

Using School Culture to Drive School Climate Change: How Educational Institutions Can Positively Impact Student Achievement

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A school's climate has a palpable and indirect, yet critical, impact on student achievement (Taylor, 2008). School climate defines the school's collective characteristics or attitudes that influence behavior and serve to distinguish the school organization from other school organizations (Hoy, Miskel, & Tarter, 2013). Educators and students experience climate in different ways at different levels of education. Therefore, it is essential for schools, via school leaders, to understand a school's climate, in order to take baseline measurement and determine the need for, and potential response to, behavioral changes that impact student achievement.

School leaders must look first to the anthropological theory of culture. Culture is also a complex construct that defines the shared set of values, beliefs, norms, and philosophies that bind the school organization as a unit and distinguish its identity from other school organizations (Hoy et al., 2013). School culture provides the foundation and sets the expectation for how people will experience school climate change (Goodenough, 1981; Henstrand, 2006).

Consider the relationship of culture and climate similar to that of a tree, with culture as the roots of the tree and climate as the leaves of the tree. The cultural roots of a school are made up of the individual and collective beliefs and values of both educators and students while the climate leaves show the behaviors, attitudes, and temperature of the school. The cultural roots help the leaves to grow and drive the climate behaviors and attitudes.

This article will investigate the foundation of school culture and its underpinnings as an anthropological theory. The findings will develop and establish a framework for researching, measuring, and understanding school climate. With an accurate measure of school climate, educators can effectuate change and inform student

achievement efforts at both the kindergarten through grade 12 (K-12) and the higher education levels.

The Construct of Culture

Culture is deeply rooted in anthropological theory and such theories have been directly applied to school organizations. Anthropological researchers study the role of people in the collective makeup of organizational culture and have developed the cognitive anthropological theory of culture (Goodenough, 1981). This theory of culture instructs that to study organizational culture, researchers must look at people on three distinct levels: the individual's outlook (or propriospect), the individuals as part of organizational subgroups, and the individuals as part of the organization as a whole (Goodenough, 1981; Henstrand, 2006).

Goodenough's cognitive anthropological theory of culture has been directly applied to the school organization and used to study school culture in the context of organizational change (Henstrand, 2006). The three levels of school cultural study examine the teachers within the school as individuals, groups, and the organizational whole (Henstrand, 2006). The individual teacher and school organizational beliefs are further examined based upon four standards of cultural study: "standards for deciding what can be, standards for deciding how one feels about it, standards for deciding what to do about it, and standards for deciding how to go about doing it" (Henstrand, 2006, p. 9). Organizational change is more plausible when there is consistency between individual teacher beliefs and organizational beliefs about the change (Henstrand, 2006). When changes are inconsistent between school and individual beliefs then friction occurs and people respond by fighting back or withdrawing (Henstrand, 2006).

Although Henstrand's (2006) research had a

cultural focus, the import of the findings related directly to climate, behavior, and the school's response to the change. The assumptions, perceptions, and interpretations that make up culture direct and manifest themselves in climate (MacNeil, Prater, & Busch, 2009; Taylor, 2008) and can be even more influential to the climate than the actual facts of a situation (Henstrand, 2006; Taylor, 2008).

Adding to the tree metaphor, the cultural roots are often hidden below ground and are thus much harder to see and understand. Yet, it is the cultural roots that provide the structure and direction of the tree, set the path, and allow prediction as to how the leaves will grow.

Culture Versus Climate

The tree metaphor and the cognitive anthropological theory of culture help develop and illustrate the connections of school culture and climate. The framework begins with the study of culture but the process does not stop there. As the tree metaphor suggests, while culture and climate are connected, they remain separate constructs (Goodenough, 1981), with distinctions in both definition and measurement. These distinctions provide the key to understanding and identifying how culture drives climate and how the school leader can move from the first part of the framework, understanding culture, to the second part of the framework, measuring climate.

Definitional Distinctions

The school culture, as the roots of the tree, is stronger and more ingrained within the organization and, as such, culture is used synonymously as the personality of the organization whereas, climate is more malleable and is often used synonymously with the attitude of the organization (Gruenert, 2008). The school's cultural personality establishes the quality and character of the school and sets school goals and values (Smith, Connolly, & Pryseski, 2014). The attitude is sometimes referred to as the atmosphere of the school, its adaptability to change, and its behaviors (MacNeil et al., 2009; Taylor, 2008). School organizational stakeholders

can palpably feel the school climate, the mood and morale of the staff, and the working conditions (Gruenert, 2008; Taylor, 2008).

