THE IMPORTANCE OF SCHOOL CLIMATE AND CULTURE

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Reflect on a school in your experience that worked particularly well—one in which teachers and students seemed to thrive and grow. Why was this school such an exciting place for teaching and learning? How did it function? How did people relate to one another? What characteristics of this school stand out? As you describe this school, you are likely to refer to principal leadership, warmth and support among teachers, the amount of emphasis put on getting the work done, sense of purpose, expectations teachers and principals shared and the number of responsibilities teachers assumed.

These descriptions are dimensions of the school’s climate. Seven such descriptors appear persistently in the writings of organizational climate theorists and researchers (see, for example, Campbell et al; 1970; DuBrin, 1984; Likert, 1967; and Payne and Pugh, 1976). The seven are arrayed in exhibit 10 -1 in the form of an organizational climate inventory. As schools differ on these descriptors, they take on different personalities and recalled as functioning particularly well. Now describe a school in your experience that was not functioning very well. Your inventory responses for each of these schools provide a hint at differences in climate typically found when more and less effective schools are contrasted.

Why is Climate Important?

School climate has obvious implications for improving the quality of work life for those who work in schools. But what is the link between climate and teacher motivation, school improvement efforts, student achievement, and other school effectiveness indicators? No easy answer exists, for the relationship is indeed complex. Schools characterized by a great deal of togetherness, familiarity, and trust among teachers may not be more effective—and indeed may be less effective—than schools in which this familiarity does not exist. In this sense, climate is a form of organizational energy whose telling effects on the school depend on how this energy is channeled and directed.

Principals can play key roles in directing climate energy into productive channels. Teachers, for example, often form closely knit and highly familiar groups or cliques. Some of these groups use their climate energy to help make the school work better, but other groups may use the same energy to promote and cause school problems and difficulties. Key is whether the group identifies with, and is committed to, the school and its purposes. The good feeling that

typically results from identification and commitment is referred to by Halpin
and Croft (1962) as espirit. Quality of togetherness among teachers is referred
to as intimacy. The school climate research of Halpin and Croft (1962) found
that the intimacy quality was characteristic of both “open” and “closed” school
climates. Esprit, however, was found to be high in open climate and low in
closed. What conclusions might we reach about the relationship between
school climate and school effectiveness? If one views climate as a condition
representing a school’s capacity to act with efficiency, enthusiasm, and vigor,
then the following generalizations can be made:

1. School improvement and enhanced school effectiveness will not likely
   be accomplished on a sustained basis without the presence of a
   favourable school climate.

2. However, favourable school climates alone cannot bring about school
   improvement and enhanced school effectiveness.

3. Favourable school climates can result in more or less effective
   schooling depending on the quality of educational leadership that
   exists to channel climate energy in the right directions.

4. Favourable school climates combined with quality educational
   leadership are essential keys to sustained school improvement and
   enhanced school effectiveness. Corollary: Unfavourable school
   climate hinder sustained school improvement of the quality of
   educational leadership.

It is in this sense that climate fit into the five forces leadership discussed in
Chapter 5 and depicted in Table 5-17. Climate conceived psychologically as
the shared perceptions of organizational life in the school is a concept related
primarily to the human leadership force. Climates are largely built, shaped
and channeled as a result of effective interpersonal leadership by the principal.
Climate conceived as potential energy to act –the capacity to change, improve
and achieve – is a concept primarily related to the educational leadership force.
School improvement and enhanced effectiveness are products of the proper
channeling of this potential capacity to act. Sound educational leadership
provides the necessary know-how and direction.

The Concept of School Culture

In every school there are observable behavioral regularities defined by the rules
of the game for getting along. These rules are norms that define for people
what is right and correct to do, what is acceptable, and what is expected.
Norms are expressions of certain values and beliefs held by members of the

work group. When trying to understand how norms emerge and work, the metaphor of culture can be helpful. Some experts may debate whether schools really have cultures or not. But the issue is less the reality of culture and more what can be learned by thinking about schools as cultures. The metaphor school culture helps direct attention to the symbols, behavioral regularities, ceremonies, and even myths that communicate to people that underlying values and beliefs that are shared by members of the organization.

**School Climate and School Culture**

How are school climate and school culture linked? Both have similar characteristics, but climate is more interpersonal in tone and substances and is manifested in the attitudes and behaviours of teachers, supervisors, students and principals at work. It is a concept that enables the charting and interrelating of commonalities and consistencies of behavior that define, for better or for worse, the operating style of a school. Climate is concerned with the process and style of a school's organizational life rather than its content and substances.

School culture, by contrast, is more normative than school climate in the sense that it is a reflection of the shared values, beliefs, and commitments of school members across an array of dimensions that include but extend beyond interpersonal life. What the school stands for and believes about education, organization, human relationships; what it seeks to accomplish; its essential elements and features; and the image it seeks to project are the deep rooted defining characteristics shaping the substance of its culture.

