE

By

David A. Parker

May 2009

Dissertation supervised by Jim Henderson

Framed within intentional conceptual change theory, this study looked at the effects of a discourse community model on promoting intentional conceptual change to increase understanding of school climate and its importance. A highly-motivated group of 11 teachers from one elementary school participated in this discourse community designed to promote an intentional conceptual change regarding school climate. Initial interviews, artifact collection, and journal responses were the methods of data collection. Within the discourse community setting, the teachers interacted with a series of activities and discussions to construct new knowledge pertaining to school climate. Themes and patterns of climate understanding emerged and presented evidence of an increase in the teachers' understanding of school climate and its importance from their initially-stated understanding.

DEDICATION

To my family living thank you for your love and support.

To those that have passed on I am here because

I have stood on your shoulders for every step along this exciting journey.

ACKNOWLEDGEMENT

I am at the threshold of a lifelong dream; a dream instilled within me years ago that I should help to make this world a better place than it was when I entered it. This journey which symbolically ends as I enter doctorateville is actually a beginning. This beginning actually began before I saw the road which led to where I am now. I am grateful to so many who have walked with me and guided me throughout this journey.

First, I thank God for providing me with the wisdom, courage, and strength to navigate whatever was placed in front of me along the way.

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team and I will be forever grateful for their guidance, support, and timely feedback. Most of all, I am grateful for their friendship and respect which they have granted me. I am humbled by their gift and I value it every day.

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CHAPTER I

INTRODUCTION

The Perfect Storm

During the fall of 1991, off of the east coast of the United States with little advanced warning, three weather systems collided and created a storm of catastrophic proportions. The result was a storm of singular fury with winds at hurricane speeds and waves reported to be over one-hundred feet in height. There was much destruction and little if anything could be done to avert the storm. What caused this horrific event was the combining of three weather systems. The United States Weather Service and bestselling author Sebastian Junger identified this unforgettable event as “The Perfect Storm” (Junger, 1997).

The analogy of a perfect storm can be applied to the perception of school climate. The literature has indicated that there is a perceived misunderstanding of school climate (Frankly, 2006). This misunderstanding has led to diminished attention being given to issues of school climate in school districts. This misunderstanding can be linked to three elements: (a) historical connections, (b) lack of clear definition and understanding, and (c) singular-focused research. These three elements together have contributed to creating a perfect storm regarding school climate understanding.

The manifestation of a perfect storm regarding the understanding of school climate can be behavior that is not aligned with the stated goals and mission of a school district. Unlike its weather-related counterpart, there is advance warning and options to avert and diminish this perfect storm. This research is a look at one of those options.

Statement of the Problem

Hoy, Tarter, and Kottkamp (1991) stated that school climate is "...the set of internal characteristics that distinguishes one school from another and influences the behavior of its members" (p.10). School climate is created by the belief system of the school. The climate affects the impressions, expectations, and behaviors of the members of the entire school community which encompasses the students, educators, staff, parents, and the larger community (Anderson, 1982; Hoy et al., 1991; Schein, 1990). The climate of the school community can have a positive effect on the health of the school community or it can be a major obstacle to learning (Hoy & Miskel, 2005).

The concept of school climate is dynamic and is a chameleon-like phenomenon. The task of seeking a definition and understanding for school climate is reminiscent of the story of the seven blind persons who each gave a different and unique description of an elephant depending upon the part that each touched. School climate is created by the routine practices that are important to the members of the educational community (Hoy et al., 1991). The climate defines how the school will behave toward its members and how the school is perceived by the parents and the community (Hoy et al., 1991).

The elements that make up school climate are complex and dynamic. The chosen research focus of a school climate study is largely an outcome of the researcher's theoretical orientation (Anderson, 1982). The different elements of focus can range from relationships between the members of the educational community within the building to their relationship with the community (Smith, 2005) and from the physical structure of the building (Wargoeki & Wyon, 2006) to the degree of safety that is built into the structure (Perkins, 2007). The size of the school (Cotton, 1996), the opportunities for rich

staff development (Fairbanks & LaGrone, 2006; Ho, Watkins, & Kelly, 2001), and the expectations for success (Perkins, 2007) can influence the climate of the school.

Hoy and Miskel (2005) stated that school climate affects how the educational community approaches instruction. Freiberg (1998) used the metaphor of air to better illustrate the influence and affects of climate. Freiberg explained that school climate, like air, does not have attention given to it until it becomes foul. Hoy et al. (1991) claimed that climate has the potential for making schools "...more productive as well as an important end in itself" (p.4). There does not seem to be an area within the school community that is not affected by the climate of the school.

The problem is that even with the literature that describes the importance of the factors that are affected by the climate of the school, many schools report that they do not look at climate at all (Frankly, 2006). Frankly (2006) reported that 34% of the respondents to a survey stated that they do not do anything regarding school climate. The reasons stated for this lack or limited attention included: (a) lack of clarity in the definition, (b) limited time or resources, (c) low priority, (d) limited understanding of and strategies for addressing school climate, (e) limited understanding of the effects of climate, (f) limited understanding of how the behaviors become practice, and (g) lack of clarity on the variables that compose climate (Frankly, 2006).

Significance of the Study

The literature shows that a clearer understanding of school climate is indicated within educational communities. This study explored whether a discourse community model could promote intentional conceptual change to increase the understanding of school climate and its importance.

Ho et al. (2001) stated that there is a need to approach the staff development of educators utilizing a conceptual change process. The use of intentional conceptual change within a discourse community model was enacted in this study with a community of professional educators to share and construct new knowledge of school climate.

Askill-Williams, Murray-Harvey, and Lawson (2007) noted that within the framework of the community in their study, the members were able to form new perspectives about issues that are at the core of professional teacher education.

The use of the discourse community in this study to promote intentional conceptual change regarding school climate attempted to address two gaps noted in the literature. One gap concerns the limited understanding about school climate. A second gap concerns the limited literature and research regarding the staff development of educators utilizing a conceptual change process.

Purpose of the Study

The purpose of this study was to explore the effects that a discourse community model could have on promoting intentional conceptual change to increase the understanding of school climate and its importance. Furthermore, the effects of a discourse community on the perceptions of the participants toward school climate as well as patterns and themes regarding school climate understanding that emerged from the discourse community were examined.

First, I will discuss the conceptual framework of the discourse community model that was used in this study. Then, I will describe the discourse community project which was the actual implementation of the discourse community model.

Discourse Community Model

The discourse community model allies elements of social constructivist theory, most importantly the notions of discourse community (Ovens, 2002; Swales, 1990), along with elements of intentional conceptual change theory (Sinatra & Pintrich, 1983). The discourse community becomes the context wherein the individual participating professionals are situated and situate themselves to exchange and construct new knowledge which may lead to intentional conceptual change (Ovens, 2002; Sinatra & Pintrich, 2003; Swales, 1990).

Sinatra and Pintrich (2003) indicated that intentional conceptual change is “...goal directed and conscious initiation and regulation of cognitive, and motivational process to bring about a change in knowledge” (p.6.). Pintrich, Marx, and Boyle (1993) postulated that the intentional conceptual change process should be situated within a dynamic learning environment wherein personal, motivational, social, and historical elements interact with one another, as well as members of the group and shape the process of conceptual change. They added that the physical environment may also have an influencing role in designing models with the intent to create conceptual change.

The pre-study activities were used to form a base-line for creating instructional activities and assessing existing knowledge, dispositions, and beliefs regarding school climate (Dole & Sinatra, 1998; Ho et al., 2000; Pintrich et al., 1993; Posner et al., 1982). The activities in the discourse community model were designed with reference to the theoretical base provided in intentional conceptual change (Sinatra & Pintrich, 2003) and the conceptual change staff development programme (Ho et al., 2001).

As a means to demonstrate the intent of the focus for each activity, they were categorized into four groups: (a) self-reflection, clarification of conceptions, and relationship-building, (b) exposure to alternative concepts, (c) building new conceptions and (d) assessing conceptual change.

Discourse Community Project

The discourse community project consisted of two sessions with eleven teachers from a K– 8 school in the greater Pittsburgh, PA area. The group met at the school during the time allotted for staff development for one-and-one-half days for a total of nine hours. All eleven members of the group participated in the pre-study and in-group activities.

Initial interviews were conducted on a separate day. The interviews were intended to gather information about the participants' perceptions and understandings of climate. The interviews helped to start to build a relationship between the participants and myself.

In-group activities were developed. These activities were based upon the principles of intentional conceptual change.

The teachers had a history of working together and enjoyed the opportunity to share this time as well. As the outsider to the group, I wanted to create an environment where they would feel comfortable interacting with me and contributing to the group process.

The participants were involved in activities that were designed to: (a) create a more comfortable relationship between the participants and myself, (b) provide instruction and discussion, and (c) promote intentional conceptual change to increase the understanding of school climate and its importance. The activities included a PowerPoint presentation that focused on the five elements of climate, presentations by the

participants based on climate information provided, and reading a published climate research article. Throughout the group process, there was discussion and sharing of ideas.

During the two days together, the participants completed guided reflections. The reflections were used as a way to encourage thought on the topics presented. They were also the primary data source to check for changes in conceptions.

Need for the Study

This research explored whether a discourse community model would be an effective vehicle for creating an intentional conceptual change regarding the understanding of school climate and its importance. The need for this study has been illuminated within the literature more so in the absence of information directly linked to issues of staff development, conceptual change, and school climate.

In my review of the literature, I identified three areas which indicated a need for this study. These areas are: (a) limited attention given to issues of school climate in school districts, (b) limited use of intentional conceptual change in the area of staff development, and (c) the need for the use of discourse communities in the area of staff development and teacher learning. A brief discussion of these areas follows.

Limited Attention Given to Issues of School Climate

Hoy et al. (1991) stated that school climate is "...the set of internal characteristics that distinguishes one school from another and influences the behavior of its members (p.10). The climate of the school community can have a positive effect on the health of the school community or it can be a major obstacle to learning (Hoy & Miskel, 2005).

The problem is that even with all of the factors that are affected by the climate of the school there still exists a reported limited understanding of the importance of school

climate. Frankly (2006) discussed a study whose participants were self-identified as school superintendents, board members, and building principals. Frankly (2006) noted that 34% of the respondents to the study's survey stated that they do not do anything regarding school climate.

Limited Use of Intentional Conceptual Change with Staff Development

There is a demonstrated need in the literature for finding ways to bring about conceptual change in teachers' staff development. Ho et al. (2001) stated that there is limited empirical evidence of a conceptual change approach to staff development. There is a need for more research for a "...conceptual change approach to have a real impact in the staff development arena..." (p. 146).

Ho et al. (2001) stated that teachers' conceptions of their teaching can explain the limitations of approaching staff development from a skills-only perspective. The literature has indicated that teachers' epistemological beliefs about teaching were developed from their years of classroom experience as students and teachers (Ho et al., 2001). Their teaching practices are guided by these beliefs. Ho et al. (2001) indicated that there is a need to approach staff development from a conceptual change perspective in order to affect changes in teachers' beliefs and behavior.

Discourse Communities in Staff Development and Teacher Learning

It is indicated in the literature that there is a need to find a structure where teachers can construct knowledge (Fairbanks & LaGrone, 2006; Ho, 2000; Ho et al., 2001; Ovens, 2002). For the purpose of transforming and restructuring teachers' knowledge, teachers can be involved in a socially-mediated community. This community can meet on a regular basis and may be facilitated by an experienced staff member or a

member of the university community (Fairbanks & LaGrone, 2006). This community, identified as a discourse community, is constructive in its approach in looking at knowledge acquisition (Fairbanks & LaGrone, 2006; Killingsworth, 1992; Ovens, 2002; Swales, 1987). The purpose of these discourse communities would be to engage teachers in on-going reflective activities and inquiry related to their practice (Fairbanks & LaGrone, 2006; Ovens, 2002; Pintrich et al., 1993).

The implementation of a discourse community model was believed to be capable of addressing the need for an increased understanding of climate and its importance. Additionally, the use of intentional conceptual change within the setting of a discourse community was believed to be able to bring about this increased understanding.

Research Questions

Primary Research Question

What are the effects of a discourse community model on promoting intentional conceptual change to increase the understanding of school climate and its importance?

Secondary Research Question

What effects does the discourse community model have on the perceptions of the participants toward school climate?

Tertiary Research Question

What patterns and themes regarding school climate understanding emerge from the discourse community?

Theoretical Frame

The theoretical perspectives informing this research are organizational culture, intentional conceptual change, and social constructivist theory. A discourse community

and intentional conceptual change share a constructivist perspective as part of their core elements. Organizational culture provides a platform from which school climate can be explored. The theoretical perspective of each of these will be discussed.

Organizational Culture

Schein (1990) explained that culture is the way in which a group has learned to survive over an extended period of time. It is the manner in which the group approaches and solves its problems. This learning occurs on several levels simultaneously. It is a behavioral, cognitive, and emotional process. Schein (1990) stated that culture: (a) is a pattern of general assumptions, (b) is created by a given group of people, (c) is to be taught to new members of the group, (d) has worked well and is considered valid, (e) learns to cope with its problems, and (f) is the correct way to perceive, think, react, and feel in relation to those problems.

Schein (1986) remarked that culture is a deep phenomenon with many layers. For a group with a long history, culture is composed of the basic assumptions created or found by the group to help cope with its problems. In time these assumptions come to be considered valid as the correct way to perceive, think, and feel in relation to the problems. In time these responses become automatic and the patterns of assumptions are taken for granted. These behaviors and perceptions are passed on to new members of the organization.

School climate is the observable manifestation of the school's culture (Schein, 1990). These observable behaviors do not explain the variations in climate from one school to another. Exploring school climate through the lens of culture offers a deeper

exploration of how schools' unwritten rules, traditions, norms, and expectations influence behavior (Schein, 1990).

Schein (1990) expressed levels in which culture manifests itself: (a) observable artifacts, (b) values, and (c) basic assumptions. Observable artifacts are the behavioral and visible manifestation of the basic assumptions, values, and norms of the educational community. Values reflect what members of the educational community feel to be good, right, or desirable and reflections of what is not addressed in an educational community. Basic assumptions are the taken-for-granted beliefs that the members of the educational community perceive to be true.

Intentional Conceptual Change

Intentional conceptual change has at its foundation that conceptual change, as a result of intentional learning, is under the control of the learner (Sinatra & Pintrich, 2003). Affecting a conceptual change with an individual or group requires taking into consideration their background knowledge (Posner et al, 1982) and motivational constructs (Pintrich et al. 1993). Pintrich et al. (1993) stated that motivational constructs, such as beliefs and goals, interact in dynamic ways with background knowledge to affect a conceptual change.

There are three characteristics of intentional conceptual change: (a) change is a goal-directed activity with the goal being a change in the existing conceptual understanding, (b) change requires some metacognitive or metaconceptual awareness by the individual that a change to their understanding is needed, and (c) change requires self-regulation on the part of the individual as they strive toward their goal of intentional changed understanding (Sinatra & Pintrich, 2003).

Discourse Communities

Within discourse communities, social processes are central in the creation of meaning. Discourses create their own specific perspectives for interpreting the world. Each discourse indicates what knowledge is privileged, how problems are identified, and how solutions are sought. Discourses are not contained within communities. They become elements that frame practices, objectives, and meaning-making of a community. A discourse community interweaves language and action that connects the participants immediately and over time and place (Ovens, 2002).

A discourse community is the collective practices of the contributing members. The discourse community provides the cognitive tools, ideas, theories, and concepts to the members which they will use to make sense of their experiences (Ovens, 2002).

Discourse communities and intentional conceptual change theory have the perspective that knowledge is not transmitted from the group leader, text, or activity to the participant; but, rather knowledge is constructed by the participant (Ovens, 2002; Sinatra & Pintrich, 2003; Swales, 1990).

Social Constructivist Theory

Social constructivist theory states that learning occurs within a social context through a series of interactions. The interactions between learners provide the setting in which to construct new learning. Learners' experience and prior knowledge combine to create conceptions. The learning process for conceptual change is related to the extent of integration of individual conceptions with new information from within the environment (O'Donnel, 2001; Ovens, 2002; Pintrich et al., 1993; Sinatra & Pintrich, 2003; Swales, 1990).

Limitations

One of the limitations was the intensity of the two-day time period for the study. There was not a large amount of time to reflect and refine between the two days.

Another limitation was the years of experience of this study's teachers. The years of teaching experience were very high for this group. Their teaching experience ranged from twelve years to forty years. There were no novice teachers in the group. It is unknown the effect that this experience would have had with teachers that are new to the field.

Definition of Terms

School Climate: "...the set of internal characteristics that distinguishes one school from another and influences the behavior of its members" (Hoy et al., 1991, p. 10).

Culture: (a) is a pattern of general assumptions, (b) is created by a given group of people, (c) is to be taught to new members of the group, (d) has worked well and is considered valid, (e) learns to cope with its problems, and (f) is the correct way to perceive, think, react, and feel in relation to those problems (Schein, 1990).

Discourse Community: A discourse community joins the two concepts of discourse and community. The concept of discourse relates to the influential role that communicative practices have in constructing the social world. Discourse is larger than language, because it embraces all forms of communicating rather than simply the verbal or written word. It refers to all meaning-making activity, whether this be "...intentional, conscious, unconscious, explicit, tacit or reflexive" (Kirk, 1992, p.42).

The concept of community as it relates to a discourse community involves members who have the same relative level of knowledge concerning a subject. Each person is an equal participating member in the discourse community.

Conceptual Change: A learning process that involves the restructuring of pre-instructional understanding to create new interpretations and acquire new knowledge.

Intentional Conceptual Change: The goal-directed and conscious initiation and regulation of cognitive and motivational processes to bring about a change in knowledge.

Educational Community: Stakeholders within the school system including students, parents, teachers, administration, support staff, and community members.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This literature review is constructed through the lens of a perfect storm regarding the misunderstanding of school climate. This misunderstanding can be linked to three elements: (a) historical connections, (b) lack of clear definition and understanding, and (c) singular-focused research. The review will explore these elements that comprise this perfect storm. A strategy to avert the results of the storm will be discussed. The review will end with a discussion of the literature that will identify the framework for how school climate will be viewed in this study.

First, I will identify and discuss the three elements that have collided to create the perfect storm regarding school climate understanding. Next, I will discuss the concept of intentional conceptual change as a strategy to construct new meaning and understanding of school climate. Finally, discourse communities will be presented as the setting within which the intentional conceptual change approach will be presented.

Historical Perspective of Climate Misunderstanding

The misunderstanding of the concept of school climate can be traced back to educational reports that were published during the sixties and seventies. These reports were instrumental in shaping the perception of school climate. The interpretation and limited focus on aspects of the information from the 1966 Coleman Report, *Equity of Educational Opportunity* (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, & York, 1966) and *Effective School Research* (Edmonds, 1979) has contributed to the misunderstanding of school climate. Ladson-Billings (2006) indicated that some of the

results of Coleman et al. (1966) were overlooked while others became a focal point for school action.