Research Methodology Distinctions

To implement the framework, not only are the definitional distinctions important, so are the research methodologies. The methodological differences are a direct result of the type of data necessary to study each construct. These distinctions are important to the framework as it drives the manner and means through which the school leader can learn the unique culture and climate of the school. The methodologies are the tools that the school leader needs to gather the data and inform the process of improving student achievement.

The study of school organizational culture is typically researched through qualitative methodologies (Henstrand, 2006). Understanding culture as beliefs, values, and norms requires the researcher to identify consistent themes through thick description that allows for individual interpretation of meaning (Geertz, 1973). By contrast, the study of school organizational climate is typically studied through quantitative methodologies and, in particular, surveys (Kwong & Davis, 2015; Smith et al., 2014). Survey tools measure school organizational stakeholders' attitudes related to different dimensions, including goal focus and organizational adaptation or ability to change (MacNeil et al., 2009). Survey results are analyzed and used to provide a baseline of current climate and its existing impact on student learning outcomes and achievement (Kwong & Davis, 2015).

Application of the Framework

The cognitive anthropological theory of culture lays the foundation to understand and predict school organizational climate. The school leader is the link that shapes school culture and climate and indirectly impacts student achievement (MacNeil et al., 2009). The school leader must first qualitatively assess school culture to determine if the organization is ripe for change. More influential

than the actual facts of a situation, school culture drives school climate (Henstrand, 2006; Taylor, 2008). The school leader must use the information provided in the cultural roots of the tree to move up the tree and quantitatively measure the climate and determine where change is needed. In turn, the school leader can use the climate to indirectly but not inconsequentially, positively impact student achievement through strategic practices and policies (Hoy et al., 2013; Taylor, 2008).

By way of example, begin with the research-based assumption that school connectedness is a powerful predictor of health and academic outcomes (Center for Social and Emotional Education, 2007). The school leader must first consider culture and utilize qualitative methodologies to investigate whether connectedness is a strongly held organizational value (Ashley, 2015). If such values are strongly held, the school leader must then use quantitative methodologies (i.e., survey tools) to measure the current climate of behaviors and attitudes that may reflect school connectedness, such as collaboration. Change becomes necessary to policy, practice, and professional development if such behaviors and attitudes do not exist but the culture suggests that they are valued (Center for Social and Emotional Education, 2007). When positive change can be effectuated, positive school climate will promote essential learning skills and student achievement (Ashley, 2015; Center for Social and Emotional Education, 2007; Kwong & Davis, 2015).

School Climate in Kindergarten Through Grade Twelve

When schools and school leaders measure school climate in the K-12 setting, they begin by using a quantitative survey measurement tool to determine the baseline for the organization's climate. There are a variety of tools to measure the climate of an organization. Some organizations develop their own measures, while others use previously created measures, such as the School Climate Index, Organizational Climate Index, Omnibus T-Scale, and the Organizational Climate Descriptive Questionnaire (Hoy, 1998; Hoy & Tarter, 1997; Hoy & Tschannen-Moran, 2003).

They all measure similar parameters and provide valuable feedback on both teacher and principal behavior. Of the behaviors assessed in these climate measures, several have been shown to have a major impact on student achievement when measured and connected to school climate, including professional behavior, trust, academic press, and supportive principal behavior. As school principals begin to measure a school's climate, a survey enables the first step in implementing the framework and can determine the school's areas of need, which can lead to changing policies and practices to foster improvements.

As school leaders collect information about their organization, they must determine which aspects are helpful and strong in their organization, as well as those that could be altered to bring about positive change. Teachers who demonstrate strong professional behavior will work together to share ideas and create a cooperative working environment, which benefits the services they provide to students (DiPaola & Tschannen-Moran, 2001). Informal teacher leaders in the school can help to promote collegial behavior, and they can provide quick feedback to teachers regarding strategies to help provide assistance as needed to fellow teachers and students based on their individual needs. Doing so will help to create an open dialogue through which strategies can be developed and shared with colleagues to have a greater instructional impact in the department. However, formal instructional leaders must also be open to teacher input, especially with mapping the curriculum to fit the needs of their students. In employing this strategy, teacher input is respected and teachers are given the professional autonomy to effectuate strategies within the classroom (Gabriel, 2005). Student interest, engagement, and success will follow when teachers are allowed to work together to bring forward exceptional lessons, teaching ideas, and assessment strategies.