**External Adoption and Internal Integration**

Edgar Schein believes that the term culture “should be reserved for the deeper level of basic assumptions and beliefs that are shared by members of an organization, that operate unconsciously, and that define in a basic ‘taken-for-granted’ fashion an organization’s view of itself and its environment” (Schein, 1985:6). The concept of culture is very important, for its dimensions are much more likely to govern what it is that people think and do than is the official management system. Teachers, as suggested earlier, are much more likely to teach in ways that reflect the shared assumptions and beliefs of the faculty as a whole than they are in ways that administrators want, supervisors say, or teacher evaluation instruments require.

Following Parsons (1951), Merton, (1957), and Argyris (1964), Schein (1985) points out that schools and other organizations must solve two basic problems if they are to be effective: external adoption and survival and internal integration. The problems of external adoption and survival are themed to:

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1. Mission and strategy (how to reach a shared understanding of the core mission of the school, and its primary task)

2. Goals (developing a consensus on goals that are linked to the core mission)

3. Means (reaching consensus on the managerial and organizational means to be used to reach goals)

4. Standards (reaching consensus on the criteria to be used to determine how well the group is doing in fulfilling its goals and whether it is meeting its commitments to agreed upon processes)

5. Correction (reaching consensus on what to do if goals are not being met) (Schein, 1985).

The problems of internal integration are themed to:

1. Developing a common set of understandings that facilitates communication, organizes perceptions, and helps to categorize and make common meanings.

2. Developing criteria for determining who is in and who is out and how one determines membership in the group.

3. Working out the criteria and rules for determining who gets, maintains and loses power.

4. Working out the rules for peer relationships and the manner in which openness and intimacy are to be handled as organizational tasks are pursued.

5. "Every group must know what its heroic and sinful behaviours are; what gets rewarded with property, status and power; and what gets punished in the form of withdrawal of the rewards an, ultimately, excommunication" (Schein, 1985:66).

6. Dealing with issues of ideology and sacredness: "Every organization, like every society, faces unexplainable and inexplicable events, which must be given meaning so that members can respond to them and avoid the anxiety of dealing with the unexplainable and uncontrollable" (Schein, 1985:66).

As issues of external adoption and internal integration are solved, schools and other organizations are better able to give full attention to the attainment of their goals and have the means for allowing people to derive sense and meaning from their work lives—to see their work as being significant.

In summarizing his stance, Stein (1985) notes that culture is “a pattern of basic assumption—invented, discovered or developed by a given group as it learns to cope with its problems of external adaptation and internal integration—that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems” (9). Since the assumption have resulted in decisions and behaviours that have worked repeatedly, they’re likely to be taken for granted. This point is important because the artifacts of culture, such as symbols, rites, traditions and behaviours are different from the actual content and substance of culture; the basic assumptions govern what is thought to be true, what is right, and for all intents and purposes what is reality for the school. As mentioned in earlier discussions of culture, the central zone that Shils (1961) speaks of is composed of assumptions, values and beliefs. The values and beliefs are often manifest, but the assumptions are typically tacit.

Levels of Culture

Since assumptions and basic beliefs are typically tacit, they are inferred from students of cultures such as the school’s climate (Dwyer, 1989) and the rites and rituals of the school’s organizational life (Deal, 1985). To account for both, it is useful to think about dimensions of school culture as existing at at least four levels (Schein, 1981; Dyer, 1982; Schein, 1985). The most tangible and observable level is represented by the artifacts of culture as manifested in what people say, how people behave, and how things look. Verbal artifacts include the language systems that are used, stories that are told, and examples that are used to illustrate important points. Behavioral artifacts are manifested in the ceremonies and rituals and other symbolic practices of the school. The interpersonal life of the school as represented by the concept of school climate is an important artifact of culture.

Less discernable but still important is the level of perspectives. Perspectives refer to the shared rules and norms to which people respond, the commonness that exists among solutions to similar problems, how people define the situations they face, and what are the boundaries of acceptable and unacceptable behaviours. Often, perspectives are included in statements of the school’s purposes or its covenant when these include ways in which people are to work together as well as the values that they share.

The third level is that of values. Values provide the basis for people to judge or evaluate the situations they face, the worth of their actions and activities, their

priorities and the behaviours of people with whom they work. Values not only specify what is important but often the things that are not important. In schools the values are arranged in a fashion that represents the covenant that the principal, teachers and others share. This covenant might be in the form of an educational or management platform, statements of school philosophy, mission statements, and so on.

The fourth level is that of assumptions. Assumptions are “the tacit beliefs that members hold about themselves and others, their relationships to other persons, and the nature of the organization in which they live. Assumptions are the non-conscious underpinnings of the first three levels – that is, the implicit, abstract axioms that determine the more explicit system of meanings” (Lundberg, 1985:172).