The Coleman Report (Coleman et al., 1966) looked at the effect that school characteristics have on student achievement. Coleman et al. (1966) examined various student and teacher-centered factors and found no statistically significant correlations between the factors and student achievement. As a result, Coleman et al. (1966) stated that the students' academic achievement was related to the socio-economic background of their parents.

Some members of the educational community took *The Coleman Report* (Coleman et al., 1966) to support the deficit theory and suggested there was not much a school can do to improve the academic achievement of low socio-economic students. *The Coleman Report* (Coleman et al., 1966) did subtly state there were other factors that influenced student achievement. The report indicated that the environment, students' sense of control over their future, teachers' verbal skills and family background all contribute to student achievement. However family background became the focal point of many school and social policies (Ladson-Billings, 2006).

Effective Schools Research (Edmonds, 1979) indicated that school-related factors do influence student academic achievement. Edmonds (1979) studied urban schools that had students that were achieving higher than expected and developed a model of an effective school. Edmonds (1979) stated that an effective school has strong administrative leadership, high performance expectations, a safe and orderly environment, an emphasis on basic skills, and a system for monitoring student progress. Together, these elements

constitute a school climate that fosters academic achievement. The Effective Schools Research (Edmonds, 1979) became the focal point of criticism.

Effective Schools Research (Edmonds, 1979) focused on low socio-economic urban schools. The model that was created was objective and provided other schools with a blueprint of what may be needed to obtain success within their school. Much of the research focus remains on that population (Quinn, Poirier, Faller, Gable, & Tonelson, 2006; Worrell, 2001). The limited focal points that are studied in the school climate literature can lead the reader to form an incorrect understanding of the utility of school climate.

Levine and Lezotte (1990) stated that the results of the Effective School Research could not be generalized as the participating schools were not characteristic of the general population. The concept of school climate had become part of the Effective School Research rhetoric. The Coleman Report (Coleman et al., 1966) led to a dismissive attitude toward school climate (Ladson-Billings, 2006).

Limited Definition of School Climate

Another factor that has contributed to the misunderstanding of school climate is the multiplicity of definitions (Anderson, 1982; Hoy et al., 1991). The definitions range from vague to substantive. The term “school climate” experienced a great amount of rhetorical use which has indicated a need for a clear definition. Yet, when there is an attempt to define the term, there is no agreed-upon common understanding of the meaning of school climate (Hoy et al., 1991).

The concept of school climate has an appealing ring and a comfort level as it seems to present an aspect of organizational life in a holistic fashion. However, members

of the educational community use the term with ease without a clear definition of the concept (Hoy, 1990).

Climate literature reveals that the definition of climate varies according to the researcher (Kelly, Thornton, & Daugherty, 2005; Perkins, 2007). Climate is the general “we-feeling,” a group sub-culture, or interactive life of the school (Nwankwo, as cited by Anderson, 1982). Halpin and Croft (1963) linked the understanding of school climate to the uniqueness of individuals in stating that personality is to the individual what ‘climate’ is to the school. The concept of school climate is explained by other researchers as the specific characteristics that distinguish one school from another and influences its members’ behavior (Hoy et al., 1991; Hoy & Miskel, 2005). Schein (1990) stated that climate is a salient cultural phenomenon and, as it focuses on behavior, lends itself to direct observation and measurement

Occasionally, researchers will construct their own definition of climate to support their research. Perkins (2007) defined climate in the largest urban school climate study as: “...the learning environment created through the interaction of human relationships, physical setting, and psychological atmosphere” (p. 1). Perkins’ (2007) climate research assessed the perceptions of students that attend urban schools in ten states. This research focused on the students’ perceptions of specific areas within their schools. Perkins (2007) stated that the students’ perceptions will influence how well they learn.

Multiple definitions of school climate can lead to multiple perceptions of this concept. Each researcher selects or creates their own conceptualization to best meet the need of their own study. The absence of a clear definition can result in different factors

being examined when conducting research. This can skew the perception of school climate within the educational community.

Singular-Focused Research

The third factor that contributes to the misunderstanding of school climate is the perception of climate that results from the focus of the research that was conducted. Without giving a context for school climate and the various elements that comprise school climate, the perception of climate by the reader of the research can be based upon the focus of each researcher. The understanding of the concept is left to the reader's perceptions and experiences.

Frankly (2006) illustrated the limited experiential perspectives of school climate held by several administrators in the study. One administrator in the Frankly (2006) study indicated that school climate is related to issues of drug and alcohol use while another administrator cited the issue of bullying as a problem. This potential for misunderstanding can be reduced by climate researchers providing more information about school climate and the multi-dimensional nature of school climate when setting a context for their research.

Of the climate literature that was reviewed, there were two studies that provided the most comprehensive look at school climate. Perkins (2006, 2007) conducted two climate studies that involved students, teachers, and administrators from urban schools in thirteen states. This study presented a multi-dimensional perspective of school climate in that there were eight factors explored. Perkins (2006, 2007) presented a more holistic perception of school climate by: (a) looking at climate as a complex phenomenon with

several factors, (b) anchoring their research in an operational definition of school climate and (c) collecting data from several sources within the educational community.

The components that make up the concept of school climate are numerous and complex. It can be difficult to gain a complete and clear understanding of the concept of school climate from reviewing the literature. Much of the literature looks at exploring the concept of school climate in relationship to a singular variable of the researchers' choosing. Examples of this singular focus include: (a) hope for the future (Worrell & Hale, 2001), (b) student travel to and from school (Evenson, Motl, Birnbaum, & Ward, 2007), and (c) academic optimism (Smith & Hoy 2007).

Through a review of the literature of singular-focused research in school climate, five broad categories of school climate were indentified. These categories, or elements, of school climate include: (a) leadership, (b) empowerment, (c) parental involvement, (d) environment, and (e) relationships.

The remainder of this section will be used to highlight singular-focused school climate research within these categories. I will begin with the research that is focused on school leadership.

Leadership

The literature has indicated that the perceptions of school climate are greatly influenced by the leader and leadership practices. It is the principal's leadership style that establishes the foundation for the normative and behavioral structure within the school (Deal & Pearson, 1998; Hoy et al., 1991; Kelly et al., 2005; Marzano, Water, & McNulty, 2004).

One school climate study that focused on leadership was conducted by Kelly et al. (2005). In a quantitative research study, Kelly et al. (2005) investigated two aspects of leadership. One was the relationship between selected dimensions of leadership and school climate and the other aspect focused on the principals' perception of their leadership style compared to their teachers' perception of the principals' leadership style.

Kelly et al. (2005) found that when the teachers perceived that the principal varied his/her leadership style for different situations, they rated the school climate as low. Conversely, when the teachers perceived that the principal treated all teachers and situations the same, they rated the school climate as high. In looking at the principals self-report of their leadership style compared to the perception of their teachers, Kelly et al. (2005) found that the principals' self ratings of their leadership style were not consistent with their teachers' perceptions.

The influence of the leader and the style of leadership affect more than the teachers within the educational community. Griffith (2001) explored the relationship between the perceived style of leadership of the principal and how that style may influence parental involvement within the educational community. Data for this study was collected through three sources: (a) parental survey, (b) principal survey, and (c) archival data.

The results of Griffith (2001) showed that in schools where the principals self-reported to have high managerial involvement, the parents had a more negative perception of the school social environment and increased their participation in the PTA. High principal managerial behavior created the perception of the principal as impeding construction of active parent roles or not being invited to be part of their child's learning.

In comparison, less obtrusive managerial roles resulted in greater feeling of empowerment and less reported attendance at PTA meetings.

Dinham, Cairney, Craigie, and Wilson (1995) conducted research in nine secondary schools and concentrated on three schools to focus on in-depth. The researchers were looking at the role that principals, referred to in the study as the senior executive staff, had on school-community interactions and communications within the school. The results indicated that the senior executive staff had a major role in creating and maintaining the system of internal communication within the school.

Nir and Kranot's (2006) research explored the relationship between personal teacher efficacy and principal leadership style. The results supported the findings of past research which stated that the factors of efficacy and leadership style are linked when transformational leadership is involved. Wiggins (1972) demonstrated in a quantitative research study, that there was a significant relationship between principal behavior and the organizational climate of the school.

Empowerment

Another factor examined in the research of school climate is empowerment. Jenkins (1998) stated that "To empower others is to give a stakeholder share in the movement and direction of the enterprise" (p. 149). To be clear, stakeholders are categorized as the teachers, administration, students, parents, staff, and community members of the educational community. Participants that have a perception that they have a role that influences the direction of the educational community have a greater commitment to the organization (Short & Rinehart, 1993).

A clear example of this concept was noted by Richard (2001) within an elementary school in Washington, DC. Parents and teachers were unhappy with the physical condition of the school their children had to attend. The school had long since passed the stage of being effective within the day-to-day life of the educational community. Richard (2001) stated that a group of parents did not accept the status quo response from the school district.

The parents, according to Richard (2001), explored options to improve the situation which led to forming a partnership with an architectural firm that had as part of their mission to improve and make an impact on communities. This partnership created a unique solution to the situation for the school. The school sold a portion of their highly-valued real estate to the architectural firm to develop. In return, the architectural firm constructed a new state-of-the-art school on the site along with a luxury upscale condominium.

This example from the literature is not the only outcome of increased empowerment. Short and Rinehart (1993) focused on teachers' perceptions which were measured by two different instruments in this quantitative study. Their empowerment was measured by the School Participant Empowerment Scale (SPES) and school climate was assessed by the School Climate Questionnaire.

Short and Rinehart's (1993) study indicated that there was a negative correlation between empowerment and school climate. It was indicated that with a higher perception of empowerment, the teachers reported a less positive school climate. Short & Rinehart (1993) found that as the teachers' involvement in the school decision-making increased,

there were greater opportunities for interacting with conflicting ideologies and perceptions.

Within the structure of a school where teachers have limited input to school-wide decisions, there is little sharing of perceptions and ideologies. As teachers became more empowered and part of the decision-making process within their schools, they assumed additional roles such as problem-finder and problem-solver (Short & Rinehart, 1993).

In their research focusing on teachers, Taylor and Tashakkori (1994) looked at the relationship between teachers' decisional participation and school climate and the teachers' sense of efficacy. The results illustrated that the decisional participation is not related to the teachers' feelings of efficacy. This result suggested that teachers' job satisfaction is more closely related to perceptions of school climate than their sense of efficacy.

A study by Edwards, Green, & Lyons (2002) examined teacher empowerment and efficacy. It was the intent of this research project to inform school principals of areas on which to concentrate staff development. The results indicated that teacher empowerment is related to a low to moderate level of efficacy. Information from the study suggested that the teachers can benefit from trust and network building activities to increase interaction and empowerment.

Esposito and Smith (2006) reported on their research that focused on one teacher's journey toward empowerment in the area of creating and conducting action research. Through a series of guided scaffolding activities and instruction, the participant felt empowered to be able to create and conduct research projects.

Parental Involvement

Desimone's (1999) research indicated that parental involvement is more of a predictor of grades than test scores for children of all racial ethnic and income groups. McKay, Atkins, Hawkins, Brown, and Lynn's (2003) research indicated that racism awareness and parental contact with school staff were highly correlated.

Hood and LoVette (2002) explored parents' perceptions of the effect that their involvement had on their children's academic achievement. Their findings showed that race and educational level influenced parental perceptions of their involvement. Parents with a degree from a four-year college had a higher positive perception of their involvement than parents without a four-year college degree. White parents had a higher positive perception of their involvement than black parents.

Griffith (2000) also focused on parental involvement and asked if there could be a consensus between students' and parents' perceptions of the schools' climate. The results indicated that there is a positive correlation between students' and parents' perceptions of the school's climate. However, Griffith (2000) stated that in schools with diverse ethnic and racial populations, there was less student and parent consensus related to the perceptions of school climate.

Environment

Physical environment was one element of school climate that was examined in the literature. The physical environment for learning needs to be a place that is safe and free from threats, visible and unseen, so the students will feel secure to learn.

Wargocki and Wyon's (2006) results indicated that increasing outdoor air supply and reducing classroom air temperature significantly improved the performance of the

students. The improvement was specifically noted in the increased speed with which the children completed their work.

The environmental aspect of student safety was the focus of the research by Beaty and Alexeyev (2008) in examining research on school bullies. Their review agreed with the findings in Perkins (2007) which indicated that students are more aware of the frequency of bullying and the locations where bullying occurs than teachers report.

Beaty and Alexeyev (2008) found that teachers stated that bullying situations were most likely to arise in unstructured settings. Leff, Power, Costigan, and Manz (2003) stated in their research that age- and gender-appropriate activities, along with closer adult supervision, will reduce the incidence of aggression in unstructured situations.

Relationships

The importance of relationships and the influence that they have on affecting the students' perceptions of themselves and the school is a focus within the literature (Birch & Ladd, 1997; Hamre & Pianta, 2001; Libbey, 2004; Osterman, 2000; Raviv, Raviv & Reisel, 1990; Smith, 2005). While the measurement and the stated focus of the research instruments varied in name and scope, the studies all agreed on the importance of the relationships between students and teachers and between students and their peers. Libbey (2004) used the analogy of a rose by any other name may still smell as sweet to point out the various ways relationships are explored within a school community.

The role of relationships is important in creating a trajectory of student success (Birch & Ladd, 1997; Hamre & Pianta, 2001). A longitudinal study conducted by Hamre and Pianta (2001) looked at the influencing effects of kindergarten teachers' perceived

relationships with their students throughout the first eight years in school. The relationships between the kindergarten teachers and their students in the study indicated that relationships are unique predictors to academic and behavioral outcomes.

Birch and Ladd's (1997) study further emphasized the importance of relationships. Birch and Ladd's (1997) findings indicated that the teacher-student relationship that was formed in the early years of the child's educational experience correlated with issues of school avoidance and school liking.

Osterman (2000) reviewed research related to students' perceptions of their sense of acceptance within the school community. This examination of the literature was framed around three themes. These themes involved the students' perception related to: (a) belongingness, (b) experience with community, and (c) the influence of the school on the students' sense of community. The results of this review indicated that the students' sense of acceptance (belongingness) influenced their perception and outcome in multiple areas within the school community.

Raviv, Raviv and Reisel (1990) stated that perceptions of the relationships within school community differ between students and teachers. Therefore, their perceptions of the climate within the school also differ.

Smith (2005) indicated that the nature of relationships is of such importance that all stakeholders in the school community should have an opportunity to examine and express their perceptions concerning the school community. To further this goal, Smith (2005) revised an existing instrument in order to make it more usable to measure the perceptions of relationships within a school community. This revised instrument, *The Inviting School Survey-Revised (ISS-R)*, is a 50 item Likert-type scale assessment which

presents a global perspective of life at a school regarding the perception of the school as an inviting or disinviting community. The 50 questions that comprise the ISS-R are based upon the original instrument which had 100 items. Smith (2005) indicated that the revision was necessary so that the scale can be used more often in an increasing number of places.

These studies all represent a singular perspective of an element of school climate. Presenting or discussing one perspective may cause a diminished perception of the complexity of the concept of school climate. This argument is not intended to state or imply any criticism toward singular-focused research. The concern is that singular-focused research could lead the reader to believe that the element that is being researched comprises the totality of school climate. This can occur when the singular-focused research does not set a definition or a context for the totality of school climate as in the vast majority of the studies discussed in this section.

The combination of a singular focus approach without a definition or a brief discussion of the totality of climate can promote the misunderstanding of school climate. Providing an understanding of climate within the context of the study would help to better understand the researcher's perspective.

Intentional Conceptual Change

A realignment or conceptual change of thoughts which may then affect behaviors within the educational community regarding school climate is needed. This conceptual change could result in a change in the previously-stated limited behavioral action given to climate.

Conceptual change that is intentional depends upon both cognitive factors as well as affective constructs that can be under the learner's conscious control. The conceptual change framework of interest for this research is intentional. This review will provide a brief look at historical aspects of conceptual change as well as explore the intentional aspect. It will conclude with presenting aspects of an intentional conceptual change model that will be used as the framework for this research.

Conceptual Change

Conceptual change is a learning process of restructuring pre-instructional understanding to create new interpretations and acquire new knowledge. In the initial form, the conceptual change model of learning was focused on science teaching (Posner, Strike, Hewson, & Gertzog, 1982; Dole & Sinatra, 1998).

Science educators realized that children would arrive at the science learning task with alternative or pre-existing frameworks or beliefs (Posner et al., 1982). The children's perception of their knowledge was developed from life experiences within their psychological, social, and physical world. For example, young children in explaining the cycle of day to night, called upon their everyday experiences when they stated that the sun goes down behind the mountain or the clouds cover up the sun (Samarapungavan, Vosniadou, & Brewer, 1996). This knowledge may conflict with information that is taught in formal educational settings (Pintrich et al., 1993; Posner et al., 1982; Sinatra, 2005).

The conceptual change conversation led by Posner et al. (1982) shifted the focal point of the learning process from an accumulation of ideas to a process of reconstructing the ideas first learned. Conceptual change theory states that as students interact with new

learning, they attempt to reference related prior knowledge and experiences. Prior knowledge can facilitate or obstruct acquiring new knowledge.

Pre-existing knowledge serves as a platform from which learners interpret their world. Often this knowledge, which is developed through everyday experiences with the psychological, social, and physical worlds, conflicts with information that is taught in school. An example of this is that many young children, as a result of their everyday experiences, think the earth is flat. These children may have considerable difficulty developing the concept that the earth is round (Vosniadou & Brewer, 1987).

Posner et al. (1982) stated that in order for students to be able to replace their pre-existing conceptual framework with the acceptable scientific perspective, several conditions must occur. These conditions are: (a) dissatisfaction, the current concept must be perceived as dysfunctional; (b) intelligibility, the new concept has to make sense to the learner; (c) plausibility, the new concept must appear as if it can be accepted as the truth; and (d) fruitfulness, the new concept must solve the current problem and must open new avenues of inquiry.

Pintrich et al. (1993) stated that the four conditions of (a) dissatisfaction, (b) intelligibility, (c) plausibility, and (d) fruitfulness create an assumption that learners behave like scientists. It is assumed that learners, if and when they become dissatisfied with a concept, will search for a new concept. Cognitive conflict is often insufficient to induce a change. A change can often not occur even in situations specifically constructed to promote knowledge reconstruction (Dole & Sinatra, 1998; Pintrich et al., 1993). Cognitive-only approaches to knowledge acquisition do not explain why students sometimes do not experience knowledge reconstruction (Pintrich et al., 1993).

Pintrich et al. (1993) explored the existing perspective of conceptual change and found it to be a cold concept. This was due to conceptual change involving cognition only and focusing on students' existing knowledge, developmental stages, and conceptual change pedagogy. This approach suggests that conceptual change can occur as a matter of placing the student in a situation that emphasizes points of conflict. It assumes that if the learner recognizes and is aware that there is a cognitive conflict between the existing knowledge and the scientific truth, then conceptual change is possible (Sinatra & Pintrich, 2003).

