School Climate Research Summary - January 2010

Over the past two decades, researchers and educators have increasingly recognized the importance of K-12 school climate. This summary builds on our 2009 school climate research summary (Cohen, McCabe, Michelli, & Pickeral, 2009) and details how school climate is associated with and/or promotes safety, healthy relationships, engaged learning and teaching and school improvement efforts. With a few exceptions, the citations below represent empirical studies that have been published in peer-reviewed journals. (If you would like to receive abstracts for the citations noted below, please write to info@schoolclimate.org.)

The National School Climate Council (2007) defines school climate and a positive, sustained school climate in the following ways:

> School climate is based on patterns of people's experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures.

> A sustainable, positive school climate fosters youth development and learning necessary for a productive, contributive, and satisfying life in a democratic society. This climate includes norms, values, and expectations that support people feeling socially, emotionally and physically safe. People are engaged and respected. Students, families and educators work together to develop, live, and contribute to a shared school vision. Educators model and nurture an attitude that emphasizes the benefits of, and satisfaction from, learning. Each person contributes to the operations of the school as well as the care of the physical environment.

While Perry was the first educational leader to explicitly address how school climate affects students and the learning process (Perry, 1908), the rise of the systematic study of school climate grew out of organizational research and studies in school effectiveness (Anderson, 1982; Creemers & Reezigt, 1999; Kreft, 1993; Miller & Fredericks, 1990; Purkey & Smith, 1983).

Virtually all researchers suggest that there are four essential areas of focus: *Safety* (e.g. rules and norms; physical safety; social-emotional safety); *Relationships* (e.g. respect for diversity; school connectedness/engagement; social support – adults; social support – students; leadership); *Teaching and Learning* (e.g. social, emotional, ethical and civic learning; support for learning; professional relationships); and the *Institutional Environment* (e.g. physical surrounding). However, there is not yet a consensus about which dimensions are essential to measuring school climate validly[i]. Over time, research will help to refine and develop our understanding of what aspects of school climate can and need to be assessed.

As detailed below, the systematic study of school climate has led to a growing body of research that attests to its importance in a variety of overlapping ways, including social, emotional, intellectual and physical safety; positive youth development, mental health, and healthy relationships; higher graduation rates; school connectedness and engagement; academic achievement; social, emotional and civic learning; teacher retention; and effective school reform.

For the purposes of this summary, research findings will be divided into the following five dimensions: safety, relationships, teaching and learning, the institutional environment and school reform. These dimensions are interconnected. Thus, information in one section may relate to another dimension as well.

Safety

Feeling safe – socially, emotionally, intellectually and physically – is a fundamental human need. Feeling safe in schools powerfully promotes student learning and healthy development (Devine & Cohen, 2007).

However, there is a great deal of research that shows that many students do not feel physically and emotionally safe in schools. For example, a study found evidence that high school students are fearful about going to school because of the violence and personal victimization some of them experience during the school day (Astor, Benbenishty, Zeira, & Vinokur, 2002). Studies have also shown that students feel less safe in large schools and that verbal bullying is more likely to occur at such schools (Lleras, 2008).   Our Center's school climate assessment work with thousands of schools across America has shown that the adults in the school community (school personnel and parents/guardians) typically believe that bullying and social violence are a "mild" to "moderately severe" problem while students consistently report that it is a "severe" problem (Cohen, 2006).

Although many urban and economically disadvantaged schools are plagued by physical violence, most students are not exposed to physical violence (Mayer & Furlong, 2010). Unfortunately, this is not the case for social, emotional and intellectual safety. In fact, bully-victim behavior is a serious public health problem. Research from the Health Resources and Services Administration's (HRSA) National Bullying Campaign showed that up to 25% of U.S. students are bullied each year (Melton et al., 1998). As many as 160,000 students may stay home from school on any given day because they are afraid of being bullied (Nansel et al., 2001). The growing trend of cyber bullying penetrates the home via computers and cellular phones. At least one out of three adolescents report being seriously threatened online, and 60% of teens say they have participated in online bullying. A growing body of research has underscored that bully-victim behavior is toxic; it undermines K-12 students' capacity to learn and develop in healthy ways. When students bully and/or are victimized repeatedly, it dramatically increases the likelihood that they will develop significant psychosocial problems over time. Bullying seems to adversely affect the witnesses, too. A recent study of more than 2,000 students (ages 12 to 16) found that those who witnessed bullying reported more feelings of depression, anxiety, hostility and inferiority than either the bullies or victims themselves (Rivers, Poteat, Noret, & Ashurst, 2009).