**Indentifying the Culture of Your School**

The four levels provide a framework for analyzing the culture of a school. Since are difficult to identify firsthand, they often must be inferred from what is at the artifacts, perspectives and values levels. Much can be learned from examining the school’s history. Terrence E. Deal (1985) points out, for example, that

> [E]ach school has its story of origin, the people or circumstances that launched it, and the who presided over its course thereafter. Through evolutionary development – crisis and resolutions, internal innovations and external pressures, plans and chance occurrences the original concept was shaped and reshaped into an organic collection of traditions and distinctive ways. Throughout a school’s history, a parade of students, teachers, principal and parents cast sustaining memories. Great accomplishments meld with dramatic failure to form a potentially cherishable lore. (615)

The following questions might be helpful in uncovering a school’s history. How does the school’s past live in the present? What traditions are still carried on? What stories are told and retold? What events in the school’s history are overlooked or forgotten? Are heroes and heroines exist among teachers and students whose idiosyncrasies and exploits are still remembered? In what ways are the school’s traditions and historical incidents modified through reinterpretation over the years? Can you recall, for example, a historical event that has evolved from fact to myth? Believing that an organization’s basic assumption about itself can be revealed through its history, Schein (1935) suggests that the organization’s history be analyzed by identifying all major crisis, crucial transitions, and other times of high emotion. For each event identified reconstruct how management dealt with the issue, how it identified its role, what it did and why. Patterns and themes across the various events identified should then be analyzed and checked against current practices. The next step is to identify the assumptions are still relevant for present actions.

To uncover beliefs, ask what are the assumptions and understandings that are shared by teachers and others, though they may not be explicitly stated. These may relate to how the school is structured, how teaching takes place, the roles of teachers and students, what is believed about discipline, the relationship of parents to the school. Sometimes assumptions and understandings are written down somewhere in the form of a philosophy or other value statements. Whether that is the case or not, beliefs can best be understood by being inferred from examples of current practices.

According to Schein, one important set of basic assumptions revolves around the theme of what is believed about human nature and how these beliefs then affect policies and decisions. To address this issue, he suggests that an attempt be made to identify organizational heroes and villains, successful people and those who are less successful, and compare the stories that are told about them. He recommends as well that recruitment selection and promotion criteria be examined to see if indeed they are biased toward selecting a certain type of person into the organization and promoting that type. An analysis of who gets rewarded and who gets punished can also be revealing. Do patterns emerge from this sort of analysis? Are there common assumptions about people that begin to emerge?

Values can be identified by asking what things the schools prizes. That is, when teachers and principals talk about the school, what are the major and recurring value themes underlying what they say? When problems emerge, what are the values that seem to surface as being relied upon in developing solutions?

Norms and standards can be identified by asking what are the oughts, shoulds, do's and don'ts that govern the behavior of teachers and principals, and examining what are the accepted and recurring ways of doing things, the patterns of behavior, habits and rituals that prevail?

Corwith Hansen (1986) suggests that teachers discuss the following questions when seeking to identify the culture of their school: Describe your work day both in and outside of the school. On what do you spend your time and energy? Given that most students forget what they learn, what do you hope your student will retain over time from your teaching? Think of students that you are attracted to – those that you admire, respect, or enjoy. What common characteristics do these students share? What does it take for a teacher to be successful? What do you remember about past faculty members and students in your school? If you were to draw a picture or take a photo or make a collage that represented some aspect of your school, what would it look like? How are students rewarded?

The Power of Culture

School culture represents a double-edged sword for principals, if allowed to emerge and progress informally, principals cannot be sure whether basic assumptions and ensuing practices will be aligned with goals and purposes that support teaching and learning. Sometimes informal or wild cultures actually result in the development of a normal system that forces teachers to work in ways that compromise official goals and purposes. When domesticated, however, the school culture can replace detailed plans and systems of monitoring as quality-control measures. Further, culture provides a means for coordinating the efforts of people even though structurally the school may be loosely connected. As Bresser and Bishop explain:

*If values, beliefs and exemplars are widely shared, formal symbolic generalizations (such as detailed plans, monitoring systems and other controls) can be parsimonious. In effect, a well developed organizational culture directs and coordinates activities, by contrast, if an organization is characterized by many different and conflicting values, beliefs and exemplars, those authority dominates the organization cannot expect that their preferences for action will be carried out voluntarily and automatically. Instead, considerable direction and coordination will be required, resulting in symbolic generalizations formalized in plans, procedures, programs, budget and so on. (quoted in Welck, 1985:383)*

When wild cultures are in place or when beliefs and values emerge either in idiosyncratic ways or are in conflict with each other, more emphasis needs to be given to detailed planning and the other management functions.

*There is also a greater probability that the detailed plans will not be implemented as intended, because they will be interpreted in diverse ways and lead to divergent actions. Thus the substitutability of culture for strategic plans may be asymmetrical. Culture can substitute for plans more effectively than plans can substitute for culture. (Welck, 1985:383)*

The Dark Side of School Culture

The benefits of a strong school culture are clear. Culture represents an effective means of coordination and control in a loosely connected and nonlinear world. Its covenant or center of purposes and shared values represents a source of inspiration, meaning, and enhanced commitment and performance that are beyond expectations. And as a result the school is better able to achieve its goals.

But there is a dark side to the concept of school culture, as well. Weick (1985) points out, for example, that

A coherent statement of who we are makes it harder for us to become something else. Strong cultures are tenacious cultures. Because a tenacious culture can be a rigid culture that is how to detect changes and opportunities and slow to change once opportunities are sensed, strong cultures can be backward, conservative instruments of adaptation. (385)

Further, the presence of a strong norm system in a school can collectively program the minds of people in such a way that issues of reality come into question. If this is carried to the extreme, the school might come to see reality in one way but its environment in another. And, finally, there is the question of rationality. As commitment to a course of action increases, people become less rational in their actions (Staw, 1984). Strong cultures are committed cultures, and in excess, commitment takes its toll on rational action.