The seminal research of Pintrich et al. (1993) introduced a paradigm shift for exploring the concept of conceptual change. They viewed conceptual change through a constructivist perspective and as dynamic, being influenced by affective constructs and classroom context. This emotionally-charged new perspective of conceptual change was considered a hot construct. The results of the work of Pintrich et al. (1993) forever altered the focus of conceptual change research (Sinatra, 2005). Their perspectives also are the foundation to the conceptual change approach within this research. This perspective will be discussed in the remainder of this section.

New View of Conceptual Change

Pintrich et al.'s (1993) main contribution to conceptual change research was casting light on the influential role that motivational constructs play throughout the process of change. Pintrich et al. (1993) viewed motivation as a complex construct that interacted in a dynamic way with cognitive constructs such as background knowledge and metacognition. Adding to this perspective, they explained that within scientific environments, knowledge may be approached in logical course of behavior and without

interacting with these influences. However, within learning environments, these influences interact with one another, with members of the group, and shape the process of individual conceptual change.

Individual conceptual change describes learning as an interaction between an individual's experiences, such as existing knowledge, and his or her present conception and ideas. These conceptions create "...a framework for understanding and interpreting information gathered through experience" (Pintrich et al., 1993, p.170). Individuals involved in a conceptual change process may have similar background knowledge but they may not have the same motivational factors to resolve discrepancies between their knowledge and the new concepts they are learning (Ho et al., 2001; Pintrich et al., 1993).

Current conceptions can lead to the individual having discrepancies between experience and current beliefs or provide a framework for "...judging the validity and adequacy of solutions to these problems" (Pintrich et al., 1993, p.170). As a result, there is a paradox for the learner. On one hand, the current conception may cause the learner to resist conceptual change, but it may also provide a framework that can be used by the learner to interpret new information (Pintrich et al., 1993).

An example that illustrates Pintrich et al.'s (1993) conceptual change paradox is demonstrated in a research study that was conducted by Gill, Ashton, and Algina (2004) involving 161 pre-service teachers. Gill et al.'s (2004) intervention study focused on changing the epistemological beliefs of the pre-service teachers regarding teaching and learning math. The pre-service teachers found themselves in a dilemma in that the belief change was in conflict with their prior individual instructional experiences. The intervention in the treatment group included identifying and confronting original beliefs

and providing new and conflicting information regarding their experiences. The result of the intervention was that the treatment group resulted in a greater change in their epistemological beliefs.

Conceptual change can occur unintentionally, that is when students are focused on concepts without being aware of the process of their learning. In contrast, conceptual change can be intentional when students are aware of why and how they are trying to learn new concepts. This reflects the view that the role of the learner in the process of conceptual change is itself changing (Sinatra & Pintrich, 2003).

Ho et al. (2001) conducted conceptual change staff development research with twelve members of the academic staff from Hong Kong Polytechnic University. The goal of the research was to explore the effect that the staff development program had on creating a positive change in the staff's concepts of teaching. The staff's concepts about teaching are related to their teaching strategies.

Ho et al. (2001) stated that the intent of the program was to change the conceptions of the staff toward teaching and eventually result in a change in the academic staff's behavior in the classroom. Conceptual change was assessed by identifying the conceptions of the participants before and after the program.

Ho et al. (2001) stated that the participants' conceptions can be used to explain their teaching strategies. The results of the program showed that six of the twelve participants demonstrated some changes in their conceptions in a positive direction. Ho et al. (2001) stated that the participants seemed to demonstrate difficulty identifying or articulating their "...deeply entrenched personal conceptions..." (p.26). Their

conceptions were connected to the level of impact the program had on each of the participants.

Beliefs

Pintrich et al. (1993) stated that conceptual change is influenced by motivational factors. One such factor is beliefs. Beliefs are noted to be a position that is accepted as true by the individual holding them (Bandura, 1986; Schreiber & Moss, 2002). However, it is understood that alternative beliefs may exist simultaneously (Ho, 1998; Ho et al. 2001; Joram & Gabriele, 1998; Southerland, Sinatra & Matthews, 2001). While beliefs are not the only motivational factor discussed by Pintrich et al. (1993), beliefs have a major role in shaping and influencing our decisions and behaviors (Bandura, 1986).

Beliefs are central in helping individuals make sense of the world and influencing how newly-acquired information will be perceived or accepted. Moss and Schreiber (2002) explained that beliefs are central to reflexive and customary decisions related to work responsibilities. They noted that even with the best intentions, beliefs can guide practice that may not be of the best benefit to the students. An example of this is when a teacher gives a spelling test Friday in a class with the belief that spelling tests will provide evidence of the children's increased knowledge. This belief is sustained even though the children fail to demonstrate successful usage of the words in practice through written activities such as stories, letters, and posters of their own creation (Moss & Schreiber, 2002).

Teacher beliefs broadly are thought to be: "...unconsciously held assumptions about students, classrooms, and the academic material to be taught" (Kagan, 1992, p. 65). Teachers' beliefs influence their perceptions and judgment. Their behavior within the

educational community is greatly affected by their beliefs (Brookhart & Freeman, 1992; Pajares, 1993; Short & Rinehart, 1993). Pajares (1993) cited a teacher in his research that stated, “One’s personal predispositions are not only relevant but, in fact, stand at the core of becoming a teacher” (p. 45).

Preservice teachers enter their chosen field with a perception of an insider. They view their years of experience as a student within the education system as pre-training for their profession (Brookhart & Freeman, 1992). Brookhart and Freeman (1992) noted that during their student teaching experience, the student teachers’ preconceptions may remain unaffected for when they are faced with a new or different concept, they can return to their memories of their past experiences. Teachers will hold on to a belief even in the absence of supporting evidence (Moss & Schreiber, 2002).

Murphy (2001) stated that the pre-existing beliefs that students bring with them to the learning situation will influence what they come to learn. A well-crafted presentation as part of the classroom discourse can serve as a vehicle to bring an existing belief to the foreground for a stimulating discussion and reflection. Valanides and Angeli’s, (2005) research with 108 undergraduate students investigated the effects that teaching critical thinking principles would have to their epistemological beliefs. The students were randomly placed in three groups for instruction. The group named Infusion had discussion and reflection as part of their instruction and they showed the greatest change in their epistemological beliefs.

Discourse Community

Discourse communities have been defined as “...groups that have goals or purposes, and use communication to achieve these goals” (Borg, 2003, p. 398). Swales

(1987), one of the architects of the concept of discourse communities, offered as defining characteristics of a discourse community: (a) communality of interest, (b) mechanisms for intercommunication between members, (c) survival by providing information and feedback, (d) development of genre-specific discursal expectations, (e) possession of an embedded dynamic towards an increasingly shared and specialized terminology, and (f) a critical mass of members with a suitable degree of relevant discursal and content knowledge.

Discourse community joins two concepts, those of discourse and community.

The concept of discourse relates to the influential role that communicative practices have in constructing the social world. Discourse is larger than language because it embraces all forms of communication rather than simply the verbal or written word. It refers to all meaning-making activity, whether this be "...intentional, conscious, unconscious, explicit, tacit or reflexive" (Kirk, 1992, p.42).

The concept of community describes social groups whose common ideas, beliefs, and purpose become binding forces for the group. Community provides a face to discourse and recognizes that discourses are shared through human interaction. A discourse community is the collective practices of the contributing members. The discourse community provides the cognitive tools, ideas, theories, and concepts to the members which they use to make sense of experiences (Ovens, 2002).

Historically the discourse community concept is linked to the field of composition and rhetoric, speech, and interpretive communities. Killingsworth (1992) explained composition and rhetoric as exploring the theory and analysis of writing. Borg (2003) indicated that a speech community refers to a group of individuals who recognize that the

use of their language is different from other language users (e.g. Australian English) and an interpretive community is an open network of people who share ways of reading texts, primarily literary texts.

Membership within a discourse community is usually a matter of choice and participation is not restricted to a specific location (Killingsworth, 1992; Swales, 1987). Discourse communities can be categorized as either local or global in nature. Local discourse communities may be the place a member works which is a community bound by the physical association of common occupational practices (i.e. school or organization).

Global discourse community members are bound by an affiliation to particular political or intellectual ideas or particular kinds of discourse without regard to location (Killingsworth, 1992). Local or global communities can be layered within existing broader communities and the members can assume several roles each day such as teacher, parent, community activist, and musician (Borg, 2003; Killingsworth, 1992; Ovens, 2002; Swales, 1987).

The members of a discourse community have a strong and dynamic relationship that is focused upon each member. The interaction between members is interconnected and interrelated individuals in that each participant is both a sender and receiver of information and each member is fully involved in a complex social formation (Killingsworth, 1992; Hadhoannou, Shelton, Fu, & Dhanarttigannon, 2007). It is through sharing and interacting with the members of the discourse community that learning and new knowledge is constructed (Borg, 2003; Fairbanks & LaGrone, 2006). Majors (2004)

stated that the group interacts in an interpretive manner as an open network of people that have some level of “cultural funds of knowledge” (p.167).

Askell-Williams et al. (2007) conducted a year-long research study with third-year education student teachers that focused on aspects of developing their skills regarding specific strategies in offering instruction. At the end of the year, it was noted that within the framework of the community, the members were able to form new perspectives about issues that are at the core of professional teacher education.

Snow-Gerono (2004) conducted a phenomenological case study with teachers to determine the experience of being involved in a teacher inquiry community setting. The participating teachers appreciated the opportunity to access people and interact in a collaborative community. They were able to ask questions, share concerns, and construct knowledge.

Summary

The research reviewed has indicated that there is a misunderstanding of school climate (Anderson, 1982; Frankly, 2006; Freiberg, 1998). This literature review has explored the misunderstanding through the analogy of a perfect storm. This perspective was developed from the historical limited focus of school climate research findings (Ladson-Billings, 2006) the multiplicity of definitions (Anderson, 1982; Hoy et al., 1991) and singular-focused research. An outcome of the misunderstanding of climate and its importance is that there are school districts that have self-reported that they do very little to address issues related to school climate (Frankly, 2006).

A review of the school climate literature has indicated a need for a change in conceptions regarding school climate. A conceptual change regarding school climate which may then affect behaviors within the educational community is needed.

Intentional conceptual change theory offers an approach to creating new conceptions. Individual conceptual change describes learning as an interaction between an individual's experiences, such as existing knowledge, and his or her present conception and ideas. These conceptions create "...a framework for understanding and interpreting information gathered through experience" (Pintrich et al., 1993, p.170). This conceptual change is intentional and goal-oriented. Intentional conceptual change depends upon both cognitive factors as well as affective constructs that can be under the learner's conscious control (Sinatra & Pintrich, 2003).

A discourse community model for promoting intentional conceptual change to increase the understanding of school climate and its importance was posited. The members of a discourse community have a strong and dynamic relationship that is focused upon each member. The interaction between members is interconnected and interrelated as each participant is both a sender and receiver of information and each member is fully involved in a complex social formation (Killingsworth, 1992; Hadhoannou, Shelton, Fu, & Dhanarttigannon, 2007). It is through sharing and interacting with the members of the discourse community that learning and new knowledge is constructed (Borg, 2003; Fairbanks & LaGrone, 2006).

CHAPTER III

METHODOLOGY

Introduction

Intentional conceptual change is goal-oriented, influenced by motivational constructs, and is under the control of the learner (Sinatra & Pintrich, 2003). This study sought to employ intentional conceptual change within a discourse community to affect the understanding of school climate. The goal of creating an environment that was structured in a way to embrace existing knowledge, to present and accept new knowledge, to exchange multiple perspectives, to invite creativity and spontaneity, and to be safe to reflect was, in itself, a challenge.

The methodology for this research had several anchors and influences. Primarily this research emphasized a case study exploration and was influenced by characteristics of Participatory Action Research (PAR). The case study perspective provided the lens to become involved in the school during my visit. PAR allowed for the professional background training and skills of the researcher to be an influence in the research.

In this chapter I will give a brief overview of these two primary influencing methodologies. The following will also be addressed: (a) research site, (b) participants, (c) confidentiality, (d) researcher's role, (e) data sources and collection, (f) meeting with principal and staff, (g) initial interviews, (h) document and artifact review, (i) discourse community model explication, (j) data analysis, and (k) trustworthiness.

Participatory Action Research is constructivist in its approach and has been used within education to improve practice (Glesne, 2006). The research is value-driven, and cyclical. It is focused within an intervention and can be a transformative process

(Cunningham, 2008). In this research, the researcher becomes one of the instruments within the research in that the participants and researcher work as co-agents of change within the process. In this process, the researcher acts as a facilitator throughout the process of the research (Cunningham, 2008; Glesne, 2006; Kemmis & McTaggart, 2000).

Action research shares process principles with intentional conceptual change theory. The process of action research develops in a way that is cyclic, highly flexible, and reflective (Cunningham, 2008; McNiff, 2002). The process of intentional conceptual change is cyclical in that new knowledge is built upon existing knowledge. Reflection is used to explore new learning and note changes in conceptions. The process of reconstructing knowledge is influenced by motivational constructs such as social interaction. Existing knowledge interacts with motivational constructs and creates a dynamic environment for learning (Pintrich et al., 1993; Sinatra & Pintrich, 2003).

Approaching the research from the perspective of a case study focuses on what can be learned from the experience. Stake (2000) indicated that a case study draws attention to what specifically can be learned from a single case. Case study is not a methodology. It is a choice of what is to be studied. Case studies can be a small step toward a grand generalization. A case study offers an extension of an experience for practitioners and policy makers.

Research Site

Phoenix School is a parochial school located just north of a medium-sized city in the northeastern United States. It is one of 15 K-8 schools within its region in the Catholic Diocese. Phoenix school has 200 students with one class in each grade. Many of the students live within walking distance of the school.

Phoenix is located within a culturally and socio-economically diverse area with a strong neighborhood identity. The school is located on a well-traveled main street on a diocesan campus and shares its small parking lot with the church that bears the same name. Phoenix School has been a member of its community educating children and families within this neighborhood since 1929.

Participants

The entire teaching staff of eleven participated in this research project. Collectively, the teaching staff has more than 300 years teaching experience. Of those years, over 200 of them have been spent teaching at Phoenix. Several of the teaching staff members live within 10 miles of the school and have an expressed pleasure in being part of the neighborhood.

The school principal had a unique role in relationship to this research. Her role and behavior as principal were essential in the development and implementation of this research. She was a supporter and advocate of the process. She also served as a substitute teacher in each classroom for the teachers during the initial interview process.

Researcher's Role

My role was that of a participant as observer, wherein the researcher is involved with the group that is being explored while at the same time observing and adding information (Glesne, 2006). I was involved with each activity and discussion throughout the project. Since an aspect of the design of this research was its dynamic characteristic, my training as a social worker with a focus on group process and over 25 years of experience working with groups helped in defining my fluid role.

Data Sources and Collection

The teachers participating in the research were the primary source of data for this project. Documents and artifacts were collected to give supporting evidence of the expressed beliefs. The teachers participated in the initial interviews and completed four written reflections. The interviews were used to collect existing conceptions regarding climate (see Appendix A). The reflections gave an insight to the teachers' perceptions of the activities and their current conception (see Appendixes B – E).

Documents and artifacts included items that were traditional and non-traditional. Traditional documents are those that add to the understanding as to what is going on in a particular situation (Atkinson & Pugsley, 2005; Glesne, 2006). Traditional documents that were reviewed included: (a) mission statement, (b) newsletters, and (c) school websites.

School climate is considered to be a behavioral manifestation of the school's culture (Schein, 1990). It was important to view daily artifacts within the educational community to gain an indication of the stated mission and beliefs. These included: (a) signage providing directions to visitors, (b) displayed student work, and (c) evidence of efforts to keep everyone in the school building safe.

Meeting with Principal and Staff

I met with the principal at Phoenix School to explain the concept of the research project. I presented a description of the purpose, the plans for the group process, the minimum number of teachers to be involved, and the time frame. The principal expressed support for the project and recommended that I present this project to the staff.

I met with the faculty during an after-school staff meeting. Following a brief presentation of my background and my interest in the topic, I explained the research project and design to the teachers. I provided all of the information about the project and the information related to issues of confidentiality and emphasized that their participation was voluntary.

The teachers had several questions regarding time and what would be expected of them during the research. After responding to all of the questions and comments, the teachers indicated that they were all interested in participating. The principal offered the planned staff development training time during the school day in which to conduct the research. The dates for the staff development training were indicated and a time for the initial interviews was scheduled.

Confidentially

The process of confidentiality for this research was addressed from the early days of this process. During the first meeting with the principal participant confidentiality and the amount of direct involvement of the principal was discussed.

The process of confidentiality was discussed with the participants during the first meeting and again before the initial interview. It was explained to the teachers and principal that comments made within the group process would not be shared with the principal. It was explained to the participants that pseudonyms would be used to describe them and all identifiers within the school would not be used. Each of the participants signed a voluntary informed consent form prior to the start of the research (see Appendix F).

In accordance with the Internal Review Board (IRB) procedures safeguards were enacted to protect the data collected within the research. All of the data collected and transcribed remained in a locked file in my home.

Initial Interviews

The focus of this research was to look at creating an intentional conceptual change in understanding. Sinatra and Pintrich (2003) indicated that it is imperative to know the existing conceptions to compare them to later conceptions in the process. I viewed the initial interview as a time of significant importance in establishing the climate and focus for this project. The initial interview provided an opportunity for me to build upon the relationship with the teachers that had begun at the staff meeting. Also, I was able to gain an understanding of the teachers' existing concepts, beliefs, and perceptions.

The questions in the semi-structured interview were designed to gain existing conceptions of school climate understanding as well as the perceptions of the elements that comprise climate. The interviews presented an opportunity to gain the teachers' insights regarding issues of: (a) empowerment, (b) parental involvement, (c) environment, (d) relationships, and (e) leadership. The interviews provided needed information to inform revisions to the content and delivery method of the presentation for the group sessions.

Document and Artifact Review

School climate is the observable manifestation of the school's culture (Schein, 1990). Document and artifact review was used to collect observable evidence of the beliefs and values within the district. Traditional documents such as: (a) mission

statement, (b) newsletters, and (c) school websites were reviewed. Non-traditional documents were explored that offered a glimpse of the environmental display of a community such as: (a) signage providing directions to visitors, (b) displayed student work, and (c) evidence of a supportive leader.

Discourse Community Model

The activities in the discourse community model were designed with reference to the theoretical base provided in intentional conceptual change (Sinatra & Pintrich, 2003) and the conceptual change staff development programme (Ho et al., 2001). As a means to demonstrate the intent of the focus for each activity, they were categorized into four groups: (a) self-reflection and clarification of conceptions, (b) exposure to alternative concepts, (c) building new conceptions and (d) assessing conceptual change. The activities are presented in the order that they were introduced into the group process. The activities were non-linear and overlapped in presentation, discussion, and reflection.

Self-Reflection, Clarification of Conceptions, and Relationship-Building

These activities were designed to assess existing conceptions. They also served to build a more comfortable relationship with the participating teachers and myself.

Warm-Up Get Acquainted

As a way of establishing a new interactive environment, I asked the teachers to name the last concert or musical production they attended. The group was invited to ask questions related to the production that was shared. In addition the teachers were asked to share what lead them into teaching as a career.