Homophobia is one of the most common causes of bully-victim behavior (Birkett, Espelage, & Koenig, 2009). A recent school climate survey of 6,209 middle school and high school students revealed that roughly nine out of ten LGBT students (86.2%) experienced harassment at school in the previous year (Kosciw, Diaz, & Greytak, 2008). In general, differences (e.g. race, gender, disability, socio-economic and/or cultural differences) are a common focus for bullying.

There is growing evidence educators also feel unsafe in schools. A significant number of teachers are threatened and/or assaulted by students every year (Dworkin, Haney, & Telschow, 1998; Novotney, 2009).

Recent research suggests that positive school climate is associated with reduced aggression and violence (Karcher, 2002b; Goldstein, Young, & Boyd, 2008; Brookmeyer, Fanti, & Henrich, 2006) as well as reduced bullying behavior (Kosciw & Elizabeth, 2006; Meyer-Adams & Conner, 2008; Yoneyama & Rigby, 2006; Birkett et al., 2009; Meraviglia, Becker, Rosenbluth, Sanchez, & Robertson, 2003). However, this relationship has not been fully elucidated. One study revealed that the association between school climate and level of aggression and victimization is dependent upon each student's feelings of connectedness to the school (Wilson, 2004). More specifically, "the amount of connectedness experienced by the average student appears to consistently contribute to predicting his or her likelihood of aggression and victimization despite variations in school climate" (Wilson, 2004, p. 1). Future research needs to critically examine the complex set of individual, group and organizational factors that shape this behavior in schools.

What is clear is that comprehensive, ecologically informed violence prevention efforts provide the essential foundation for improvement. Recent reviews of effective school discipline and bully prevention efforts underscore that we need to recongize and target individual, peer, school, family and community processes (Osher, Bear, Sprague & Doyle, 2010; Swearer, Espelage, Vallancourt & Hymel, 2010).

Another important safety-related dimension is rules and norms. Research underscores the importance of school rules and perceived fairness in regard to students' behavior. There

is evidence that schools in which rules are effectively enforced (i.e. better discipline management) have lower rates of student victimization and student delinquency (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005).

Relationships

The process of learning and teaching is fundamentally relational. The patterns of norms, goals, values and interactions that shape relationships in schools provide an essential foundation for school climate. One of the most important aspects of relationships in school is how connected people feel to one another. The *Centers for Disease Control and Prevention* (2009) defines school connectedness as "the belief by students that adults and peers in the school care about their learning as well as about them as individuals". There is a growing body of research that suggests that school connectedness is a powerful predictor of and/or is associated with adolescent health and academic outcomes (McNeely, Nonnemaker, & Blum, 2002; Whitlock, 2006; Ruus et al., 2007; Resnick et al., 1997), violence prevention (Karcher, 2002a, 2002b; Skiba et al., 2004), student satisfaction and conduct problems (Loukas, Suzuki, & Horton, 2006). Further, it is a protective factor against risky sexual, violence and drug use behaviors (Catalano, Haggerty, Oesterie, Fleming, & Hawkins, 2004; Kirby, 2001). For a recent summary of this research, see *Centers for Disease Control and Prevention* (2009). This 2009 summary details the range of ways that K-12 schools can promote school connectedness.

From a psychological point of view, relationships refer not only to relations with others but relations with ourselves: how we feel about and take care of ourselves. There is extensive research that school climate has a profound impact on students' mental and physical health. School climate has been shown to affect middle school students' self-esteem (Hoge, Smit, & Hanson, 1990), mitigate the negative effects of self-criticism (Kuperminic, Leadbeater, & Blatt, 2001), and affect a wide range of emotional and mental health outcomes (Kuperminic, Leadbeater, Emmons, & Blatt, 1997; Payton et al., 2008; Shochet, Dadds, Ham, & Montague, 2006; Way, Reddy, & Rhodes, 2007). Research has also revealed a positive correlation between school climate and student self-

concept (Cairns, 1987; Heal, 1978; Reynolds, Jones, Leger, & Murgatroyd, 1980; Rutter, Maughan, Mortimore, & Ouston, 1979).

The social emotional climate of a school is also related to the frequency of its students' substance abuse and psychiatric problems (Kasen, Johnson, & Cohen, 1990; LaRusso, Romer, & Selman, 2008; Ruus et al., 2007; Shochet et al., 2006). More specifically, a positive school climate is linked to lower levels of drug use as well as less self reports of psychiatric problems among high school students (LaRusso et al., 2008). In early adolescence, a positive school climate is predictive of better psychological well-being (Ruus et al., 2007; Shochet et al., 2006).