Schein points out that as organizations mature, the prevailing culture becomes so entrenched that it becomes a constraint on innovation. Culture preserves the glories of the past and hence becomes valued as a source of self-esteem and as a means of defense rather than for what it represents and the extent to which it serves purposes (Schein, 1995).

**The importance of a Loyal Opposition**

If the purposes and covenants that constitute cultural centers are highly dynamic and fluid, school cultures are likely to be weak and ineffectual. By the same token, if they are cast in granite they can squelch individuality and innovation. The alternatives is to build a resilient culture – one that can bend to change here and there but not break, that can stretch in a new direction and shrink from an old but still maintain its integrity, a culture that is able to bounce back and recover its strength and spirit, always maintaining its identity. Key to resiliency is the cultivation of a small but energetic loyal opposition made of

> People with whom we enjoy an honest, high-trusting relationship but who have conflicting visions, goals or methods.... The task of the (loyal opposition) is to bring out the best in us. We need to be grateful for those who oppose us in a high-trust way, for they bring the picture of reality and practicality to our plans. (Block, 987:135-136)

Block believes that it is important when working with the loyal opposition that the leader communicates the extent to which they are valued. Leaders can do this, in his view, by reaffirming the quality of the relationship and the fact that it’s based on trust. They should be clear in stating their positions and the reasons why they hold them. They should also state in a neutral way what they think positions of the loyal opposition are. The leader reasons as follows:

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We disagree with respect to purpose, goals, and perhaps even visions. Our task is to understand their position. Our way of fulfilling that task is to be able to state to them their arguments in a positive way. They should feel understood and acknowledged by our statement of their disagreement with us. (Block, 1987: 1.17)

With this kind of relationship in place, the leadership and the loyal opposition are in a position to negotiate differences in good faith.

The effects of school culture and climate on student achievement

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The purpose of the study was to investigate whether Exemplary, Recognized and Acceptable schools differ in their school climates, as measured by the 10 dimensions of the Organizational Health Inventory. Significant differences were found on all 10 dimensions of the Organizational Health Inventory, with Exemplary schools out-performing Acceptable schools. No statistical significance was found between Exemplary and Recognized schools. Statistical significance was found, with Recognized schools out-performing Acceptable schools on the Organizational Health dimensions of Goal focus and Adaptation. The findings of this study suggest that students achieve higher scores on standardized tests in schools with healthy learning environments.

Introduction

Organizational theorists have long reported that paying attention to culture is the most important action that a leader can perform. Educational theorists have likewise reported that the principals’ impact on learning is mediated through the climate and culture of the school and is not a direct effect (Hallinger and Heck 1998). Watson (2001) warned us that if the culture is not hospitable to learning then student achievement can suffer. Fink and Resnick (2001) reminded us that school principals are responsible for establishing a pervasive culture of teaching and learning in each school.

A closer look at the relationship of specific aspects of school culture to student learning is needed, however. This study identified three categories of schools based on academic achievement of students. These categories are ‘Exemplary’ schools, ‘Recognized’ schools and ‘Acceptable’ schools, as measured by the State of Texas Accountability Rating System. These three categories of schools are then compared on the 10 dimensions of school climate as measured by the Organizational Health Inventory (OHI).
There is substantial evidence in the literature to suggest that a school principal must first understand the school's culture before implementing change (Leithwood et al. 2001). Bulach (1999) stated that a leader must identify a school's existing culture before attempting to change it. Leonard (1999) studied the dynamics and complexities of a school culture when teacher values were compatible or in conflict with school culture, with predictable results. Mortimore (2001) warned us that we should concentrate on establishing more knowledge about the complex interactions between culture and schooling. Lakoski (2001) studied the claim that it is necessary to change an organization's culture in order to bring about organizational change and concluded that there is a causal relationship between the role of the leader and organizational learning. Taylor and Williams (2001) argued that as accountability through tests has become a threat, school principals need to work on long-term cultural goals in order to strengthen the learning environment. Fullan (2001) contended that the concept of instructional leader is too limited to sustain school improvement. He promoted the idea that school principals serve as change agents to transform the teaching and learning culture of the school.

Testimony from successful school principals suggests that focusing on development of the school's culture as a learning environment is fundamental to improved teacher morale and student achievement. Nomura (1999) advised that school principals understand their school's culture. Reavis et al. (1999) explored how a new school principal at a historically low performing high school brought about changes in the school culture and how it positively affected student achievement. Kytle and Bogotch (2000) examined school reform efforts through a 'reculturing', rather than a 'restructuring', model. They found that real and sustained change is more readily achieved by first changing the culture of the school, rather than by simply changing the structures of the way the school operates and functions.

School principals who choose to lead rather than just manage must first understand the school’s culture. It is important to realize that culture is complex because it has very unique and idiosyncratic ways of working. When an organization has a clear understanding of its purpose, why it exists and what it must do and who it should serve the culture will ensure that things work well. When the complex patterns of beliefs, values, attitudes, expectations, ideas and behaviours in an organization are inappropriate or incongruent the culture will ensure that things work badly. Successful school principals comprehend the critical role that the organizational culture plays in developing a successful school.