Teacher Climate Photo Presentation

The teachers were asked to give a photographic presentation of school climate. They were requested to take a photograph of something in the school that represented climate to them (see Appendix G). These photographs were to be presented at the first session wherein the teachers would present to the group the picture's significance to school climate.

The photographs provided an opportunity to gain further understanding of the perception of school climate. Each teacher presented his or her photograph and explained the reason for its selection. Following the presentation, there was a discussion of the pictures and the areas within the school that were indicated. The teachers completed a reflection indicating their reason(s) for their choice of photograph.

Exposure to Alternative Concepts

The following activities were designed to increase the participants' understanding of the concept of school climate. The categorization of five elements of school climate was a focal point for this increased understanding.

Interactive Power Point Presentation: Looking at School Climate

This PowerPoint presentation was designed to provide context and content for future discussions (see Appendix H). The presentation discussed the historical dilemma of defining climate as well as presented the holistic influence to the educational community. Identification and discussion of five elements to categorize aspects of climate were conducted.

The teachers stated and listed the categorizing elements of climate. These elements were: (a) leadership, (b) empowerment, (c) parental involvement, (d) environment, and (e) relationships. After discussing these elements, five large sheets of

paper were labeled with each of the elements. The sheets were hung on the board to be used later.

Matching the Photos with the Five Elements

Following the presentation, the teachers were asked to examine their pictures representing an aspect of school climate. They were asked to align their photographs to one of the five identified elements of climate.

The teachers assessed their photographs. They then attached their individual photos to one of the five pieces of paper which corresponded to the element represented by their photograph.

Building New Conceptions

These activities were designed to provide further information regarding climate. This was accomplished by providing information and discussion regarding a major influence to climate creation.

Beliefs and Personal Mission Statement

There was a brief presentation regarding beliefs. The presentation was to establish the context and content for the discussion and activity that followed. The teachers were to identify the belief statement for the school and their district. They were also asked to identify a personal belief statement for their approach to work. They were to select the name of a popular song for their personal belief statement.

I presented the information regarding beliefs with a focus on how beliefs influence behavior. The teachers participated in a lively discussion sharing their perceptions. The teachers identified their personal song belief statement.

Climate Scenario

This was a group activity. The teachers were to describe the overall climate of a real-life school based on limited information that was provided to them. Their description was to include the general climate of the school and support this decision with information from discussions to this point. The information regarding the school was: (a) it is located in a town that has one of the highest unemployment rates in the country, (b) 46% of the families do not have running water, and (c) 35% of the houses have no electricity.

The teachers presented their overall climate description. They presented support for their responses.

Reading of a Climate Article

There was a discussion and role-play situation based on an article that was presented to the teachers. The teachers were given a climate article to read and discuss. The article was Frankly, Your Schools Could Use a Little Sunshine (2006). This article reported on a survey which focused on school administrators and board members. They were surveyed about the attention given in their district to issues related to school climate. Results of the survey indicated that a sizable percentage of the administrators did not address school climate. The reasons for the lack of attention included limited understanding of climate and the importance that climate has in their district.

The teachers' discussion regarding the article was lively and informed. The article was the foundation for the role-play activity that followed this discussion.

Assessing Conceptual Change

This activity was designed to assess any changes in the understanding of the concept of school climate. Each of the participants' understanding of climate was assessed through a role-play situation concerning school climate.

Climate Consultant

The role-play situation presented was that each of the teachers was an independent educational consultant that had been hired by one of the administrators who was referred to in the article Frankly, Your Schools Could Use a Little Sunshine (2006). Their task as a consultant was to convey the importance of school climate to their new client. They were to keep in mind their increasing understanding of school climate. With this in mind, they were asked to consider some of the important points that they would want to convey during their consultation.

Each of the teachers presented their comments related to the importance of school climate as part of this role-play. The comments were discussed and written. The written comments became part of the data used to support a change that had occurred from their initially-stated conception of climate.

Written Reflections

During the two days together, the participants completed guided reflections. The reflections were used as a way to encourage thought on the topics presented. The reflections were also the primary data source to check for changes in conceptions.

Data Analysis

Glesne (2006) stated that data analysis is organizing what you have seen, heard, and read so that you can make sense of what you have learned. Analysis was conducted

on the transcripts of the participants' initial interviews and written reflections. The transcripts were coded and separated by themes and patterns and were ready for future analysis (Glesne, 2006). The first analysis of the interview transcripts began immediately following the initial interviews and before the first group session.

Reviewing the transcripts of the initial interviews prior to the first group session benefited the research project in several ways. I was able to become more familiar with the teachers and their existing conceptions of climate. From this I was able to see an early emergence of themes. This information was used to guide the refinement of the context and delivery methods for the group sessions.

The initial analysis revealed that different levels of climate understanding emerged from the participants' responses. The results of the early analysis led to developing a categorization tool specific to this research. I constructed a continuum categorization tool that reflected emerging concepts regarding climate understanding from the participants as well as a concept grounded in the theoretical frame of this research which concerns climate as viewed through the lens of organizational culture (see Appendix I for Climate Understanding Continuum (CUC)).

For the purpose of guiding categorization, exemplar statements are presented to illustrate the various points of understanding. The first six statements on the continuum reflect a blending of participants' actual responses in order to show the range of understanding that was expressed. The seventh statement was created by me to reflect the theoretical frame concerning climate as viewed through the lens of organizational culture (see Appendix J for CUC Exemplar Statements).

Trustworthiness

Credibility was addressed in this study from the planning stages until the completion of the research. After the project began, it was addressed through member checking, triangulation of data sources, and clarification of researcher bias (Creswell & Miller, 2000; Glesne, 2006). In addition, there were several criteria taken into account for the site selection which added to the level of trustworthiness.

CHAPTER IV

RESULTS

Introduction

The discourse community project consisted of two sessions with eleven teachers from a K– 8 school in the greater Pittsburgh, PA area. The group met at the school during the time allotted for staff development for one-and-one-half days for a total of nine hours. On a separate day I conducted initial interviews and reviewed school and district documents to establish the mission and beliefs. All eleven members of the group participated in the pre-study and in-group activities.

The discourse community group sessions involved several activities. Included in these activities were (a) a participant photo presentation representing climate in their school, (b) interactive presentation of the complexity of climate, (c) identifying elements of climate, (d) matching perceptions with the identified elements, (e) reading a climate article and (f) completing four written reflection statements. On-going conversations were an integral part of each of the activities.

In this chapter I will present the data collection and analysis process. I will present the specific data needed to indicate the initial and concluding conceptions of school climate. I will also offer data that provides a glimpse of the perceptions of the participants regarding various elements related to school climate.

In an attempt to offer transparency in the research process, I will present an illustration identifying the data sources used to respond to each research question. With each research question I will present the specific data that were used for the analysis. I

will also present a Climate Understanding Continuum (CUC) that was created and utilized in responding to the primary and secondary research question.

The Site

Phoenix School is a parochial school located just north of a medium-sized city in the northeastern United States. It is one of fifteen (15) K-8 schools within its region in the Catholic Diocese. Phoenix is located within a culturally and socio-economically diverse area with a strong neighborhood identity. Many of the students live within walking distance to the school. Several of the teaching staff members live within ten miles of the school and have an expressed pleasure in being part of the neighborhood.

Phoenix School has been educating children and families within this neighborhood since 1929. The school is located on a well-traveled main street on a diocesan campus and shares its small parking lot with the church that bears the same name.

Phoenix school has 200 students with one class in each grade. Phoenix competes with the public school system for students. Families pay tuition for their children to attend. School climate is so important especially "...to us because of enrollment issues...." stated a member of the teaching staff.

The teaching staff consists of eleven teachers. Collectively they have more than 300 years teaching experience. Of those years, over two hundred collectively have been spent at Phoenix. "We have become a family" stated one of the teachers. They further explained that for many of the children currently in their classes they have also had their siblings or other family members as students. Table 1 shows the Phoenix School teachers' years of experience.

Table 1:
Phoenix School Teachers' Experience

Name	Years Teaching Experience	Years at School	Years in Present Grade
Debbie	25	13	12
Yvonne	24	22	19
Terry	15	12	5
Pat	40	32	23
Sam	39	10	7
Dorothy	32	22	22
Allison	32	32	5
Sally	36	36	25
Judy	43	21	8
Kathy	20+	8	8
John	40	9	9

Artifact Review

Initial data were collected from existing documents that could be used as evidence of the beliefs and values within the district. These documents included: (a) mission and vision statements, (b) existing church bulletin, (c) newsletters, (d) diocesan website, and (e) school website. A statement from their website sets the tone of the school environment:

Phoenix school students, teachers and parents create a welcoming school family for all. The exemplary manners and conduct of the students is noted by visitors to the school. A strong proponent of the anti-bullying initiative, Phoenix school provides an environment in which children gain confidence and feel comfortable with their peers.

Initial Interviews

I had the opportunity to meet the teachers when I presented the concept of the project at their staff meeting. As a result of that initial meeting, they agreed with enthusiasm to participate in the project. I saw the initial interview as a time of significant importance in establishing the climate and focus for this project. The initial interview provided an opportunity for me to begin to establish a relationship with the teachers.

As a result of the relationship formed during the initial interview I was able to obtain a glimpse of their perceptions of some of the elements that comprise school climate. We were able to discuss climate-related elements such as (a) empowerment, (b) parental involvement, (c) environment, (d) relationships, and (e) leadership. Most importantly, we discussed what they believe when they say or hear the term school climate.

I was pleased and encouraged with the initial interactions between us. The observed level of comfort and their expressed excitement related to their involvement in this project was quite evident. The research questions provided an opportunity to begin to gather data that was related to the research questions plus they also provided needed information to inform revisions to the content and delivery method of the presentation for the group sessions.

Results from Initial Interviews

The initial interview had three main goals: (a) to help build a strong relationship between the teachers and me, (b) gain a glimpse of the teachers' perceptions of some of the elements that comprise school climate, and (c) to learn the teachers' initial perceptions and understanding as they relate to their meaning of school climate.

The evidence of these goals will be demonstrated throughout this document.

Specifically, their perceptions of some of the elements that comprise school climate will be presented in narrative form while their initial stated conceptions of school climate will be presented in complete text. Table 2 shows the complete text of their responses.

Initial interview question #3: How would you describe school climate?

Table 2:
Initial Interview School Climate Description

How would you describe school climate?	
Debbie	I wasn't exactly sure what you meant by school climate, to me it sounded like whether the registers and heaters were working or not. However, as an educator I knew that is not what you meant.
Yvonne	To me that means that I make an atmosphere where children are comfortable and want to come to school and are excited about learning.
Terry	School climate is the atmosphere the relationship where children and staff are comfortable to be themselves.
Pat	I think school climate means the atmosphere of the school. When you walk into the school you feel welcome.
Sam	The atmosphere in the building, in the classroom, in the school, in the parish, in the family community.
Dorothy	It (school climate) is the interpersonal relationships between teacher to teacher, teacher to student, student to student and how that all affects the school as a whole.
Allison	The school climate would be the anti-bullying program for me, because it extends out into the community.
Sally	It means the atmosphere it means the environment that we all exist in teachers, students the whole family.
Judy	Climate was looked at as an end result to time spent together. OK basically the first thought that came to my mind was family because the children have grown up with us.
Kathy	Well I naturally think of my home room environment and how I want it to be comfortable for the children, not an over-stimulated type of environment, yet enriched type of environment.
John	School climate is the atmosphere and the relationship between the children parents and the faculty.

The initial interview questions were a guide to the conversation between the teachers and me. Their responses when linked with the five elements of school climate, (a) empowerment, (b) parental involvement, (c) environment, (d) relationships, and (e)

leadership, provided me with a glimpse of their perceptions. Their responses in narrative form follow.

Empowerment

The teachers indicated that they believed their climate is "...influenced by their (teacher's) desires and their values their philosophies." (Sam) The climate can also be shaped by "...the teacher's behavior.....it's not just the rewards that we give out, but also things like a tap on the shoulder or a hug." (Allison) It was indicated that "...it is the teacher's responsibility in that is to set boundaries in one way to let the children feel comfortable in what they are to do and how they should do it."(Sally) Talking with the students and stressing the importance of expressing themselves in an appropriate manner so that "...together we (students and teachers) build that relationship where they are not afraid to tell you what they have done... because the only thing left is to grow from it."(Judy).

The teachers expressed a desire for additional education which may enable them to increase their level of delivering instruction. When asked what would be an area in which you would like to receive additional professional training, one teacher responded "that would be a hard one can I pick two?" (Debbie)

Technology was identified as an area of great importance. "...I feel it is the way we will need to teach for the future. I love technology and I am good at it. An opportunity presented itself for teachers that are interested in pursuing a course there was a grant and I took the opportunity." (Terry) One of the primary level teachers stated they wanted to improve the manner with which they deliver instruction "...I have always wanted to be

able to do learning centers more to give the children more of the hands on experience.”
(Yvonne)

There are rituals of celebration and of successful completion of a task that were expressed by the teachers. “Students are always recognized for their accomplishment.” (Sally) “There is the birthday wall.... (Judy) “...displaying their work and people are always invited to come see the students’ work.” (Sally) “Celebrations such as birthdays are announced over the school PA system...” (Allison) “There are individual name tags on their desks and a place for their coat...” (Terry) There are stars in the entry hallway and “...the children get to have their picture on each star.” (Terry)

Parental Involvement

The teachers indicated that they believe that parental involvement is a vital component to the students’ success in school. They indicated that communication with the parents is an on-going important activity. One teacher indicated they have”... I have what I call our home note or daily note it takes our daily news (Debbie) ... while another stated, “...I write and sent an email to each parent everyday with information about what we did and what is expected.” (Dorothy)

Informing the parents from the beginning of the school year that communication is important is completed in various ways. One teacher indicated she”... ..lets them know right at the beginning of the year that if they need me for anything I’m out on the porch at the end of the day they can ask me.” (Yvonne)

The teachers stated that they see themselves as part of the students’ families in that they have been with many of the students for several years and live within the same

neighborhood as the school. (Pat) stated, "...I live local, if they (parents) find my name in the phone book and they want to call me, I have no problem with that."

In some cases, parental involvement is used to increase the students' sense of responsibility. One teacher state, "...if a student misses an assignment I'll just grab my cell phone and have them (the student) make a phone call to their family." (Kathy)

Environment

"The school has to be a safe place. This is the no bullying zone. I think you have to start here..." (Allison) The teachers expressed concern about the need for the school to direct attention on an on-going basis to an anti-bullying message. They linked their concern with their religion stating, "...we are a Catholic School, so we really push the idea of Christian fellowship here. Also in with that is our anti-bullying which lends itself to all of that, trying to tie it all together." (Pat) To create an environment that is comfortable and safe is also linked to the size of the school as one teacher noted, "...we are a smaller school all of the teachers and the principal especially on the first floor know all of the younger kids." (Terry)

Living in and being active within the neighborhood of the school was expressed as positive aspect to the school environment. "I live very close to the school, if there ever was a problem at home I could be there." (Sally). "I see school families at the store..." (Second) "I am involved with our church right next door..." (John)

Relationships

"We have the opportunity to deal with them (students) one-to -one...." (Judy) The size of the student population is stated by several teachers for one of the reasons that there are good relationships within the school. I asked if the size of the school were to

increase, would the interaction with the students change. “Personally, I think it would not change because I believe in giving attention to each student in front of me...” (Sally) “I don’t think I would change. I want to make myself available to the children and talk with the parents at dismissal to build relationships.” (Terry)

Strong relationships are created by the generations of family members that have attended the school. “In general I do not get an attitude or tone from the students. In many cases I have had their older sister or brother so the family knows me” (Kathy) “I tell the parents we are in this together, if there’s ever a problem and you need to talk with me, just grab me right then and there.” (Yvonne)

Leadership

“Our principal is wonderful because she really does have an understanding toward her faculty and an understanding toward her kids.” (Allison) Several of the teachers shared feelings similar to this regarding the school leader. Others spoke of the effort made by the principal to connect with the children, “...The principal knows all of the kids very well and is active in their lives.” (Terry)

“Just the idea that the principal is extremely approachable, you can go and talk with her...” (Sally) The teachers expressed that the principal often will model behavior for the staff. “...she (principal) sets a good example for the teachers .I mean even when they (students) are corrected by the principal it's done in a very caring way where they don't walk away crushed but they know they have to do better.” (Judy) On displaying support, teachers expressed that “...our principal is very good at expressing compliments to us and she is always telling us that we're doing a good job and praising us and she's very supportive in various ways. (Kathy) The expression of support is not

contained within the building “..., in our bulletin every week there’s something called the Principal’s Pen, she will give recognition to the staff there.” (Pat)

The teachers recognized the role of the leader and how that position influences their day. This sentiment was best illustrated by the statement “...our principal does lunch duty so we can have time to eat.” (Pat)

Climate Photographs

During the initial interview process the teachers were asked to take a photograph of something that represents school climate to them (see Appendix G). They were to bring their photographs to the first group session and present to the group the picture’s significance to school climate. The photograph presentations were part of a two step process.

The first step was in gaining some additional baseline understanding of the teachers’ concepts and perceptions related to school climate. The second step was later in the first session when the teachers aligned their photographs to one of the five identified elements of climate. Table 3 shows the teachers statements concerning their climate photos.

Table 3:
Teachers Climate Photo Statements

Please take a picture of something that reflects school climate	
Debbie	"This is our story carpet. Reading is the most important thing we learn in school. This area represents trying to make reading enjoyable and it extends to all parts of my instruction."
Yvonne	To represent a place that is "fun" "safe" "comfortable and "enticing".
Terry	"Technology exemplifies the future of education" "Technology creates increased student achievement" "Reaches students with different learning styles" "interesting" "engaging" "'wow' factor"
Pat	"Enter to Learn...Leave to Serve" (motto of school on the wall) Caring Sharing Making others feel good – develop self esteem Treating others with respect Everyone is special Promotes Anti-Bullying Honor Veterans Remember 9-11
Sam	Warmth Togetherness Sharing Taking turns
Dorothy	Individual blocks make up this (handmade) Quilt "We bring our individual gifts, talents, knowledge and creativity to the school climate as a whole. Who we are as individuals make up the 'WE' of the school."
Allison	"To promote kindness to one another in our school" "When I was in elementary school there were bullies. I felt so bad for the kids that got bullied. So, this was an opportunity for me to promote kindness and stop bullying where I could. I guess you could say I am always for the underdog."
Sally	Promotes Patriotic spirit "America is made-up of all of us" "The future of this country depends on youth-which are being taught that they are responsible for what happens to themselves, others this country." "We must use the freedom we have to reach our goals."
Judy	Student council helping them to show leadership and direction
Kathy	Teaching the Holocaust curriculum
John	Did not submit

The teachers captured a glimpse of what school climate means to each of them through photographs. One teacher’s picture showed the story area in the classroom. Another teacher’s photograph represented warmth and taking turns. A photo of a ‘smart board’ was explained as representing student achievement through the use of technology. A handmade quilt represented the “...individual gifts, talents, knowledge and creativity...” each person brings to the school climate as a whole.