Teacher commitment demonstrates trust, which also has an impact on student achievement through organizational factors within the school, with specific emphasis on student demographics, school climate, and administrative leadership (DiPaola & Hoy, 2010; Parish, 2002). One major

way to help affect teacher commitment to the school is to allow them to participate in a shared decision making process. This demonstrates an element of trust between school leaders and teachers, and it has been shown to build teacher morale more than providing teachers with more tangible rewards for successes (DiPaola & Hoy, 2010). Teacher buy-in is necessary to help build their commitment to the school as it provides them with opportunities to contribute to the overall well-being of the school.

Principal behavior further impacts school climate by influencing the perceptions, attitudes, and actions of the school members (Jurewicz, 2004). As principals provide supportive behaviors toward their teachers, the teachers are better able to support each other in a collegial and committed way (DiPaola & Hoy, 2010; Hunt, Bowden, & Wiseman, 2003; Jurewicz, 2004). These behaviors have a direct link to student perceptions of school. Supportive behavior is the best way to create an environment that creates a sense of belonging, similar to that of a family unit (Hunt et al., 2003). This behavior will then translate into a similar situation in the classroom as the teachers emulate the school leader's attitude and help to positively impact student behavior.

Academic press is displayed through establishment of and commitment to policies, procedures, and rules that create cohesive academic standards for students. To be effective, teachers must be committed to the policy standards and enforcement. Involving parents, students, and the community in the use and implementation of the policies, practices, and rules will help to further reinforce them in various settings, whether it is through a school-wide implementation or solely in the classroom (Hunt et al., 2003).

If the climate measures determine that the climate of a school could be improved, one way to do so is through the approach of Appreciative Inquiry (Tschannen-Moran, 2014). In this strengths-based approach, school leaders focus on what has been working within the organization, rather than what has not. This process provides a foundation upon which to grow, as well as one that has emphasis on the strengths of the organization.

There are specific procedures that are followed and questions that are asked to gain an understanding of the best ways to move forward and improve climate and achievement within the school. Establishing the strengths of the school enables them to be used to help build and maintain a trusting relationship with the school leaders and the staff, which can foster a strong climate within the school. In addition to using the strengths based approach to growing a school, the climate of the school can be monitored through the above mentioned climate measures. Currently, researchers are continuing to develop new climate measures as part of their focus to turn schools into vibrant learning communities (Tschannen-Moran & Gareis, 2015).

Climate measures can also be used to drive policy changes. In Virginia, student behaviors are monitored by the state and reported as part of a school's annual report card. To help schools focus their efforts on improving student achievement, Virginia has established a program called Virginia Tiered Systems of Supports. In this program both academic and behavioral supports and strategies are provided to teachers to help promote a positive climate within the school. The behavioral aspect is called Positive Behavioral Interventions and Supports (PBIS), and it is implemented through specific stages (Woolard, 2016). During the initial implementation stage of this program, teachers work collaboratively to establish the desired behaviors, and students receive rewards for following those expectations. By the third year of PBIS, teachers receive recognition for going above and beyond, which continues to foster and build on the trusting relationship within the school (Woolard, 2016). This also indicates that having a positive and productive school climate has significant implications on student development. In fact, better culture within a school, as measured by high levels of peer sensitivity and low discipline incidents, is correlated to higher student achievement (Brand, Felner, Seitsinger, Burns, & Bolton, 2008).

School Climate in Higher Education

The Goodenough (1981) theory of culture can also be used to shape our understanding of campus climate and the role it plays at multiple

levels of the institution. Additionally, this lens helps us contextualize its meaning at the individual, subgroup and enterprises levels of the organization toward driving meaningful change and support for academic achievement. Organizational climate, rather than institutional culture, is thought to have a more precise measure of institutional effectiveness. As a result, it is thought to be a better predictor of student achievement and positive student experience (Brown & VanWagoner, 1999). A positive school climate is a leading factor of academic achievement, and student development (National School Climate Center, 2016).

An important mission of higher education administrators and faculty is to provide positive developmental and academic learning experiences throughout college that lead to student achievement. A significant part of that success depends on the educational experiences students have and the impact those experiences have on their learning and development within the context of their educational experience. In higher education, climate is understood and measured along a variety of dimensions to include safety, diversity, race, and sexual identity, to name a few. Student affairs professionals and college administrators have, therefore, linked learning and development as two pathways to achieving student achievement. It is within the context of those developmental experiences that social and academic climate on college campuses plays a significant role toward positive student achievement outcomes.