\textit{Relationship between culture and climate}

Organizational culture and climate have been described as overlapping concepts by theorists (Miner 1995). Hoy \textit{et al.} (1991) offered a distinction between climate and culture, with school or organizational climate being viewed from a psychological perspective and school culture viewed from an anthropological perspective. Differences between school climate and culture are highlighted in organizational studies. Often the climate is viewed as
behaviour, while culture is seen as comprising the values and norms of the school or organization (Hoy 1990, Heck and Marcoulides 1996). Lunenburg and Ornstein (2004) described organizational climate as the total environmental quality within an organization and believe that the recent attention to the effectiveness of public schools and their cultures has shed more interest on the importance of climate. The relationship between culture and climate was supported by Schein (1985, 1996) when he stated that norms, values, rituals and climate are all manifestations of culture. In addition, the relationship of culture and climate is further supported by McDougall and Beattie (1998), as well as by the early studies of Schneider and Reichers (1983).

Even though the conceptual distance between culture (shared norms) and climate (shared perceptions) is small, it is nonetheless real (Hoy and Feldman 1999). Hoy and Feldman believed that this difference is meaningful and crucial because shared perceptions of behaviour are more readily measured than shared values. They described climate as having fewer abstractions than culture (more descriptive and less symbolic) and concluded that climate presents fewer problems in terms of empirical measurements. Climate is the preferred construct when measuring the organizational health of a school.

**Climate**

Freiberg and Stein (1999) described school climate as the heart and soul of the school and the essence of the school that draws teachers and students to love the school and to want to be a part of it. This renewed emphasis on the importance of school climate was further reinforced by a meta-analysis study performed by Wang et al. (1997), which found that school culture and climate were among the top influences in affecting improved student achievement. Their study also found that state and local policies, school organization and student demographics exerted the least influence on student learning.

According to Hoy and Tarter (1997), unhealthy schools are deterred in their mission and goals by parental and public demands. Unhealthy schools lack an effective leader and the teachers are generally unhappy with their jobs and colleagues. In addition, neither teachers nor students are academically motivated in poor schools and academic achievement is not highly valued. Healthy schools that promote high academic standards, appropriate leadership and collegiality provide a climate more conducive to student success and achievement (Hoy et al. 1990). The overwhelming majority of studies on school climate in the past have focused on teachers and leader–teacher relations and subsequent issues of job satisfaction. Miller stated 14 years ago that school climate has rarely been studied in relation to its effect on student achievement (Miller 1993). In recent years the emphasis on climate has shifted from a management orientation to a focus on student learning (Sergiovanni 2001). The reform efforts of the last 30 years have failed to improve student achievement in schools because they failed to adequately address the importance of the culture and climate of schools (DuFour and Eaker 1998). The first major purpose of a school is to create and provide a culture that is hospitable to human learning (Barth 2001).
Structural changes made to improve schools without addressing the culture and organizational health of schools have predictably not been successful (Sarason 1996).

Since the culture and climate of the school affects student achievement (Maslowsk 2001, Hoy et al. 1990, 2006) and the school principal directly influences the culture and climate (Hallinger and Heck 1998, Leithwood et al. 2004), the question should be asked: what characteristics of school climate should the principal address in order to most effectively encourage and increase student achievement?

Importance of the school principal

There is substantial evidence concerning the importance of leadership in creating good schools (Freiberg 1999, Blase and Kirby 2000, Donaldson 2001, Sergiovanni 2001, Snowden and Gorton 2002). Ultimately, the relationships that shape the culture and climate of the school are strongly influenced by the school principal. ‘In schools where achievement was high and where there was a clear sense of community, we found invariably that the principal made the difference’ (Boyer 1983: 219). Hallinger and Heck (1998) proposed that the principal does not directly affect student achievement, but rather indirectly effects learning by impacting on the climate of the school.

This perspective on indirect effects also occurs in more recent and more complex models for research into principal leadership. Leadership is no longer proposed as having a direct influence on learning outcomes but as having an indirect influence through the way it has an impact on school organization and school culture. (Witziers et al. 2003)

Current research has additionally suggested that the principal’s influence has an indirect effect on learning and is mediated by their interactions with others, situational events and the organizational and cultural factors of the school (Hallinger and Heck 1998, Hoy et al. 2006, Leithwood et al. 2004). Leithwood (1992) referred to principals as ‘change agents’ and suggested that they impact on the school through transformation of the school culture. Maslowski (2001) further stated that an association exists between leadership values and behaviours and school culture and that different school cultures can be identified with different consequences for student outcomes. Furthermore, research studies exploring the indirect effect of principal leadership on student outcomes have suggested that educational leadership is related to the organization and culture of the school, which is related in turn to student achievement (Witziers et al. 2003).