Climate Photographs Linked with the Five Elements of Climate

Following the teachers’ individual school climate photo presentations and discussion there was a power point presentation with discussion which focused on the broad scope and influence of school climate. The five major elements of school climate were introduced at this time: (a) empowerment, (b) parental involvement, (c) environment, (d) relationships, and (e) leadership.

Following the presentation the teachers were asked to examine their pictures representing an aspect of school climate and then place that photo in one of the five major areas of climate. Table 4 shows the placement of the photos within these five areas.

Table 4:
Climate Photographs Linked with Five Elements

Five major areas of climate	Relationships (3)	Empowerment (3)	Parental Involvement (1)	Environment (3)	Leadership (1)
Statements Relating Photo to School Climate	Promote kindness (Allison), School motto (Pat) Handmade quilt (Dorothy)	Patriotic spirit (Sally) School family student council (Judy) Holocaust curriculum (Kathy)	Story carpet (Debby)	Fun, safe place (Yvonne) Technology (Terry) Togetherness (Sam)	Student council (Judy)

(#) = Number of photographs within that element

The photographs representing each teacher's perceptions of school climate were linked with a major element of school climate. When matched with one of the five major areas of climate, empowerment and environment had three (3) photos each. Leadership and parental involvement each had one (1) photo.

Reflection One

The first session focused on two key components: (a) identifying the participants' perception of school climate and (b) establishing a broad scope of what comprises school climate. Following the session the participants were asked to respond to a series of reflective questions. The questions and complete responses are listed. Table 5 shows their response to the first reflection question.

Question 1: What were some of your thoughts about this research study before the project began?

Table 5:
Pre-Study Thoughts Related to Research

What were some of your thoughts about this research study before the project began?	
Debbie	What does school climate mean? How does the researcher define it?
Yvonne	It was a little difficult to narrow down the idea of school environment to one specific area. It provoked some different ideas and directions to go – just my class or the whole school?
Terry	I think school climate is so important especially to us because of enrollment issues. I'm interested in learning what the research says about climate.
Pat	I wasn't too sure I like the idea of sharing ideas. I basically don't like discussion groups.
Sam	That it would be something interesting to do. It would be a break from everyday work.
Dorothy	I wondered what it would involve
Allison	Had no specific thoughts
Sally	Somewhat unsure of what was needed for this and what aspects made up school climate.
Judy	Wondered what it was about. Would I be able to see what was needed to help with the project. Would it have a bearing on how I teach or interact in the future?

Kathy	We have a positive school climate.
John	Is my idea of climate the Same as the project presenter?

The teachers expressed a mixture of feelings related their thoughts connected to the research project. One teacher expressed their uncertainty of what the project was about. Several of the teachers focused their questions on understanding the meaning of school climate. Another expressed a desire to understand if climate is focused on the classroom or the school. The climate of their school was positive was stated by one participant. The feeling of “not liking discussion groups” was expressed by one teacher. The responses to question two are reflected in table 6.

Question 2: What is a new thought or understanding for you from the activities today?

Table 6:
New Understanding from Activities

What is a new thought or understanding for you from the activities today?	
Debbie	I think in a Catholic School we would call school climate, school spirit or soul.
Yvonne	School environment includes such a variety of aspects that I hadn't even considered. Our environment spreads out to community as well as each classroom.
Terry	It is important to look beyond the surface of something
Pat	It wasn't too bad. It was good to interact with your friends, particularly when some days I may not even see them.
Sam	Climate includes many things.
Dorothy	I enjoyed spending time with the teachers – sharing our thoughts relating to school climate. It was fun!
Allison	Enjoyed interaction with the faculty. Very comfortable atmosphere.
Sally	Re-emphasized this point That it is good to listen to different perspectives to learn.
Judy	Will help to give me a clearer picture of where we are how do we as a community think what is important what need to be changed or improved. What is good and needs to continue.
Kathy	It reaffirmed my opinion about the faculty's passion for teaching.
John	Some details teachers have were enlightening

Several of the teachers expressed pleasure from interacting and learning with their colleagues throughout the day. One teacher stated they had thoughts about climate they

had not considered before this project while another stated that climate includes many things. It (the group) wasn't too bad expressed one teacher. Table 7 contains their response to question 3.

Question 3: What is one thing you learned today about climate?

Table 7:
New Learning of Climate

What is one thing you learned today about climate?	
Debbie	You can call it climate spirit or soul it's what make the school alive and not just a place.
Yvonne	Climate involves many small areas that make up the bigger picture.
Terry	I learned about the five areas that make up school climate. It was easy to see from the activity what areas we may need to improve on.
Pat	It is a combination of 5 aspects
Sam	There are five categories (R-E-P-E-L)
Dorothy	The 5 elements of climate
Allison	That it involves many aspects and how those aspects are intertwined.
Sally	Many factors make up climate - Climate is like a living thing it changes
Judy	That it just does not affect an individual but the group or community it can not be contained but flows freely beyond us.
Kathy	It is ever changing depending on particular students and their challenges.
John	The teachers' ideas are similar to mine.

The consensus of the teachers' responses expressed that climate involves many areas. It was also stated that climate is a dynamic factor within the school that affects the individual and the community. As well as that climate makes the school alive and not just a place.

Reflection Two

The morning session focused on: (a) reinforcing the elements that comprise school climate and (b) introducing core beliefs as a major influence to climate formation. The teachers shared their perspectives related to individual beliefs and how those beliefs can influence the school climate. There seemed to be a level of surprise when they

realized they may not all have the same exact beliefs. Can the climate be affected by variations in beliefs? That seemed to be an unspoken question.

In response to the discussions during the session I added an addition question to the reflection. The question that was added was: how do you know when you have a good school climate? The question was intended to have the teachers focus on what is important to them in determining what comprises a good school climate. This question is question 3. Table 8 shows the responses to question 1.

Question 1: In thinking about climate since our time together yesterday what are your key thoughts you hold now?

Table 8:
Climate Reflections Day Two

In thinking about climate since our time together yesterday what are your key thoughts you hold now?	
Debbie	Climate is a combination of many things.
Yvonne	Climate includes many more aspects that I first considered. It's not just what I make [of] it but what the WHOLE school body makes, [of] it, even the children in the classroom.
Terry	There are five areas that make up school climate and our belief system influences how we perform in those areas.
Pat	Climate is affected by individual beliefs as well as the school philosophy which was formed by individual beliefs.
Sam	Climate is shaped by our beliefs.
Dorothy	School climate is shown in various ways. It comes through the 5 elements that were presented.
Allison	[Climate] comes in many ways. Different people, situations, beliefs all affect climate.
Sally	Climate is the key to education – It is the ??? that promotes individual growth. Good to have discussions make you think.
Judy	Climate affects every aspect of our relationships personally, as teachers, as educators to educator. There is not aspect untouched in every one of the 5 areas of climate.
Kathy	We have a safe nurturing self-??? Climate to educate successful students.
John	My thoughts have not changed, but I have become perhaps thoughtfully broader with input from other teachers.

Beliefs were identified as the foundation for creating climate. One teacher stated that there is much more to school climate than what they had thought before this project began. Climate is a combination of many things and is exhibited in a variety of ways.

Responses to reflection question 2 are in table 9.

Question 2: What are your new understandings about climate?

Table 9:
New Climate Understandings Day Two

What are your new understandings about climate?	
Debbie	We need to work on all elements that create climate
Yvonne	Climate spreads out into the community and can have a life-long effect.
Terry	Our beliefs are key to what type of environment we have created in our classrooms and school.
Pat	My understanding of climate is pretty much what I felt since the start.
Sam	Shaped by environment – beliefs – school climate is visible in the community
Dorothy	Our belief system affects our teaching techniques, which in turn affect the school climate
Allison	What you believe can have an affect (positive or negative) on climate
Sally	Climate is influenced by beliefs --- beliefs and climate effect school and outside community
Judy	Reaches out and touches everyone in a positive or negative way --- beyond school boundaries.
Kathy	We all basically share similar hopes dreams questions and concerns
John	There are several components to the concept of school climate.

It is important to work on all elements of climate stated one teacher. Some of the teachers shared their understanding that climate extends beyond the school walls and spreads out into the community. Several components make up climate and our beliefs shape the climate we experience in the school.

A question was added to the reflection during the session. The question reflected the subject of the discussion. Table 10 has the responses to the question.

Question 3: How do you know you have a good school climate?

Table 10:
Question 3 Good School Climate

How do you know you have a good school climate?	
Debbie	“There’s a good climate when everyone enjoys what’s happening.”
Yvonne	“You can see and hear it in the way the children act when they walk in your door, talk to you and each other, and the joy you witness in their success.”
Terry	“...I feel safe, happy, loved, and important. I feel I am where I belong!”
Pat	“...are able to freely and comfortably interact and communicate with one another, both students and parents.”
Sam	“... I want to come to work in the morning.”
Dorothy	“...We collectively make up the climate based on what we contribute individually.
Allison	“... is very comfortable and relaxed with my fellow faculty... and I love teaching which makes me feel good about myself.”
Sally	“There is a positive energy things get done enthusiasm is obvious.”
Judy	Showing eagerness and are relaxed then we are what we should be.”
Kathy	“Students are smiling a lot of the time - students are attentive and feel free to interact...”
John	Pre informed of their absence

The teachers expressed a variety of thoughts indicating that a good school climate enables one to want to come to work in the morning and that there is a positive energy wherein things get done with obvious enthusiasm. One teacher added that a good climate is one where they feel safe, happy, loved, and important. I feel I am where I belong.

Reflection Three

Following the morning session the participants asked to complete a reflective question based upon a scenario presented during the session. The participants were asked to consider the conversation and activities of the previous sessions in formulating their responses. The morning session focused on: (a) reinforcing the elements that comprise school climate and (b) introducing core beliefs as a major influence to climate formation.

As part of a working lunch, the participants discussed a research article they read earlier that day. The article illuminated the results of a survey that indicated many school

districts self-reported that they don't address school climate. The teachers were asked to imagine that each of them was an independent educational consultant. You have been hired by one of the administrators who was referred to in the article Frankly, Your Schools Could Use a Little Sunshine (2006). Their task as a consultant was to convey the importance of school climate to their new client. Table 11 shows their response.

Question: Given your increasing understanding of school climate what are some of the important points you would want to convey during your consultation?

Table 11:
Climate Consultant Responses

The article <i>Frankly, Your Schools Could Use a Little Sunshine</i> states that many administrators do not address school climate due to their lack of understanding of the importance of school climate. Imagine that you have been requested to be an independent consultant to the principals referred to in the article. Your task is to convey the importance of school climate to these principals. Given your increasing understanding of school climate what are some of the important points you would want to convey during your consultation?	
Debbie	Left to pick up daughter
Yvonne	Define climate / Set guidelines that should include the 5 areas of leadership – environment – parental environment – empowerment – relationships / Set standards on requirements on goals in each of these areas / Each one of this has equal importance to make it work and balance / Accept and respect differences
Terry	I would stress to the principals that school climate is extremely important. School climate shapes the way the students, faculty, staff and community view your school. Positive school environment will influence achievement. School climate can be improved
Pat	The principal and staff should get together and first discuss personal beliefs and how they influence their class climate which ultimately influences school climate, children and parents. Group should discuss how the 5 aspects of school climate Leadership – Empowerment – Relationship – Parental Involvement – and Environment play apart in this climate. School climate should be a positive experience in the formation of future successful adults.
Sam	You need to recommend to them to have round table discussions about what school climate is. They need to look at the five elements of school climate L - E - P - E - R. You need to find a way to be consistent with all people, keeping in mind that climate is based on beliefs and beliefs being individualized. School climate is important to your school's growth
Dorothy	Have them address their belief systems. Implement understanding of the 5 elements of school climate. In service days to better educate the faculty about

	school climate. Survey parents comments regarding school climate.
Allison	Individual beliefs have to be addressed. Implement different ways to address these beliefs. In-service days to educate the faculty and administrators to help in understanding the school climate. Input from parents using a survey on what school climate means to them. What is important or what should be addressed to improve it.
Sally	Trust- Meet the school community- students- parents – teachers school community members – Input is important. Stress that beliefs are different – tolerance is the key Roles and consequences must be agreed to by all. Varied communication methods must be used Policy and climate must be re-evaluated look ??? see excellence and needs for improvement
Judy	Define School Climate = (respect acceptance) ideas But coming to a consensus about what is important and needed in our definition of school climate. Set up guide lines that must be agreed upon and fulfilled by all members. Discussion discussion discussion make sure all are on the Same plane and have a clear understanding. Need guidelines (rules) Need consequences. Need total cooperation.
Kathy	Define school climate. State the 5 elements. Have each teacher record examples of the five elements in the classroom. Analyze any weakness. Devise a plan to improve specific points. Self monitor, ask students, parents and teachers to observe behavior. Revise the plan, be flexible and open. Design a swift immediate consequence plan.
John	Did not attend

The teachers stated that stressing the importance of school climate is of great importance when talking with a principal of another school. They further recommended that the administration and staff should form “round table discussions” to explore their beliefs as they affect the climate. It was further recommended that the conversation of climate should include the broad concept of climate.

Group Leadership Element Activity

Previous discussions focused on the complexity of climate. As an illustration of this complexity, the participants engaged in a brain-storming activity where they created a list of components within their school community that focused on one of the major element of climate. The teachers selected leadership as the element to explore. The

list was to include people, activities, and organizations. Table 12 shows all of the components at the school related to leadership.

Table 12:
Group Leadership Element Activity

Student Council	Teachers	Principals	Pastor	Parents Teacher Groups (PTG)	Consultant (Supervisor)
Line Leader	DRE	Chore-assignments	Student Council elections	Student Lectors and Cantor	Alumni to students to adult students
Custodians	Scouting leader	A.D.	Sports Coaches	Bus Drivers	Cafeteria Staff
Parents	Peer Mentoring	Holy Communion	Modeling	Displays	8 th Graders
Mentoring	Service	Responsibility	Secretary	Guest Speakers	Students

Reflection 4

At this point in the study, the participating teachers had been involved in seven hours of activities and discussion focusing on creating a different conception of school climate. As one of the final activities during the time together, they were asked to reflect on their thoughts and experiences. Table 13 shows their responses to Reflection 4.

Question: Please explain in depth your understanding of school climate at this time.

Table 13:
Final Statements of Climate Understanding

Please explain in depth your understanding of school climate at this time.	
Debbie	
Yvonne	School climate is the melding of many areas that creates a positive, beneficial atmosphere for children to be helped to reach their potentials and be successful. These areas include all people in the school, family and community.
Terry	Climate is the set of beliefs, behaviors, and attitudes that affect a school. Climate is composed of 5 areas: leadership, empowerment, relationships, environment and parental involvement. Principals, teachers and staff play a key role in developing a school climate.
Pat	School climate involves the 5 aspects of Leadership, Empowerment, Relationships, Parental Involvement, and Environment. It is affected by our individual beliefs, Climate is not a constant. It is what distinguishes one school or classroom from another.
Sam	School climate is made up of five elements. (REPEL) Beliefs are all individualized and this has effect on the school climate.
Dorothy	Begins with basic belief system, involves the ACCEPTANCE of the beliefs of others, not necessarily the agreement of such beliefs. We implement the belief system into the 5 elements of school climate.
Allison	School climate involves the beliefs of each individual and how those beliefs affect the relationships of student to teacher, teacher to students, teacher to parent, parent to child, which eventually filters through to make-up the school climate.
Sally	Much deeper than it was in the beginning of our two days. I understand many factors (5) that make up the climate of the school. All interrelated in some aspect. Positive climate leads to success in education a brighter future for the whole community.
Judy	School climate is focusing on the whole make up of the school being aware of its' positive points understanding the needs of the school and being aware of how to attain a better working, learning environment. How to maintain it and grow to its potential.
Kathy	We have a wonderful school climate in general and each of us continually works on the fine concepts. Hopefully the students feel the positive setting we strive to maintain.
John	Did not attend

The teachers indicated that climate is the set of beliefs, behaviors, and attitudes that affect a school. They indicated that creating a positive climate may require the ACCEPTANCE of the beliefs of others, not necessarily the agreement of such beliefs. It was further indicated that climate is comprised of many areas that creates a positive,

beneficial atmosphere for children to be helped to reach their potentials and be successful. Table 14 shows some important understandings of climate the teachers want to remember after they leave.

Question 2: What are the important understandings of school climate that you want to make sure you remember?

Table 14:
Important Understanding of School Climate to Remember

What are the important understandings of school climate that you want to make sure you remember?	
Debbie	Left to pick up daughter
Yvonne	That the better the climate is the better and more the children achieve. We all need to work together to achieve and maintain this climate. We can benefit and help each other as well as the children.
Terry	Our beliefs are influenced by the environment that we are in. Student achievement is increased with a positive school climate. Open dialogue is critical to improving school climate.
Pat	Remember that since everyone's set of beliefs differ so does the climate in which you exist.
Sam	School climate is what you as an individual has to offer. You are a part of school climate. Our relationships are an important factor in this school.
Dorothy	Acceptance of others and what they believe. Positive environment – having students feel safe and comfortable. Building positive relationships – student to student / teacher – student / teacher – teacher / parent – teacher – student> working together.
Allison	That my beliefs so not necessarily matter to others, but that I would not abandon my beliefs, but to be accepted of others beliefs! That school climate is an important element in schools and needs to be addressed and implemented where ever possible.
Sally	Our beliefs may not be the Same but we are all working toward student success. Tolerance, listening and discussion are important.
Judy	We need to have a common goal and we need to agree on how to attain this goal and work together so our message in clear and attainable.
Kathy	I want to nurture relationships and take time to understand people in spite of the hectic schedules and demands of life.
John	Pre informed of their absence

The teachers indicated that the better the climate is, the better and more the children will achieve. They continued to explain that beliefs are a focal point in climate

and everyone's set of beliefs differ and so does the climate in which you exist. Adding to this explanation, they stated our beliefs may not be the same but we are all working toward student success. Tolerance, listening, and discussion are important.

Data Collection Summary

Throughout the data collection process I utilized several collection techniques. These techniques included: (a) document/artifact analysis, (b) pre-interviews, (c) photograph presentation, (d) group activity, and (e) written reflections. The participating teachers provided a mountain of data to analyze. Anfara et al. (2002) suggested that the researcher should make public the manner with which data are collected and analyzed in the research. In the next section, I will demonstrate the analysis of this data. It is my intent to present the analysis of this data in a manner that is transparent.

Data Analysis

Anfara et al. (2002) indicated that the process of data analysis is as diverse as there are researchers. They also noted that there is no singular right way to analyze the mountains of data collected. Transparency in collecting and analyzing is what I have attempted to do in this project.

In this section I have presented my three research questions. Also, I have presented the data sources, interviews and written reflections that would be used for analysis. I have identified the data that would be analyzed for each research question. The research questions are aligned with the data sources for analysis. Table 15 shows the data sources that are used to answer each research question.