Student affairs offices college-wide are tasked with the responsibility of keeping their finger on the pulse of campus climate, and can so do in a variety of ways. One example, when it comes to measuring the racial climate for the entire campus, is a four-dimensional framework designed to understand the influence of racial climate on diversity in graduate education (Griffin, Muñiz, & Espinosa, 2012). The framework includes an understanding of: (1) the institution's historical legacy of inclusion or exclusion; (2) structural diversity and number of ethnic groups represented; (3) the psychological perceptions and attitudes between and among groups; and (4) behavioral climate of how groups relate. In this case, low

graduation rates among students from underrepresented populations have a direct impact on how the college sets policies and student engagement efforts that lead to achievement (Griffin et al., 2012). Each of these components is critical to student affairs officers, and can help them more precisely pinpoint where the breakdown in climate is taking place.

At the individual level, campus climate is impacted through the self-authorship of intercultural maturity framework. This framework is an example of how climate is used to understand what factors lead to student achievement through academic performance, and language related problems among international students (Glass, 2012; Magolda, 2008). This framework is used to understand to what degree twelve educational experiences contribute to student learning, development, and their perception of campus climate within the curricular, co-curricular, and community levels. Research in the area of self-authorship as a framework for understanding how international students are experiencing college, found that international students who participated in leadership programs and interacted with students from their own culture and took classes from instructors who facilitated classroom dialogue on a regular basis, had positive perceptions of campus climate (Glass, 2012).

The U.S. Department of Education, as part of its school climate initiative, uses a much broader framework when evaluating school climate and focuses on three domains: engagement, safety, and environment (American Institutes for Research, 2016). Within the engagement domain, the Educational School Climate Survey measures cultural and linguistic competence, relationships, and school participation. Within the safety domain, the survey measures emotional safety, physical safety, bullying, substance abuse, emergency readiness. Within the environment domain, it measures physical environment, instructional environment, physical health, mental health and discipline (American Institutes for Research, 2016). Different from the previous frameworks that focus on climate from individual perspectives, this framework and survey instrument have been

developed for public school systems, and measures climate across multiple domains, among students, staff, faculty and parents (American Institutes for Research, 2016).

As noted in the Goodenough (1981) framework, organizational climate is not just created or experienced as a whole, but also within subunits or academic units of the organization (Moran & Volkwein, 1988). Campus climate could be experienced to a greater degree within academic units rather than at the organizational level and therefore measure how students, faculty and administrators are experiencing college within academic units, which could very well be different than how they are experiencing college at the organizational level (Moran & Volkwein, 1988). In a climate survey conducted by Moran and Volkwein (1988), college administrators perceived a more positive campus climate, than their faculty counterparts. This contrast in climate perceptions came from faculty who stated they would like administrators to provide a clearer focus on goals and performance standards. Thus, it is equally as beneficial in higher education, to measure organizational climate at both the academic unit level and at the organizational level (Moran & Volkwein, 1988).

Climate frameworks should be chosen to help shape and give focus to the variables that need to be measured. The extent to which we can develop instruments that accurately measure climate at both the individual, academic unit and organizational levels, does not just contribute to the cognitive and psychological development of students, it is also critical in helping improve perceptions of climate by students, faculty and administrators. Determining organizational climate should ultimately be used to drive positive change. The role it plays as a predictor of student achievement is clearly an important factor in achieving organizational effectiveness and meeting the goals and objectives of the institution.

Conclusion

In both K-12 or higher education, student achievement is the paramount goal. It is clear that

school climate in K-12 institutions (Hoy et al., 2013; Taylor, 2008) and social climate in higher education institutions (Brown & VanWagoner, 1999; National School Climate Center, 2016) impact student achievement. Schools must strive to accurately measure school climate in order to utilize it to drive student achievement efforts.

To effectuate these efforts, the framework dictates starting at the root of the tree and utilize anthropological cultural theory to understand a school's personality, its values, and its goals. The framework then requires moving up the tree to determine how the roots of the tree have caused the growth of the leaves, the school's behavior, attitudes, and climate. At that point, the framework provides a clear and accurate picture of the overall health and wellness of the school community and its ability to impact student achievement. Through this process, the cultural framework has identified factors to allow for the selection of an intentional methodology to drive the needed change in behavior and/or policy that will have the greatest impact on student achievement and positive student outcomes.

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