Fairman and McLean (1988), in their work with dimensions of organizational health, believed that diagnosing the climate or health of schools in order to capitalize on existing leadership strengths and to identify improvement priorities should be the goal of every school principal. Deal and Peterson (1999) defined symbolic leadership as the ability to understand and shape the culture of the school. A school principal that creates a culture that promotes and encourages learning is absolutely essential in order to improve student achievement in schools (Freiberg 1999, Sergiovanni 2001). Successful leaders have learned to view their organizations’ environment in
a holistic way. This wide-angle view is what the concept of school culture offers school principals. It gives them a broader framework for understanding difficult problems and complex relationships within the school. By deepening their understanding of school culture, these leaders will be better equipped to shape the values, beliefs and attitudes necessary to promote a stable and nurturing learning environment which impacts student performance (Bosset et al. 1982). The connection between effective school cultures and leadership is supported by educational research (Leithwood and Jantzi 1990, Leithwood 1992, Hallinger and Heck 1998, Freiberg 1999, Sergiovanni 2001, Leithwood et al. 2004).

Focus on climate

School principals who care and focus on the specific aspects of the dimensions of school climate that affect the culture of the school promote student achievement (Pellicer 2003). As stated by Fairman and Clark (1982) in more precise and descriptive language, healthy schools are schools that exhibit the following types of cultures, also known as dimensions of organizational health: goal focus, communication, optimal power equalization, resource utilization, cohesiveness, morale, innovativeness, autonomy, adaptation and problem-solving adequacy.

In addition, there are specific aspects or dimensions of the climate that significantly influence student achievement in schools (Busch 2003, McLean et al. 2005).

Comparisons between school climate and student achievement can help school principals’ focus their efforts to improve student achievement. Sarason (1996) stated that if we want to change and improve the outcomes of schooling for both students and teachers, there are features of the school culture that must be changed. The efforts of policy-makers and school principals to improve student learning in American schools have had less than the expected results education leaders need to reframe and refocus their leadership efforts. Simply altering the structure and expectations of schools has failed over the last 50 years. Schlechty (1997) suggested that structural change that is not supported by cultural change will fail because it is in the culture that any organization finds meaning and stability. Educational studies of school change have isolated the organizational culture of schools as a critical factor to the successful improvement of teaching and learning (Fullan 2001). Deal and Peterson (1999) stated that study after study has confirmed that the culture of the school and its resulting climate must support reform or improvement will not occur. Improvements in student achievement will happen in schools with positive and professional cultures that reflect a positive school climate.

Summary

Strong school cultures have better motivated teachers. Highly motivated teachers have greater success in terms of student performance and student outcomes. School principals seeking to improve student performance should
focus on improving the school’s culture by getting the relationships right between themselves, their teachers, students and parents. Measuring school climate and using these assessments to focus the school’s goals on learning is important for the process of improving the school’s academic performance.

Method

Participants

The sample comprised 29 schools located in a large suburban school district in southeast Texas. The Texas Education Agency assigned one of three ratings to the schools based on student performance on the Texas Assessment of Academic Skills (TAAS). Test results from 24,684 students were used as the basis for these ratings. Teachers in each of the schools rated the organizational health of their respective unit using the OHI. A total of 1727 teachers completed the survey. The individual school was used as the unit of analysis for the study.

Instrumentation

Organizational Health Inventory. Organizational health as conceptualized by Matthew Miles (1971) consists of 10 key internal dimensions: Goal focus, Communication adequacy, Optimal power equalization, Resource utilization, Cohesiveness, Morale, Innovativeness, Autonomy, Adaptation and Problem-solving adequacy. These 10 dimensions characterize aspects of climate that address the successful interaction among the members of the organization as well of the organization’s ability to deal with stress from the environment. They also provide diagnostic data that can assist leaders in recognizing the effectiveness of the organization (McLean et al. 2006). The dimensions provide important data that inform the leadership styles of principal in addressing the aspect of climate that need improvement.

- Goal focus is the ability of persons, groups or organizations to have clarity, acceptance and support of goals and objectives.
- Communication adequacy is when information is relatively distortion free and travels both vertically and horizontally across the boundaries of an organization.
- Optimal power equalization is the ability to maintain a relatively equitable distribution of influence between members of the work unit and the leader.
- Resource utilization is the ability to involve and coordinate the efforts of members of the work unit effectively and with a minimal sense of strain.
- Cohesiveness is when persons, groups or organizations have a clear sense of identity. Members feel attracted to membership in the organization. They want to stay with it, be influenced by it and exert their own influence within it.
- Morale is when a person, group or organization has feelings of well-being, satisfaction and pleasure.
• Innovativeness is the ability to be and allow others to be inventive, diverse, creative and risk-takers.
• Autonomy is when a person, group or organization can maintain ideals and goals as well as meet needs whilst managing external demands.
• Adaptation is the ability to tolerate stress and maintain stability while being responsive to the demands of the external environment.
• Problem-solving adequacy is an organization’s ability to perceive problems and solve them using minimal energy. The problems stay solved and the problem-solving mechanism of the organization is maintained and/or strengthened.