Table 15:
Research Questions Compared to Data Sources

Research Questions	Data Sources for Analysis
What are the effects of a discourse community model for creating intentional conceptual change regarding the understanding of school climate and its importance?	I: 3 R4:1
What effects does the discourse community model have on the perceptions of the participants?	I: 3 R4:1
What patterns and themes regarding school climate understanding emerge from the discourse community?	I: 3 R4:1

I = Interview I: # = Interview question
R = Reflection R #: # = Reflection: Question number

Climate Understanding Continuum (CUC)

The Climate Understanding Continuum (CUC) is a seven-point self-created hybrid categorization tool. The CUC was created reflecting emerging concepts regarding climate understanding from the participants as well a concept grounded in the theoretical frame of this research.

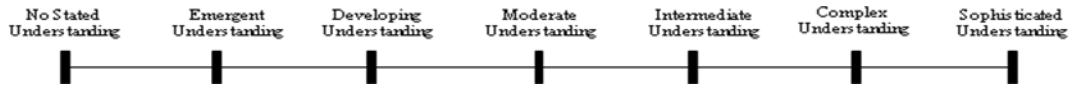
Different levels of climate understanding emerged from the participants' responses. From analyzing the participants' responses, I was able to construct a categorization tool to reflect their stated understanding of climate. The participants' expressed understandings are reflected in the first six points.

School climate is the observable manifestation of the school's culture. Exploring school climate through the lens of culture offers a deeper exploration of how schools' unwritten rules, traditions, norms, and expectations influence behavior (Schein, 1990). The seventh and final point on the continuum reflects this concept.

The continuum is used to illustrate the participants' expressed understanding of climate throughout the project. The points are: (a) No Stated Understanding, (b) Emergent Understanding, (c) Developing Understanding, (d) Moderate Understanding,

(e) Intermediate Understanding, (f) Complex Understanding and (g) Sophisticated Understanding. Table 16 shows the Climate Understanding Continuum.

Table 16:
Climate Understanding Continuum (CUC)



Climate Understanding Continuum Exemplar Statements

Each of the seven points in the CUC indicates a different expressed level of understanding of the concept of school climate. Exemplar statements are presented to illustrate to the various levels of understanding. The statements in Table 17 reflect a combination of actual participants’ responses in order to show the range of levels of understanding that were expressed.

Table 17:
Climate Understanding Continuum Exemplar Statements

<i>Points along the continuum</i>	No Stated Understanding	Emergent Understanding	Developing Understanding	Moderate Understanding	Intermediate Understanding	Complex Understanding	Sophisticated Understanding
<i>Benchmark Statements</i>	I don't know what climate is.	Climate is a feeling.	Climate affects how I behave.	Climate affects how the work is done.	Climate affects everything.	Climate is shaped by beliefs.	Climate is a manifestation of culture.

Primary Research Question

1. What are the effects of a discourse community model for creating intentional conceptual change regarding the understanding of school climate and its importance?

This research is intended to explore the effects of a process within a discourse community on affecting conceptual change regarding school climate and its importance.

To do this it would be necessary to know the existing conception to compare it to later conceptions in the process. To this end an analysis was completed by examining data

from two sources: (a) initial interviews, and (b) written reflection statements. The level of climate understanding will be illustrated later upon a climate understanding matrix. Table 18 shows the responses that were analyzed for research question 1.

Initial Interview

Question 3: How would you describe school climate?

Table 18:
Initial Interview School Climate Description - RQ1

How would you describe school climate?	
Debbie	I wasn't exactly sure what you meant by school climate, to me it sounded like whether the registers and heaters were working or not. However, as an educator I knew that is not what you meant.
Yvonne	To me that means that I make an atmosphere where children are comfortable and want to come to school and are excited about learning.
Terry	School climate is the atmosphere the relationship where children and staff are comfortable to be themselves.
Pat	I think school climate means the atmosphere of the school. When you walk into the school you feel welcome.
Sam	The atmosphere in the building, in the classroom, in the school, in the parish, in the family community.
Dorothy	It (school climate) is the interpersonal relationships between teacher to teacher, teacher to student, student to student and how that all affects the school as a whole.
Allison	The school climate would be the anti-bullying program for me, because it extends out into the community.
Sally	It means the atmosphere it means the environment that we all exist in teachers, students the whole family.
Judy	Climate was looked at as an end result to time spent together. OK basically the first thought that came to my mind was family because the children have grown up with us.
Kathy	Well I naturally think of my home room environment and how I want it to be comfortable for the children, not an over-stimulated type of environment, yet enriched type of environment.
John	School climate is the atmosphere and the relationship between the children parents and the faculty.

Climate Understanding Matrix Initial Interview

This matrix presents a snapshot of the participants' reflection statements. I compared data from the participants' initial interview responses to the exemplar statements. Interview responses were aligned with exemplar statements and the

corresponding placement point on the CUC. Table 19 reflects data collected from the initial interview.

Question 3: How would you describe school climate?

Table 19:
CUC Matrix Initial Interview

Name	No Stated Understanding	Emergent Understanding	Developing Understanding	Moderate Understanding	Intermediate Understanding	Complex Understanding	Sophisticated Understanding
Debbie	*						
Yvonne			*				
Terry			*				
Pat		*					
Sam		*					
Dorothy					*		
Allison				*			
Sally		*					
Judy		*					
Kathy			*				
John		*					

* Initial interview

Fourth Reflection Statements

Question 1: Please explain in depth your understanding of school climate at this time.

Table 20:
Final Statement of Climate Understanding - RQ 1

Please explain in depth your understanding of school climate at this time.	
Debbie	Not Present
Yvonne	School climate is the melding of many areas that creates a positive, beneficial atmosphere for children to be helped to reach their potentials and be successful. These areas include all people in the school, family and community.
Terry	Climate is the set of beliefs, behaviors, and attitudes that affect a school. Climate is composed of 5 areas: leadership, empowerment, relationships, environment and parental involvement. Principals, teachers and staff play a key role in developing a school climate.
Pat	School climate involves the 5 aspects of Leadership, Empowerment, Relationships, Parental Involvement, and Environment. It is affected by our individual beliefs, Climate is not a constant. It is what distinguishes one school or classroom from another.
Sam	School climate is made up of five elements. (REPEL) Beliefs are all individualized and this has effect on the school climate.
Dorothy	Begins with basic belief system, involves the ACCEPTANCE of the beliefs of others, not necessarily the agreement of such beliefs. We implement the belief

	system into the 5 elements of school climate.
Allison	School climate involves the beliefs of each individual and how those beliefs affect the relationships of student to teacher, teacher to students, teacher to parent, parent to child, which eventually filters through to make-up the school climate.
Sally	Much deeper than it was in the beginning of our two days. I understand many factors (5) that make up the climate of the school. All interrelated in some aspect. Positive climate leads to success in education a brighter future for the whole community.
Judy	School climate is focusing on the whole make up of the school being aware of its' positive points understanding the needs of the school and being aware of how to attain a better working, learning environment. How to maintain it and grow to its potential.
Kathy	We have a wonderful school climate in general and each of us continually works on the fine concepts. Hopefully the students feel the positive setting we strive to maintain.
John	Not present

Climate Understanding Continuum Fourth Reflection

The following matrix presents a snapshot of the participants' placement on the CUC according to their final understanding of climate. The Table 21 reflects data collected from the fourth reflection entries.

Question 1: Please explain in depth your understanding of school climate at this time

Table 21:
CUC Matrix Final Statement of Climate Understanding - RQ 1

Name	No Stated Understanding	Emergent Understanding	Developing Understanding	Moderate Understanding	Intermediate Understanding	Complex Understanding	Sophisticated Understanding
Debbie	NP						
Yvonne					**		
Terry						**	
Pat						**	
Sam						**	
Dorothy						**	
Allison						**	
Sally					**		
Judy				**			
Kathy			**				
John	NP						

** Fourth Reflection

NP = Not Present

Climate Understanding Comparative Statements

The following matrix shows the participants statements from two reflections that were compared. Table 22 shows the statements from the initial interviews and the fourth reflection.

Table 22:
CUC Matrix Comparative Statements - RQ 1

Name	Initial Interview	Fourth Reflection
Debbie	I wasn't exactly sure what you meant by school climate, to me it sounded like whether the registers and heaters	NP
Yvonne	To me that means that I make an atmosphere where children are comfortable and want to come to school and are excited about learning.	School climate is the melding of many areas that creates a positive, beneficial atmosphere for children to be helped to reach their potentials and be successful. These areas include all people in the school, family and community.
Terry	School climate is the atmosphere the relationship where children and staff are comfortable to be themselves.	Climate is the set of beliefs, behaviors, and attitudes that affect a school. Climate is composed of 5 areas: leadership, empowerment, relationships, environment and parental involvement. Principals, teachers and staff play a key role in developing a school climate.
Pat	I think school climate means the atmosphere of the school, when you walk into the school you feel welcome	School climate involves the 5 aspects of Leadership, Empowerment, Relationships, Parental Involvement, and Environment. It is affected by our individual beliefs, Climate is not a constant. It is what distinguishes one school or classroom from another.
Sam	The atmosphere in the building in the classroom in the school in the parish in the family community	School climate is made up of five elements. (R-E-P-E-L) Beliefs are all individualized and this has effect on the school climate.
Dorothy	Climate depends upon the "interpersonal relationships between teacher to teacher, teacher to student, student to	Begins with basic belief system, involves the ACCEPTANCE of the beliefs of others, not necessarily the agreement of such beliefs. We

	student and how that all affects the school as a whole”	implement the belief system into the 5 elements of school climate.
Allison	“The school climate would be the anti bullying program for me, because it extends out into the community”	School climate involves the beliefs of each individual and how those beliefs affect the relationships of student to teacher, teacher to students, teacher to parent, parent to child, which eventually filters through to make-up the school climate.
Sally	“It means the atmosphere it means the environment that we all exist in teachers, students the whole family.”	Much deeper than it was in the beginning.... Positive climate leads to success in education a brighter future for the whole community.
Judy	“OK basically the first thought that came to my mind was family because the children have grown up with us	School climate is focusing on the whole make up of the school being aware of its’ positive points understanding the needs of the school and being aware of how to attain a better working, learning environment.
Kathy	Well I naturally think of my home room environment and how I want it to be comfortable for the children, not an over-stimulated type of environment, yet enriched type of environment	We have a wonderful school climate in general and each of us continually works on the fine concepts. Hopefully the students feel the positive setting we strive to maintain.
John	School climate is the atmosphere and the relationship between the children parents and the faculty.	NP

NP = Not Present

Climate Understanding Matrix Comparative Statements

Reflecting the Climate Understanding Continuum utilizing participants’ input related to the Climate Understanding Continuum Exemplar Statements. The following matrix presents a snapshot of the participants’ placement on the CUC according to their initial and final understanding of climate. Table 23 reflects data collected from the initial interviews and the fourth reflection entries.

Table 23:
CUC Matrix Compare Initial Interviews and Fourth Reflection - RQ 1

Name	No Stated Understanding	Emergent Understanding	Developing Understanding	Moderate Understanding	Intermediate Understanding	Complex Understanding	Sophisticated Understanding
Debbie	1	****					
Yvonne					2		
Terry						2	
Pat		1				2	
Sam		1				2	
Dorothy					1	2	
Allison				1		2	
Sally		1			2		
Judy				2			
Kathy			1/2				
John	NP						

1= Initial interview 2= Fourth Reflection
NP = Not Present **** = Debbie Not Present Fourth Reflection

Secondary Research Question

2. *What effects does the discourse community model have on the perceptions of the participants?*

An analysis of the collected data was completed by examining data from two sources: (a) initial interviews, and (b) written reflection statements. The greatest attention was give to the perceptions shared within the questions related to describing climate directly. Some attention was give to the perspectives expressed related to the 5 elements of climate.

Initial Interview

Question 3: How would you describe school climate?

Table 24:
Initial Interview School Climate Description - RQ 2

How would you describe school climate?	
Debbie	I wasn't exactly sure what you meant by school climate, to me it sounded like whether the registers and heaters were working or not. However, as an educator I knew that is not what you meant.
Yvonne	To me that means that I make an atmosphere where children are comfortable and want to come to school and are excited about learning.
Terry	School climate is the atmosphere the relationship where children and staff are comfortable to be themselves.
Pat	I think school climate means the atmosphere of the school. When you walk into the school you feel welcome.
Sam	The atmosphere in the building, in the classroom, in the school, in the parish, in the family community.
Dorothy	It (school climate) is the interpersonal relationships between teacher to teacher, teacher to student, student to student and how that all affects the school as a whole.
Allison	The school climate would be the anti-bullying program for me, because it extends out into the community.
Sally	It means the atmosphere it means the environment that we all exist in teachers, students the whole family.
Judy	Climate was looked at as an end result to time spent together. OK basically the first thought that came to my mind was family because the children have grown up with us.
Kathy	Well I naturally think of my home room environment and how I want it to be comfortable for the children, not an over-stimulated type of environment, yet enriched type of environment.
John	School climate is the atmosphere and the relationship between the children parents and the faculty.

Fourth Reflection Statements

Question 1: Please explain in depth your understanding of school climate at this time.

Please explain in depth your understanding of school climate at this time.

Table 25:
Final Statement of Climate Understanding - RQ 2

Please explain in depth your understanding of school climate at this time.	
Debbie	
Yvonne	School climate is the melding of many areas that creates a positive, beneficial atmosphere for children to be helped to reach their potentials and be successful. These areas include all people in the school, family and community.
Terry	Climate is the set of beliefs, behaviors, and attitudes that affect a school. Climate is composed of 5 areas: leadership, empowerment, relationships, environment and parental involvement. Principals, teachers and staff play a key role in developing a school climate.
Pat	School climate involves the 5 aspects of Leadership, Empowerment, Relationships, Parental Involvement, and Environment. It is affected by our individual beliefs, Climate is not a constant. It is what distinguishes one school or classroom from another.
Sam	School climate is made up of five elements. (REPEL) Beliefs are all individualized and this has effect on the school climate.
Dorothy	Begins with basic belief system, involves the ACCEPTANCE of the beliefs of others, not necessarily the agreement of such beliefs. We implement the belief system into the 5 elements of school climate.
Allison	School climate involves the beliefs of each individual and how those beliefs affect the relationships of student to teacher, teacher to students, teacher to parent, parent to child, which eventually filters through to make-up the school climate.
Sally	Much deeper than it was in the beginning of our two days. I understand many factors (5) that make up the climate of the school. All interrelated in some aspect. Positive climate leads to success in education a brighter future for the whole community.
Judy	School climate is focusing on the whole make up of the school being aware of its' positive points understanding the needs of the school and being aware of how to attain a better working, learning environment. How to maintain it and grow to its potential.
Kathy	We have a wonderful school climate in general and each of us continually works on the fine concepts. Hopefully the students feel the positive setting we strive to maintain.
John	Did not attend

Tertiary Research Question

3. *What patterns and themes regarding school climate understanding emerge from the discourse community?*

An analysis of the collected data from the initial interviews and the final written reflection responses showed a theme of stated understanding which emerged related to school climate (Glesne, 2006; Miles & Huberman, 1994). The range of the theme of understanding went from no stated understanding to complex understanding. Two examples of participants' statements that illustrate these two ends of the range are: "...I wasn't exactly sure what you meant by school climate, to me it sounded like whether the registers and heaters..." (Debbie) and "Climate is the set of beliefs, behaviors, and attitudes that affect a school... Principals, teachers and staff play a key role in developing a school climate." (Terry)

The themes of understanding that emerged in the two data sources were: (a) No Stated Understanding, (b) Emergent Understanding, (c) Developing Understanding, (d) Moderate Understanding, (e) Intermediate Understanding and (f) Complex Understanding.

To further illustrate the themes of understanding I will present the theme with the participants' statements. First, I will present the statements from the initial interview and then the fourth written reflection. Table 26 shows the themes and the participants' statements from the initial interview.

Table 26:
Themes of Understanding Initial Interview

Theme	Participant Statement
No Stated Understanding	I wasn't exactly sure what you meant by school climate, to me it sounded like whether the registers and heaters. (Debbie)
Emergent Understanding	I think school climate means the atmosphere of the school, when you walk into the school you feel welcome. (Pat)
Emergent Understanding	The atmosphere in the building in the classroom in the school in the parish in the family community. (Sam)
Emergent Understanding	It means the atmosphere it means the environment that we all exist in teachers, students the whole family. (Sally)
Emergent Understanding	OK basically the first thought that came to my mind was family because the children have grown up with us. (Judy)
Emergent Understanding	School climate is the atmosphere and the relationship between the children parents and the faculty. (John)
Developing Understanding	To me that means that I make an atmosphere where children are comfortable and want to come to school and are excited about learning. (Yvonne)
Developing Understanding	School climate is the atmosphere the relationship where children and staff are comfortable to be themselves. (Terry)
Moderate Understanding	The school climate would be the anti bullying program for me, because it extends out into the community. (Allison)
Intermediate Understanding	Climate depends upon the interpersonal relationships between teacher to teacher, teacher to student, student to student and how that all affects the school as a whole. (Dorothy)

Now, I will present the statements the fourth written reflection. Table 27 shows the themes and the participants' statements from the forth reflection.

Table 27:
Themes of Understanding Fourth Reflection

Theme	Participant Statement
Developing Understanding	We have a wonderful school climate in general and each of us continually works on the fine concepts. Hopefully the students feel the positive setting we strive to maintain. (Kathy)
Moderate Understanding	School climate is focusing on the whole make up of the school being aware of its' positive points understanding the needs of the school and being aware of how to attain a better working, learning environment. How to maintain it and grow to its potential.(Judy)
Intermediate Understanding	Much deeper than it was in the beginning of our two days. I understand many factors (5) that make up the climate of the school. All interrelated in some aspect. Positive climate leads to success in education a brighter future for the whole community. (Sally)
Intermediate Understanding	School climate is the melding of many areas that creates a positive, beneficial atmosphere for children to be helped to reach their potentials and be successful. These areas include all people in the school, family and community. (Yvonne)
Complex Understanding	Climate is the set of beliefs, behaviors, and attitudes that affect a school. Climate is composed of 5 areas: leadership, empowerment, relationships, environment and parental involvement. Principals, teachers and staff play a key role in developing a school climate. (Terry)
Complex Understanding	School climate involves the 5 aspects of Leadership, Empowerment, Relationships, Parental Involvement, and Environment. It is affected by our individual beliefs, Climate is not a constant. It is what distinguishes one school or classroom from another. (Pat)
Complex Understanding	School climate is made up of five elements. (REPEL) Beliefs are all individualized and this has effect on the school climate. (Sam)
Complex Understanding	Begins with basic belief system, involves the ACCEPTANCE of the beliefs of others, not necessarily the agreement of such beliefs. We implement the belief system into the 5 elements of school climate. (Dorothy)
Complex Understanding	School climate involves the beliefs of each individual and how those beliefs affect the relationships of student to teacher, teacher to students, teacher to parent, parent to child, which eventually filters through to make-up the school climate. (Allison)

Upon closer examination the data revealed that two of the themes of stated understanding contained a majority of the patterns of concepts. Emergent and complex understanding exemplar statements indicated that climate is related to atmosphere and it is shaped by beliefs. Table 28 shows the participants' statements from the initial interview and the fourth written reflection related to the theme of understanding and the pattern within.