Moreover, a series of studies revealed that a positive school climate is correlated with decreased student absenteeism in middle school and high school (deJung & Duckworth, 1986; Gottfredson & Gottfredson, 1989; Purkey & Smith, 1983; Reid, 1982; Rumberger, 1987; Sommer, 1985) and with lower rates of student suspension in high school (Wu, Pink, Crain, & Moles, 1982). A growing body of research indicates that positive school climate is critical to effective risk prevention (Berkowitz & Bier, 2005; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Greenberg et al., 2003) and health promotion efforts (Cohen, 2001; Najaka, Gottfredson, & Wilson, 2002; Rand Corporation, 2004; Wang, Haertel, & Walberg, 1993).

Safe, caring, participatory and responsive school climates tend to foster a greater attachment to school and provide the optimal foundation for social, emotional and academic learning for middle school and high school students (Blum, McNelly, & Rinehart, 2002; Goodenow & Grady, 1993; Lee, Smith, Perry, & Smylie, 1999; Osterman, 2000; Wentzel, 1997). These research findings have contributed to the U.S. Department of Justice (2004), the U.S. Department of Education's *Safe and Drug Free Schools network*, the U.S. Department of Health and Human Services (2009) and a growing number of State Departments of Education emphasizing the importance of safe, civil and caring schools.

Teaching and Learning

Teaching and learning represents one of the most important dimensions of school climate. School leaders and teachers should strive to clearly define the sets of norms, goals, and values that shape the learning and teaching environment. Research supports the notion that positive school climate promotes students' ability to learn.

A positive school climate promotes cooperative learning, group cohesion, respect and mutual trust.   These particular aspects have been shown to directly improve the learning environment (Ghaith, 2003; Kerr, Ireland, Lopes, Craig, & Cleaver, 2004; Finnan, Schnepel, & Anderson, 2003).

A series of correlational studies have shown that school climate is directly related to academic achievement (Brand, Felner, Shim, Seitsinger, & Dumas, 2003; Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1977; Brookover, 1978; Brookover & Lezotte, 1979; Freiberg, 1999; Good & Weinstein, 1986; Gottfredson & Gottfredson, 1989; Griffith, 1995; Ma & Klinger, 2000; MacNeil, Prater, & Busch, 2009; Madaus, Airasian, & Kellaghan, 1980; Rutter, 1983; Rutter et al., 1979; Shipman, 1981; Stewart, 2008; Fleming et al., 2005) and that its effect seems to persist years later (Hoy, Hannum, & Tschannen-Moran, 1998). Researchers have also looked at the relationship between school climate and academic achievement in relation to student classroom participation. When students are encouraged to participate in academic learning, the potential for academic achievement increases (Voelkl, 1995; Ladd, Birch, & Buhs, 1999).

Teacher support is integral to student achievement. Research shows that the student-teacher relationship in kindergarten is related to later academic and behavioral outcomes for students (Pianta, Steinberg, & Rollins, 1995; Hamre & Pianta, 2001). If a teacher-student relationship is negative and conflictual in kindergarten, it is more likely that the student will have behavioral and academic problems in later grades (Hamre & Pianta, 2001). Also, teachers' interactions with students can directly affect students' behavioral and emotional engagement in the classroom (Skinner & Belmont, 1993). When teachers support and interact positively with students, then students are more likely to be engaged and behave appropriately (Skinner & Belmont, 1993).

The specific nature and goals of K-12 instruction impact academic achievement in a variety of ways. Educators (like parents) are <u>always</u> teaching social, emotional, civic, and ethical as well as intellectual lessons, intentionally or not. Research shows that evidence-based character education programs lead to higher achievement scores in elementary school students (Benninga, Berkowitz, Kuehn, & Smith, 2003). Also, evidence-based social and emotional learning programs have resulted in impressive gains in achievement test scores and in increasing the academic emphasis of elementary and middle school students (Battistich, Schaps, & Wilson, 2004; Bradshaw, Koth, Thornton, & Leaf, 2009; Elias & Haynes, 2008). A recent meta-analysis of over 700 positive youth development, social emotional learning (SEL) and character education studies revealed evidence-based SEL programs had many significant positive effects, including improving students' achievement test scores by 11 to 17 percentile points (Payton et al., 2008)[ii].

Implementing learning activities beyond the classroom is an effective way to incorporate civic education into a school and these activities, in turn, promote student learning. Encouraging active and collaborative learning through authentic projects is most effective in an environment with a civic mission that encourages trusting relationships between all members of the school community (Carnegie Corporation of New York & Center for Information and Research on Civic Learning and Education, 2003; Wentzel, 1997; Skinner & Chapman, 1999).