Recognizing a need to operationally define these dimensions, a 3 year research and development study was done which resulted in the development of the Organizational Health Instrument (OHI) (Johnstone 1988). The OHI consists of 80 items, 8 for each of the 10 dimensions, with each being rated on a 5 point Likert-type scale. The instrument has been widely used to provide data about the internal working of schools and other organizations. The OHI has been proved to be a reliable measure. The overall split-half reliability coefficient of the OHI was 0.98 for the 40 item split. The highest reliability coefficient was 0.95 for Goal focus and the lowest was 0.72 for Adaptation. The overall alternative form reliability for the OHI was 0.76 (Johnstone 1988).

After administration of the OHI a percentile score is assigned to each of the 10 dimensions. The percentile scores are determined from the raw scores gathered from administration of the OHI. For statistical analysis the percentile scores were converted to normal curve equivalents (NCE).

The Texas Assessment of Academic Skills (TAAS). This was used as the basis for assigning an accountability rating to schools. Schools are rated as Exemplary, Recognized Acceptable or Low-performing. The TAAS has been used in the state of Texas for the past 10 years. It is a criterion-referenced test that is used to measure the academic skill levels of students in reading, mathematics and writing. Students’ performance on the TAAS in the different demographic subgroups, White, Hispanic, African-American and Low socio-economic, are used to assign one of the following accountability ratings: Exemplary, Recognized, Acceptable or Low-performing. Every government funded school in the state receives an accountability rating.

TAAS test reliabilities are based on internal consistency measures, in particular on the Kuder–Richardson Formula 20 (KR-20). Most KR-20 reliabilities are in the high 0.80 to low 0.90 range (Texas Student Assessment Program Technical Digest 2000).

Procedure

The accountability rating for all schools in Texas was announced during the spring semester of the school year. The standards for school accountability ratings are as follows.
- Exemplary—at least 90% of the students who were tested passed and 1% or fewer of students dropped out in Grades 7–12.
- Recognized—80–89% of the students who were tested passed and 1.1–3% of students dropped out in Grades 7–12.
- Acceptable—50–79% of the students who were tested passed and 3.1–5.5% of students dropped out in Grades 7–12.
- Low-performing—less than 50% of the students who were tested passed and over 5.5% of students dropped out in Grades 7–12.

The Texas Education Agency publishes this data each year.

The OHI was administered to all 1727 teachers in the 29 schools within the district. Sixteen of the schools were rated as Exemplary, seven schools were rated as Recognized and six were rated Acceptable. None of the 29 schools in the district was classified as Low-performing. Percentile scores on each of the dimensions were converted to NCEs for analysis purposes.

Analysis

The three categories of schools were compared across the 10 subtests of the OHI using a multivariate analysis of variance (MANOVA). When warranted, post hoc comparisons using Tukey's Honestly Significant Differences (HSD) were made.

Results

Descriptive statistics, based on NCE scores, were used to report the means and standard deviations on each of the 10 rating scales across the three types of schools. These are reported in Table 1. The results of the MANOVA indicted significant differences between the Exemplary, Recognized and Acceptable categories of schools across each of the 10 subtests of the OHI. The MANOVA yielded a significant main effect ($F = 3.22$, $df = 2, 34$, $p < 0.001$) using Wilks' $\lambda$. Results for the MANOVA, subsequent univariate ANOVAs and post hoc comparisons using Tukey's HSD are also shown in Table 1.

For each of the 10 dimensions of organizational health statistical significance was found at $p < 0.05 \alpha$, indicating that Exemplary schools (superscript a) out-performed Acceptable schools (superscript b) on student achievement, as measured by the TAAS. In other words, each of the schools that demonstrated higher student achievement as shown by their Exemplary rating also demonstrated healthier climates than schools with Acceptable ratings. The Exemplary schools consistently demonstrated higher scores on each of the 10 dimensions of organizational health than Acceptable schools. The schools with higher student achievement consistently exhibited healthier school climates.

However, post hoc comparisons using Tukey's HSD indicate that statistical significance was not found between Exemplary schools and Recognized schools or Recognized schools and Acceptable schools. Two exceptions to the pattern emerged in the data analysis: In the organizational health
Table 1. Differences between exemplary, recognized and acceptable schools on 10 dimensions of organizational health