Table 28:
Themes and Patterns of Understanding

Participant Statement Initial interview Emergent Understanding Atmosphere		Participant Statement Fourth Written Reflection Complex Understanding Beliefs Behaviors Attitudes
I think school climate means the atmosphere of the school, when you walk into the school you feel welcome. (Pat)		Climate is the set of beliefs, behaviors, and attitudes that affect a school. Climate is composed of 5 areas: leadership, empowerment, relationships, environment and parental involvement. Principals, teachers and staff play a key role in developing a school climate. (Terry)
The atmosphere in the building in the classroom in the school in the parish in the family community. (Sam)		School climate involves the 5 aspects of Leadership, Empowerment, Relationships, Parental Involvement, and Environment. It is affected by our individual beliefs, Climate is not a constant. It is what distinguishes one school or classroom from another. (Pat)
It means the atmosphere it means the environment that we all exist in teachers, students the whole family. (Sally)		School climate is made up of five elements. (R-E-P-E-L) Beliefs are all individualized and this has effect on the school climate. (Sam)
OK basically the first thought that came to my mind was family because the children have grown up with us. (Judy)		Begins with basic belief system, involves the ACCEPTANCE of the beliefs of others, not necessarily the agreement of such beliefs. We implement the belief system into the 5 elements of school climate. (Dorothy)
School climate is the atmosphere and the relationship between the children parents and the faculty. (John)		School climate involves the beliefs of each individual and how those beliefs affect the relationships of student to teacher, teacher to students, teacher to parent, parent to child, which eventually filters through to make-up the school climate. (Allison)

Conclusion

The intent of this research was to explore if a conceptual change can occur regarding school climate within the framework of a discourse community. Data were collected through: (a) document analysis, (b) initial interviews, (c) reflection questions

and (d) interacting with the teachers throughout the group process to gain their existing beliefs and perceptions related to school climate.

The teachers' stated perceptions enabled me to refine the content and approach to the group activities. The initial activities also provided an opportunity for me to develop a more comfortable working relationship with this established group of teachers.

Throughout the group process there were interactive activities related to school climate. The teachers completed written reflection statements related to the activities. Data were identified that was related to creating responses to the research questions. The data indicated there was a shift in the initial stated perceptions and understanding of school climate.

In the next chapter I will discuss the results of the analysis of the data collected and aligned with the research questions.

CHAPTER V

DISCUSSION

Introduction

The literature has indicated that there is a perceived misunderstanding of school climate (Frankly, 2006). This perspective was developed from the historical limited focus of school climate research findings (Ladson-Billings, 2006) and the multiplicity of definitions (Anderson, 1982; Hoy et al., 1991). This misunderstanding has led to diminished attention being given to issues of school climate in school districts.

This research has sought to examine the effects that a discourse community model would have on promoting intentional conceptual change to increase the understanding of school climate and its importance. The discourse community utilized social constructivist theory which states that learning occurs within a social context through a series of interactions. During this study the participating teachers have received climate information and constructed their understanding of the concept as it related to them.

In this chapter I will discuss the research findings as they relate to the three research questions. I will also discuss implications for practice and offer some directions for future research. I will conclude with a discussion of thoughts related to the research, its intent and findings.

Primary Research Question

1. What are the effects of a discourse community model for creating intentional conceptual change regarding the understanding of school climate and its importance?

This discourse community approach offers encouraging findings regarding the effectiveness of this approach towards creating intentional conceptual change. Eleven

teachers were involved in the research. Two teachers were not present for the fourth reflection process. Of the nine that did complete all of the activities and written reflections, all nine teachers showed a change in their conception of school climate. The nine teachers showed an increase in their understanding of school climate in the fourth reflection.

Sinatra and Pintrich (2003) indicated that intentional conceptual change theory, at its foundation, states that any change in conceptions is under the control of the learner. In addition, they added that to affect conceptual change with an individual or a group requires taking into consideration their background knowledge (Posner et al., 1982) and motivational constructs (Pintrich et al., 1993).

As a trained social worker with a focus on group process, I designed the discourse community model to be a fluid process. Input from the participants throughout the process influenced content design and delivery within the group. In doing this, the group structure can be receptive to the needs and personalities of the participants.

The final content design and the delivery approach were influenced by the teachers' input. The initial interviews established the platform to construct the group environment which led to the reported intentional conceptual change. The teachers' collective background knowledge and perceptions of school climate refined the delivery approach within the discourse community. In addition the initial interviews gave evidence of some motivational constructs of the teachers.

Motivational constructs are defined as beliefs and goals. These constructs interact in dynamic ways with background knowledge to affect a conceptual change (Pintrich et al., 1993). The motivational constructs for the teachers were: (a) their strong personal

sense of commitment, (b) their sense of responsibility, and (c) their expressed individual and collective vision. This was indicated in three ways: (a) their length of time teaching at Phoenix school, (b) their expressed educational philosophies, and (c) their desire to improve as a teacher.

The activities in the discourse community were designed to inform and to guide the teachers in constructing their understanding of school climate. Discourse communities and intentional conceptual change theories have the perspective that knowledge is not transmitted from the group leader, text, or activity to the participant; rather, knowledge is constructed by the participant (Ovens, 2002; Sinatra & Pintrich, 2003; Swales, 1990).

Each of the activities assisted in constructing new conceptions of school climate that led to the change in conceptions that were stated in the reflection. A discourse community utilizes elements of social constructivist theory (Ovens, 2002; Swales, 1990). The teachers comprised an established group that was willing to risk and learn together. “We are like a family” was a shared statement from several of the teachers.

One of the activities was an interactive presentation on the complexity of climate which involved comparing existing knowledge to an alternative view. One teacher remarked that “...climate is much deeper than it was in the beginning... Positive climate leads to success in education a brighter future for the whole community.” (Sally) Another activity was an active discussion focusing on beliefs and how they influence behavior. One teacher was able to articulate, “Climate begins with our basic belief system, involves the ACCEPTANCE of the beliefs of others, not necessarily the

agreement of such beliefs. We implement the belief system into the 5 elements of school climate.” (Dorothy)

The intentional conceptual change process should be situated within a dynamic learning environment wherein personal, motivational, social, and historical elements interact with one another, as well as members of the group (Pintrich et al., 1993). The teachers enjoyed the opportunity to discuss issues related to education yet not directed to an individual child. They also enjoyed the shared time with one another. “We don’t have enough time to spend with one another.” (Sam) “Better understanding of one another. It also opens opportunities to be able to gain knowledge of various subjects from one another.” (Dorothy) ”It can give me a new outlook, new directions for myself and students.” (Judy)

The influence the group had on creating a change in conceptions and behaviors was best reflected in one participant’s comment at the end of the first session. This participant originally had expressed some discomfort to the idea of a group discourse process stating, “... I wasn’t too sure I like the idea of sharing ideas. I basically don’t like discussions.” (Pat) At the end of the first session, this participant reflected, “It wasn’t too bad. It was good to interact with your friends, particularly when some days I may not even see them.” (Pat)

The literature has indicated that the perceptions of school climate are greatly influenced by the leader and leadership practices. It is the principal’s leadership style that establishes the foundation for the normative and behavioral structure within the school (Deal & Pearson, 1998; Hoy et al., 1991; Kelly et al., 2005; Water, Marzano, & McNulty, 2004).

The discourse community was supported fully and enthusiastically by the principal whom the teachers respected and held in high regard. This regard is seen in these statements, “Our principal is wonderful because she really does have an understanding toward her faculty and an understanding toward her kids.” (Joshua) and “...just the idea that the principal is extremely approachable, you can go and talk with her...” (Sally)

The principal’s support of the research along with the teachers’ respect became a motivational asset. I initially met with the principal to introduce the concept of the project. I was then invited back to introduce the idea to the staff so they can decide if and who might be interested in participating in the project. When it was clear that the entire teaching staff was interested, the principal offered the opportunity to conduct the project during the school day as part of their staff development and provide ACT 48 credit for their participation.

Sinatra and Pintrich (1983) stated that an important factor in producing intentional conceptual change is the motivational component. The enthusiastic support for this project that was created by the principal and the relationship that the principal has with her staff were both motivational factors that may have added to the intentional conceptual change that the teachers experienced.

Although the teachers showed an increase in their understanding of school climate, it should be noted that none of the teachers’ responses reflected the sophisticated point of understanding on the continuum. This point of understanding on the continuum is grounded in organizational culture theory and is the lens for viewing school climate in this research.

There are several possible reasons that the sophisticated understanding was not attained. Ho et al. (2001) stated that short courses may have a disadvantage regarding time. There are limits to in-depth pursuit of concepts and connections. The design of the content within the discourse community model in this study emphasized aspects related to the complexity of the concept of school climate. This included activities and discussion regarding how beliefs influence behavior and attitudes. Time could have had an effect on the discourse community's ability to pursue these complex aspects.

Another reason may also be researcher observation of the group process and decisions for action based on these observations. The duration for the activities and conversations was influenced by the time needed for the specific activity as well as behavioral feedback from the participants. When the participants' behavior indicated a need to move on, I made revisions to the scheduled activities. As a result, some of the content that was planned did not get to be discussed.

In addition to the teachers' reporting a change in their conception of school climate, there also seemed to be a change in their confidence level. As the teachers shared their new perspectives and themes as related to their school environment, the conversation had behavioral characteristics of a change in personal confidence with the subject. This confidence change was evidenced by their body language and vocal tones when they were discussing climate in relationship to their school situation.

This discourse community approach provided an environment for the teachers to examine and create a clearer understanding of school climate. The change in the initial conceptions of climate that was stated by the nine teachers was a result of their individual

and group goal to gain a clearer understanding of the concept and their personal desire to be a positive influence in the lives of their students.

Secondary Research Question

2. *What effects does the discourse community model have on the perceptions of the participants?*

This discourse community approach provided an environment for the teachers to further develop a collaborative culture within the school. Within the discourse community, the teachers were able to share their perspectives and dispositions. Pratte and Ruby (1991) suggested that educators create a system of mutual respect built upon trust in order to have a climate of professional regard.

The discourse community was dependent upon relationships between the teachers that were focused on learning and/or improving a situation. This relationship was exemplified by one teacher's reflection stating, "The group re-emphasized this point that it is good to listen to different perspectives to learn." (Sally) The trust and respect between the teachers within the discourse community provided an opportunity for the teachers to feel comfortable to share perspectives and experiences related to school climate. The comfort level of the teachers was reflected in one teacher's response, "I enjoyed spending time with the teachers – sharing our thoughts relating to school climate. It was fun!" (Dorothy)

Through the interactions, the teachers were reminded of core beliefs of their colleagues, "...it reaffirmed my opinion about the faculty's passion for teaching." (Dorothy) Within the discourse community, the teachers were able to share divergent perspectives. One teacher stated that the discourse community "...will help to give me a

clearer picture of where we are, how do we as a community think what is important, what needs to be changed or improved, what is good and needs to continue.” (Judy)

Six of the eleven teachers stated during the initial interview that their main strategy for parental involvement was email or phone. It was recognized and acknowledged by the teachers that this may not be the most optimal level of parental involvement. It was explained that there is a history of failed attempts to have a greater level of parental involvement.

During the discourse community there was a change in their initially-stated perspectives on involving parents. One teacher noted, “I think I can improve on parental involvement. I think I will continue to encourage open dialogue between faculty [members] and promote using clear policies so that everyone is working together.” (Yvonne) Another teacher stated, “We enjoy getting together and chatting. We know we need parental involvement but we’re not sure how to achieve it.” (Debbie)

The teachers presented a photo presentation as one of the activities in the discourse community. The goal was for each teacher to take a picture of something that represented climate to them. Ten of the eleven teachers participated in this photography activity. Nine of the photographs represented an aspect within each teacher’s classroom as the climate subject. During the discourse community, this perspective that climate is focused to individual classes underwent a change. One teacher reflected, “I will be thinking about the “bigger picture” that is involved in school climate. It’s not just what happens when the classroom door closes.” (Yvonne)

The discourse community provided an environment in which the teachers were able to further create a community built upon trust and respect. The goal of this

community is to learn and improve their school. Within this community, the teachers were able to talk express their perspectives, take risks, and share alternative perspectives.

Tertiary Research Question

3. What patterns and themes regarding school climate understanding emerge from the discourse community?

The perspective that school climate is a misunderstood concept was presented in the first two chapters. This perspective was developed from the historical limited focus of school climate research findings (Ladson-Billings, 2006) and the multiplicity of definitions (Anderson, 1982; Hoy et al., 1991). As a result of the misunderstanding, there are multiple responses to the understanding of the influence and importance of school climate. In some cases the importance and influence of climate is compared to air while in others the climate may not receive attention (Freiberg, 1998; Frankly, 2006).

It has been the intent of this research to explore whether a discourse community would be an effective vehicle for creating an intentional conceptual change regarding the understanding of school climate and its importance. It was noted that the level of stated understanding underwent a change during this process. Themes were identified related to the participants' stated understanding of school climate.

During the discourse community process, the eleven participating teachers stated two levels of understanding. There was a level of understanding before and a level of understanding after the discourse community process. The stated understanding expressed in the fourth written reflection statement demonstrated a richer depth of understanding compared to the understandings stated during the initial interview.

Five of the teachers expressed similar themes of understanding during the initial interview. The understandings were similar in that the five understandings represented a single dimension concept. Within the theme, there was a common pattern expressed. The pattern identified in Chapter Four was that the belief that climate is an atmosphere. To me this suggested that there is a limited scope of influence by the teacher in creating and maintaining this dimension of climate. “I think school climate means the atmosphere of the school, when you walk into the school you feel welcome.” was noted by one teacher (Second). There is a similar pattern expressed in climate literature, “...Climate is the general “we-feeling,” a group sub-culture, or interactive life of the school” (Nwankwo, as cited by Anderson, 1982, p 369).

Throughout the process, the teachers’ conversations regarding climate mirrored their written reflections. As the teachers gained information and created their individual and collective perspectives for climate, their words to express the concept changed. One teacher noted, “Eating together can affect our overall climate.” (Dorothy) This statement of discovery reflecting how every behavior can have an influencing affect on the overall climate illustrated the process that was occurring and new levels of understanding that were being created.

The fourth written reflection revealed a new major theme containing a multi-dimensional pattern that had emerged. The sentiment of the theme and patterns which had been identified in Chapter Four as beliefs reflected an increased understanding of the concept of climate and a greater sense of personal responsibility in its creation and continuance. This increased understanding is reflected in this teacher’s statement, “Climate is the set of beliefs, behaviors, and attitudes that affect a school. Climate is

composed of five areas: leadership, empowerment, relationships, environment and parental involvement. Principals, teachers and staff play a key role in developing a school climate.” (Yvonne) Another teacher noted, “School climate involves the 5 aspects of Leadership, Empowerment, Relationships, Parental Involvement, and Environment. It is affected by our individual beliefs. Climate is not a constant. It is what distinguishes one school or classroom from another.” (Pat)

The stated theme and patterns within did not seem to be simply an academic exercise to parrot information presented and discussed. The sentiment of the theme expressed was parallel to the perceived intent of the teachers’ educational philosophies shared in the initial interview, “...helping students learn and grow and achieve to his or her potential. Everyone is different. Everyone has different needs... They are not all packaged the same. Push kids because they can do wonderful things. They will rise to that challenge.” (Tim) Another teacher’s educational philosophy shows this theme “...“I'd say that every child needs to learn to the best that they can and it's my job to make sure that they give 100% of themselves and I have to appreciate any kind of differences in their learning processes...” (Yvonne)

The misunderstanding of the concept of school climate has been well-documented in climate literature. This research had as its intent to explore what effects a discourse community could have on creating intentional conceptual change and increase the understanding of school climate. During different stages of the research, themes of climate understanding emerged from the participating teachers. The themes contained patterns of elements which served as anchors for the theme. The stated theme of

understanding and the patterns increased in complexity in conjunction with the teachers experience within the discourse community.

Implications for Practice

This research with the discourse community model was intended to explore effects of this approach on creating an environment to promote intentional conceptual change to increase the understanding of school climate. I want to point out at this time that this research has been guided by my passion and interest. My passion and interest is to work with individual educators and systems to help develop and improve their abilities to create an educational climate that is supportive to all stakeholders.

Discourse Community

The discourse community is intended to be a forum wherein its members can share and construct knowledge. It is unique in that it operates without a leader in that the leadership changes with the area of discussion. That said, I agree with Fairbanks and LaGrone (2006) that the process requires a content rich facilitator one who is also knowledgeable about group process and the theory of intentional conceptual change.

If the facilitator is not a permanent member of the group environment, the group will need to learn to operate without the facilitator as they also interact around the content which brought them together. During the initial stages of the group process, it would be helpful and important to assess the level of the collective efficacy regarding the group's belief of being a group that can affect change.

The discourse community model used in this study can be used within a school district or school in a variety of ways. It can be used to promote an intentional conceptual change in a short-course format. It can also be utilized as a vehicle for presenting issues

related to climate or culture within a school. The discourse community model can be a vehicle for presenting staff development around any targeted area within a school system.

Adding an implementation component to the discourse community model will provide an extra benefit of promoting action to change school climate. Participants can take their newly-gained knowledge of climate and create action plans to address the areas identified within the process that need attention. Through the implementation component, an assessment and follow-up opportunities are recommended to keep changes on course.

The discourse community model can also be used at the university level. The model can be the foundation for the delivery of a course about school climate and culture at the university level within a school of education. The university-based course would be for education majors or students in educational leadership programs. The course would explore aspects of school culture and how the culture is manifested in the climate. The course would focus on student beliefs and dispositions and illuminate how personal beliefs influence the creation of an educational community.

Directions for Further Research

Sinatra and Pintrich (1983) and Ho et al. (2001) stated that additional research is needed focusing on a conceptual change approach. Ho et al. (2001) recommended a particular focus in the area of staff development. In order to learn more about this process I would: (a) replicate this study within a public school environment, (b) replicate this study with multiple sessions and several days in-between each session, (c) conduct this study within the context of an on-going university-based educational course, and (d) conduct follow-up interviews at Phoenix School within three to six months to assess retained level of climate understanding.

Another recommendation for further research would be to replicate this study with a change in the final assessment process. In addition to a written final reflection to be used to measure the levels of change, use one-on-one final interviews to assess the level of intentional conceptual change. Sinatra and Pintrich (1983) indicated that assessing the level of intentional conceptual change usually has been accomplished primarily with participant written self-reporting. They argue that a self-reporting assessment may have limitations in providing information to completely understand the process the participant experienced in the process of intentional conceptual change. They suggest that interviews may provide a richer picture of how the various aspects of the process worked to produce the change.