<table>
<thead>
<tr>
<th>Variable</th>
<th>Exemplary</th>
<th>Recognized</th>
<th>Acceptable</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal focus</td>
<td>68.60 ± 9.75ₐ</td>
<td>61.19 ± 15.93ₐ</td>
<td>39.10 ± 16.43ᵇ</td>
<td>11.49ᶜ</td>
</tr>
<tr>
<td>Communication</td>
<td>70.66 ± 15.45ᵃ</td>
<td>62.17 ± 21.14ᵃᵇ</td>
<td>48.97 ± 18.23ᵇ</td>
<td>3.43ᵈ</td>
</tr>
<tr>
<td>Power equalization</td>
<td>65.29 ± 13.46ᵃ</td>
<td>54.71 ± 19.39ᵃᵇ</td>
<td>43.93 ± 16.75ᵇ</td>
<td>4.30ᵈ</td>
</tr>
<tr>
<td>Resource utilization</td>
<td>70.46 ± 13.97ᵃ</td>
<td>64.77 ± 22.15ᵇ</td>
<td>42.40 ± 16.00ᵇ</td>
<td>6.29ᶜ</td>
</tr>
<tr>
<td>Cohesiveness</td>
<td>66.91 ± 13.34ᵃ</td>
<td>58.91 ± 23.95ᵇ</td>
<td>35.77 ± 18.45ᵇ</td>
<td>7.04ᶜ</td>
</tr>
<tr>
<td>Morale</td>
<td>70.33 ± 16.21ᵃᵇ</td>
<td>61.17 ± 24.89ᵇ</td>
<td>43.28 ± 23.40ᵇ</td>
<td>4.01ᵈ</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>75.19 ± 16.28ᵃᵇ</td>
<td>67.61 ± 26.29ᵇ</td>
<td>43.65 ± 22.19ᵇ</td>
<td>4.40ᵈ</td>
</tr>
<tr>
<td>Autonomy</td>
<td>67.21 ± 12.64ᵃᵇ</td>
<td>65.66 ± 22.87ᵇ</td>
<td>463.77 ± 18.78ᵇ</td>
<td>4.49ᵈ</td>
</tr>
<tr>
<td>Adaptation</td>
<td>71.71 ± 9.93ᵃ</td>
<td>60.96 ± 24.15ᵃ</td>
<td>33.75 ± 19.56ᵇ</td>
<td>11.87ᶜ</td>
</tr>
<tr>
<td>Problem solving</td>
<td>67.30 ± 14.84ᵃᵇ</td>
<td>60.93 ± 20.29ᵇ</td>
<td>43.13 ± 17.54ᵇ</td>
<td>4.54ᵈ</td>
</tr>
</tbody>
</table>

ᵇ, Means ± SD sharing a common superscript are not significantly different by Tukey HSD comparison.
ᶜ, p < 0.001.
ᵈ, p < 0.05.

dimensions Goal focus and Adaptation Recognized schools did out-perform Acceptable schools (note the absence of a superscript b). While the standard deviations, particularly for the Acceptable schools, were quite large, the estimated effect sizes for group differences ranged from 1.11 to 1.80, indicating substantial across-group variability.

These findings suggest that the dimensions Goal focus and Adaptation describe aspects of school health and culture that are crucial to the academic success of students within the school. The ability of persons, groups or organizations to have clarity, acceptance, and support (Goal focus) and the ability of organizations to tolerate stress and maintain stability while being responsive to the demands of the external environment (Adaptation) represent dimensions of the school climate that show the greatest variance when looking at differences between the climates of Recognized and Acceptable schools.

Discussion

Exemplary schools were found to possess healthier climates than Acceptable schools, which reported lower organizational health scores. The OHI survey measures organizational health by asking questions that relate to various aspects of the school environment. Eleven of the 80 questions comprising the OHI refer directly to the effective performance of the principal as rated by the teachers of the school.

Recommendations and limitations

The study found that Exemplary, Recognized and Acceptable schools varied with regard to organizational health. The organizational dimensions Goal focus and Adaptation were most effective in discriminating between the cultures of Recognized and Acceptable schools. Since these were the only
two dimensions that exhibited statistical significance between these categories of school cultures, it follows that Goal focus and Adaptation justify special attention when developing a healthy school climate.

Since Goal focus and Adaptation accounted for the greatest variance between schools rated Recognized and Acceptable on student achievement, how do these dimensions affect the climate of the school and how are they affected by leadership? First, research suggests that one of the most important actions that a principal initiates within a school is to promote a strong vision for the organization (Leithwood et al. 2004). When the principal supports clear goals for the school that are accepted and supported by the staff, then organizational health scores will be higher, reflecting his/her leadership influence on the climate. Likewise, when the principal develops and supports structures within the school that allow the organization to tolerate stress and maintain stability while at the same time effectively coping with the demands of the environment, he/she has effectively improved the school's ability to adapt. It is through the principal’s ability to interact with the climate of the school in a manner which improves Goal focus and Adaptation that the learning environment is improved. The findings of this study suggest that when principals interact with the climate of the school in ways that increase Goal focus and build structures that support Adaptation the climate will more effectively enhance learning for students.

More study is needed to address the associations between principal leadership behaviours and Goal focus and Adaptation within schools. What aspects or styles of leadership are most closely related to improved Goal focus and Adaptation? This question is significant because, as stated earlier, it is through their interactions with the climate that principals most effectively have an impact on students’ achievement (Hallinger and Heck 1998). Hackman and Wageman (2007) suggested that different leaders can behave in their own unique manner and still achieve effective leadership results. Therefore, is it the principals’ specific leadership style or his/her use of deliberate strategies that significantly improve the climate of the school? The answer to this question requires further study that has the potential to significantly affect and change our views of leadership.

Since this study used OHI scores as the measure of school health, more study is recommended to examine the meaning of improved OHI scores. Comparisons between school climate and student achievement can help school principals focus their efforts to improve student achievement. This study supports the notion that healthy schools will achieve higher ratings on the TAAS.

This study is limited in that the sample is small (29 schools) and that there were no Low-performing schools in the sample. In addition, the sample was composed of high schools and middle schools, as well as elementary schools. A larger sample which includes one level of school may reveal data that strengthens the findings of this study.

References