Further research using the Climate Understanding Continuum (CUC) to categorize climate understanding is recommended. Although the CUC was created for this study using emerging concepts regarding climate understanding from the participants as well as a concept grounded in the theoretical frame of this research, the CUC can be implemented in other research to measure levels of participant understanding. In addition the CUC can be used in conjunction with interviews (Sinatra & Pintrich, 1983) as a second assessment tool to explore effects of the research.

Based upon the findings of this study, another recommendation would be to replicate this study with some changes. Conduct the research with the intent to increase the participants' level of understanding. Their understanding of climate would include an additional understanding of the role culture has in relationship to creating climate. This increased understanding would be aligned with the sophisticated level of understanding indicated on the CUC.

Changing the research by adding the focus of the role of culture in relationship to climate would require a change in the research design. The intent of the change would be to have the group process become a tool in the conceptual change process. The change would involve using some of the concepts of organizational culture as the framework for guiding the process within the group sessions.

An example of this design would be to establish operating procedures of the group based on key aspects of organizational culture as presented by Schein (1990). Schein (1990) noted that there are certain aspects of an organizational culture such as values, beliefs, and rituals. The group process would be established for the duration of the research utilizing these aspects of culture as the guidelines.

Conclusion

This research explored the effects that a discourse community model had on promoting intentional conceptual change to increase the understanding of school climate and its importance. The discourse community model used in this study has demonstrated the ability to serve as a vehicle for promoting intentional conceptual change regarding school climate understanding.

Initial interviews were conducted to obtain the teachers' existing beliefs and understanding of climate. The group process involved interactive activities designed to increase the understanding of school climate. The activities were created to present information and to lead to conversation between the teachers. The teachers completed written reflection statements related to the activities.

Analysis of the data indicated that the participating teachers had experienced a change from their initial concepts of school climate and its importance. This change was

illustrated through the use of the multi-point climate understanding continuum (CUC) that was created to categorize the understanding of school climate.

The perceptions indicated a change in the words used to describe climate. A change in an awareness of personal responsibility for creating and maintaining the desired climate was also noted.

The themes and the patterns within the themes of understanding revealed an increase in the complexity of the patterns that was aligned with the in-group experience level of the teacher. The themes and patterns that emerged revealed that the teachers stated that climate is complex and has several parts.

Another pattern that emerged was that the teachers feel that the parents should be part of the climate. The teachers also expressed that the teacher has a role in establishing the educational environment. The themes and patterns were very much in line with the personal educational philosophies expressed by the teachers earlier in the process.

Several components are required for intentional conceptual change to occur. These include an individual's experiences, such as existing knowledge, and his or her present conception and ideas. These are combined with affective constructs such as goals and motivation (Pintrich et al., 1993). Phoenix School provided a supportive environment with a principal who is a visionary spiritual leader and teachers who were highly motivated to improve individually and collectively. The discourse community model served as the vehicle to promote the intentional conceptual change regarding school climate understanding.

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Appendix A: Initial Interview Questions

Initial Interview Questions

1. What was the most recent staff development offered in your school/district? Did you participate in this?
2. How do you showcase student work?
3. How would you describe school climate?
4. What methods are used to motivate teachers and students in your school?
5. What kind of parent involvement is there besides your school's parent-teacher organization?
6. What is your educational philosophy?
7. How do you demonstrate that everyone in the school is important?
8. What is one area of your professional growth on which you would like to work?
9. What effect do you feel that you can have on the climate of the school?
10. What are some of the rituals in your school to celebrate an event?

Appendix B: First Guided Reflection

REFLECTION ONE

Pseudonym: _____ Date: _____

Thank you for participating in this study. Please take a few moments, reflect on today's meeting and respond to the following questions. I will collect this before you leave.

What were some of your thoughts about this research study before the project began?

What is a new thought or understanding for you from the activities today?

What is one thing you learned today about climate?

What was something that your group colleagues indicated was new for them?

How can this new knowledge influence how you think of an aspect of your work?

Appendix C: Second Guided Reflection

REFLECTION TWO

Pseudonym: _____ **Date:** _____

Thank you for participating in this study. Please take a few moments and share your thoughts and respond to the following questions. I will collect this before you leave.

In thinking about climate since our time together yesterday what are your key thoughts you hold now?

What are your new understandings about climate?

What is a question you may have regarding the concept of school climate?

Appendix D: Third Guided Reflection

REFLECTION THREE
Friday Lunch

Pseudonym: _____ Date: _____

Thank you for participating in this study. Please take a few moments and share your thoughts and respond to the following questions. I will collect this before you leave.

The article *Frankly, Your Schools Could Use a Little Sunshine* states that many administrators do not address school climate due to their lack of understanding of the importance of school climate. Imagine that you have been requested to be an independent consultant to the principals referred to in the article. Your task is to convey the importance of school climate to these principals. Given your increasing understanding of school climate what are some of the important points you would want to convey during your consultation?

Appendix E: Forth Guided Reflection

REFLECTION FOUR

Pseudonym: _____ Date: _____

Thank you for participating in this study. Please take a few moments and share your thoughts and respond to the following questions. I will collect this before you leave.

Please explain in depth your understanding of school climate at this time.

What are the important understandings of school climate that you want to make sure that you remember?

How can this new knowledge influence how you think of an aspect of your work?

Appendix F: Informed Consent Form



DUQUESNE UNIVERSITY

600 FORBES AVENUE ♦ PITTSBURGH, PA 15282

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

- TITLE:** The effects of a discourse community model on promoting intentional conceptual change to increase understanding of school climate and its importance
- INVESTIGATOR:** David A. Parker
208 Carpenter Lane
Pittsburgh PA 15212
412.766.4013
- ADVISOR:** Dr. James E. Henderson
IDPEL Program Director
Department of Foundations and Leadership
412. 396.4880
- SOURCE OF SUPPORT:** This study is being performed in partial fulfillment of the requirements for the degree of Doctor of Education in the Interdisciplinary Doctoral Program for Educational Leaders at Duquesne University.
- PURPOSE:** You are being asked to participate in a research project that seeks to investigate the effects that a discourse community model will have upon increasing understanding of climate and its importance. During the study, you will be involved in a dynamic small group engage in conversations that will include discussions and activities, such as on-going reflective journals regarding school climate. At the beginning of the research project the participants will be invited to participant in a short semi-structured interview. The interviews and portions of the group sessions will be taped and transcribed. These are the only requests that will be made of you.
- RISKS AND BENEFITS:** There are no risks greater than those encountered in everyday life. Possible benefits of this study include developing an increased understanding of school climate and its importance. In addition an unintended outcome of the study may be the understanding of the use of a discourse community as the framework for creating a structure for professional interaction.

COMPENSATION: Teacher participation in this project is voluntary. There will be no monetary cost to you.

CONFIDENTIALITY: Your involvement in all parts of this study will remain confidential. Information from the teachers' participation in the interviews, the discourse community process will be recorded and transcribed. Portions of the information may be used within the dissertation. In all situations pseudonyms will be used. All written materials, consent forms, and audiotapes will be stored in a locked file in the researcher's home and retained for five years after study completion. At that time, all materials will be destroyed. Your response(s) will only appear in statistical data summaries.

RIGHT TO WITHDRAW: You are under no obligation to participate in this study. You are free to withdraw your consent to participate at any time.

SUMMARY OF RESULTS: A summary of the results of this research will be supplied to you, at no cost, upon request.

VOLUNTARY CONSENT: I have read the above statements and understand what is being requested of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason. On these terms, I certify that I am willing to participate in this research project.

I understand that should I have any further questions about my participation in this study, I may call David Parker (412.766.4013) Dr. James Henderson (412.396.4880) or Dr. Paul Richer, Chair of the Duquesne University Institutional Review Board 412-396-6326).

Participant's Signature

Date

Researcher's Signature

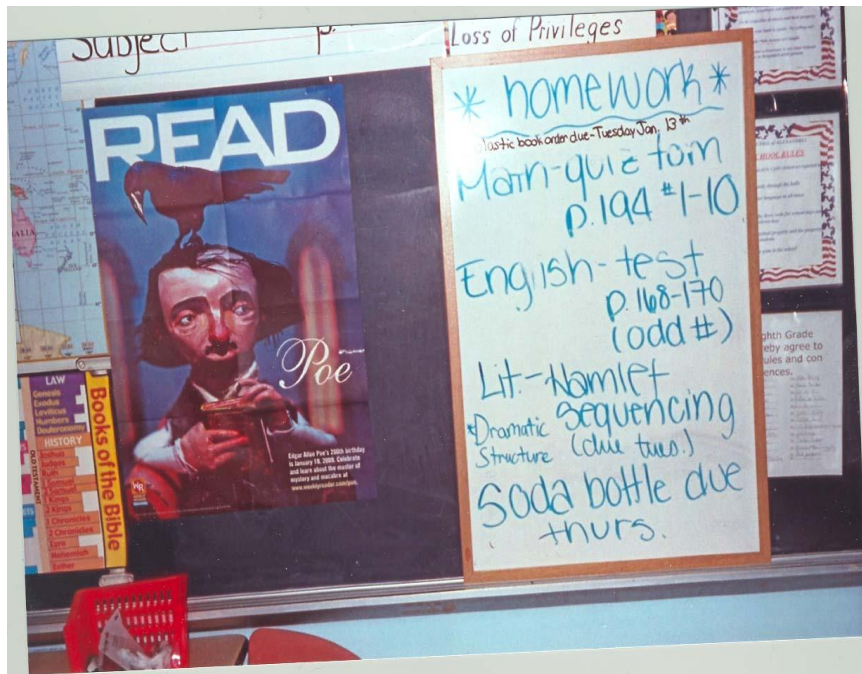
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Appendix G: Teacher Climate Photos









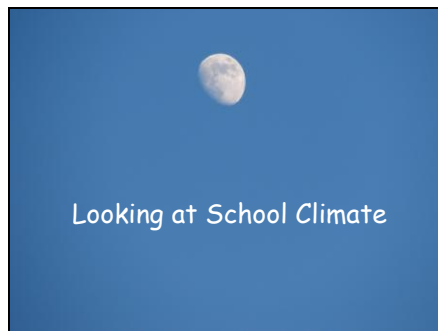


Appendix H: Interactive Power Point Presentation

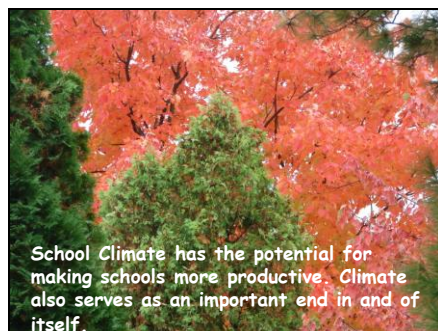
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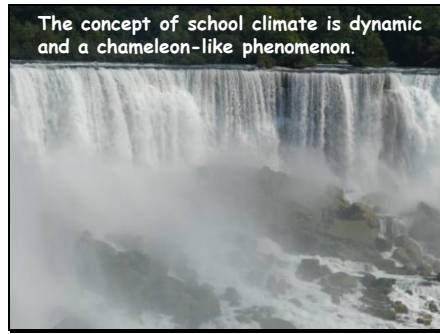
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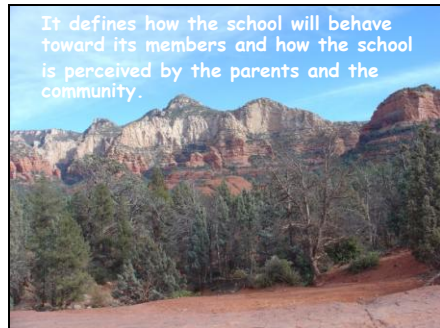
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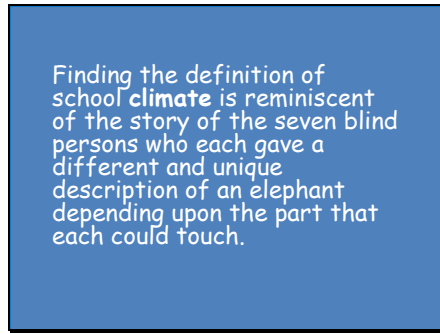
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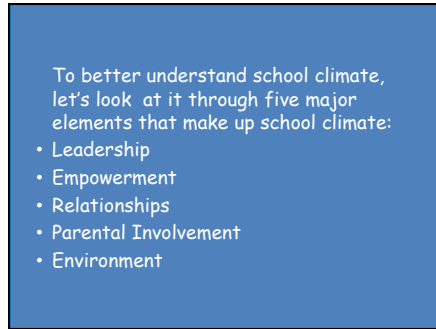
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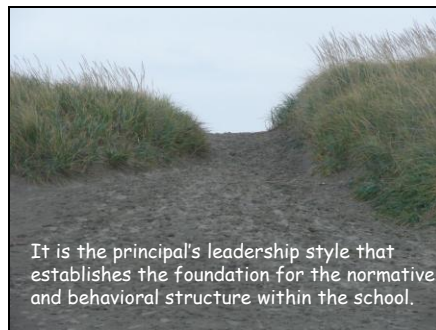
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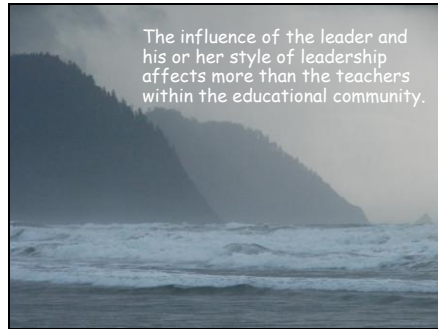
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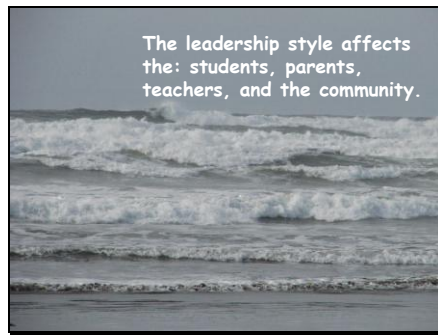
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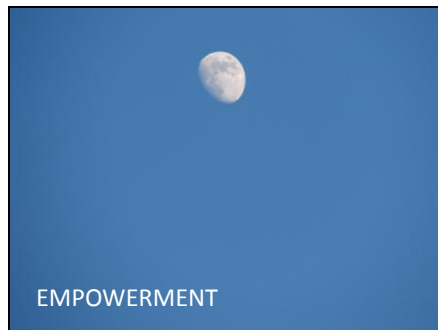
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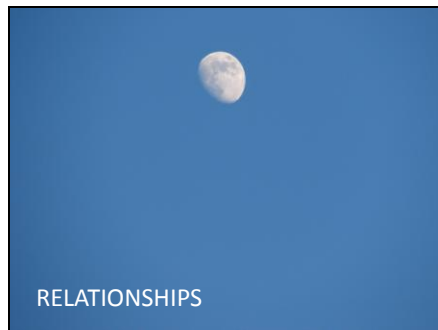
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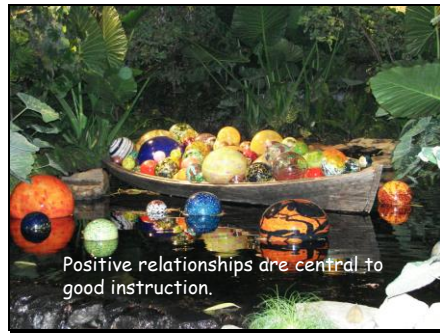
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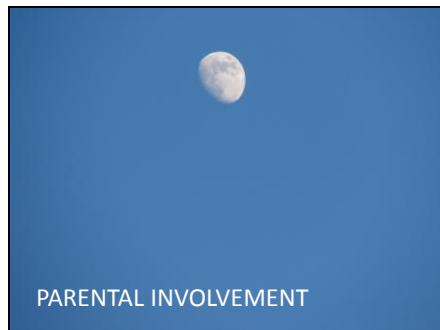
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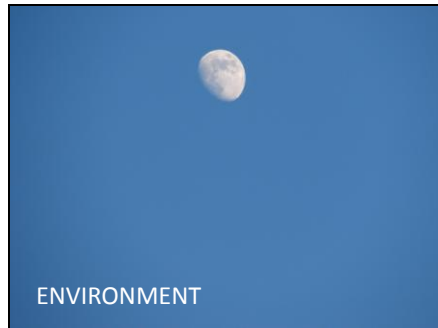
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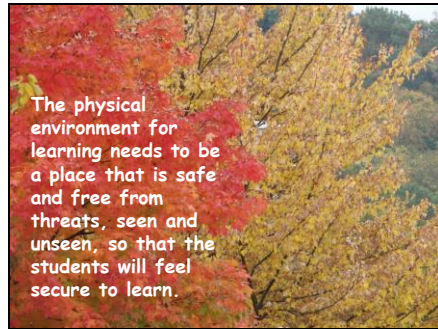
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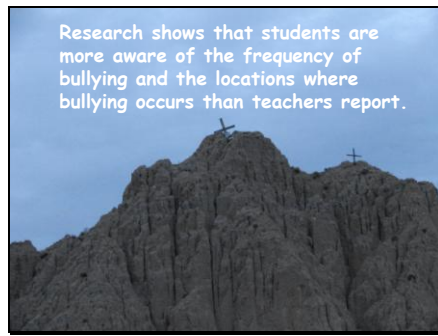
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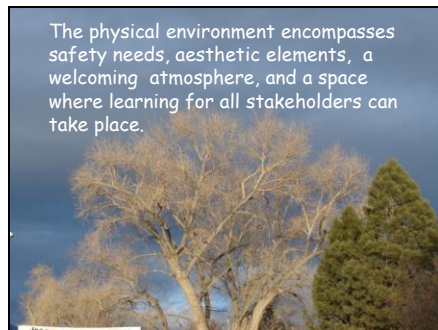
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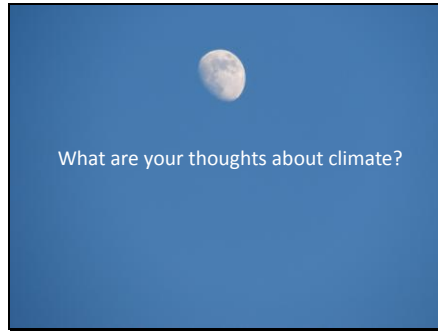
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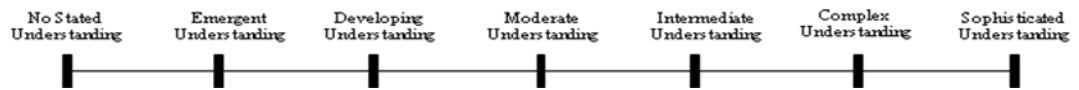
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Appendix I: Climate Understanding Continuum (CUC)



Appendix J: CUC Exemplar Statements

<u><i>Points along the continuum</i></u>	No Stated Understanding	Emergent Understanding	Developing Understanding	Moderate Understanding	Intermediate Understanding	Complex Understanding	Sophisticated Understanding
<u><i>Benchmark Statements</i></u>	I don't know what climate is.	Climate is a feeling.	Climate affects how I behave.	Climate affects how the work is done.	Climate affects everything.	Climate is shaped by beliefs.	Climate is a manifestation of culture.