Service learning projects promote civic education because these activities teach students how to apply classroom material to real life situations (Morgan & Streb, 2001; Bandura, 2001; Torney-Purta, Lehmann, Oswald, & Schulz, 2001). For example, activities like community service and debates enhance the learning environment by providing students opportunities to participate and begin forming their own opinions of social and government systems (Torney- Purta, 2002; Youniss et al., 2002). Moreover, when these activities are presented in a

collaborative environment, they encourage students to interact and build upon one another's ideas (Wentzel & Watkins, 2002; Ghaith, 2003). If students are given ownership and choice in their service learning projects, there is evidence that students' self concept and tolerance for diversity will increase (Morgan & Streb, 2001).

Furthermore, school climate influences how educators feel about being in school and how they teach. Recent research shows that school climate powerfully affects the lives of educators and teacher retention. School climate enhances or minimizes emotional exhaustion, depersonalization, and feelings of low personal accomplishment (Grayson & Alvarez, 2008) as well as attrition (Miller, Brownell, & Smith, 1999). Research shows that when teachers feel supported by both the principal and their peers, teachers are more committed to their profession (Singh & Billingsley, 1998). A positive school climate is also associated with the development of teachers' beliefs that they can positively affect student learning (Hoy & Woolfolk, 1993). The National Commission on Teaching and America's Future defines school climate in terms of a learning community and argues that poor school climate is an important factor contributing to teacher retention (Fulton, Yoon, & Lee, 2005).

Institutional Environment

In this section, we briefly review recent research about how smaller schools can greatly improve school climate and how the physical layout of the school can affect safety.

There are various benefits to smaller schools for student achievement, safety, and relationships among members of the school community. Smaller schools are positively correlated to school connectedness (McNelly et al., 2002). In addition, research suggests that, at the middle-school level, smaller schools lead to better academic performance though the picture is more complicated at the elementary and high school levels (Stevenson, 2006). However, reducing the school size is not the only way to improve the school environment. Instead, a school should strive to form smaller learning communities as a way to improve the learning environment (Cotton, 2001). School space is another environmental dimension that impacts

students' feelings about safety. Astor and colleagues' research (2001) demonstrated that students felt unsafe in unsupervised areas of the school building. In fact, there is a growing body of research that illuminates how environmental variables such as classroom layout, activity schedules and student-teacher interactions can influence student behaviors and feelings of safety (Conroy & Fox, 1994; Van Acker, Grant, & Henry, 1996).

School Climate and Improvement

School climate is an important factor in the successful implementation of school reform programs (Bulach & Malone, 1994; Dellar, 1998; Gittelsohn et al., 2003; Gregory, Henry, & Schoeny, 2007). For example, teachers' perceptions of school climate influences their ability to implement school-based character and development programs (Beets et al., 2008). Studies about the implementation of character education programs suggest that the most effective ones are those incorporated into the school curriculum and developed holistically with the school community (Kerr et al., 2004).

Some of the most important research that elucidates the relationship between school climate and school improvement efforts emerged from a multi-year study of schools in Chicago. Bryk and his colleagues found evidence that schools with high relational trust (good social relationships among members of the school community) are more likely to make changes that improve student achievement (Bryk & Schneider, 2002). In their most recent summary of this work, Byrk and his colleagues (2010) detail how the following four systems interact in ways that support or undermine school improvement efforts: (i) professional capacity (e.g. teachers' knowledge and skills; support for teacher learning; and school-based learning communities); (ii) order, safety and norms (labeled as "school learning climate"); (iii) parent-school-community ties; and (iv) instructional guidance (e.g. curriculum alignment and the nature of academic demands). These dimensions shape the process of teaching and learning. The authors underscore how their research has shown relational trust is the "glue" or the essential element that coordinates and supports these four processes, which are essential to effective school climate improvement (Bryk,

Sebring, Allensworth, Luppescu, & Easton, 2010).

Summary

School climate – by definition – reflects students', school personnel's, and parents' experiences of school life socially, emotionally, civically, ethically as well as academically. Over the past two decades, research studies from a range of historically disparate fields (e.g. risk prevention, health promotion, character education, mental health, and social-emotional learning) have identified research-based school improvement guidelines that converge predictably to promote safe, caring, responsive and participatory schools (American Psychological Association, 2003; Centers for Disease Control, 2009; Benninga et al., 2003; Berkowitz & Bier, 2005; Greenberg et al., 2003).

School climate matters. Positive and sustained school climate is associated with and/or predictive of positive youth development, effective risk prevention and health promotion efforts, student learning and academic achievement, increased student graduation rates, and teacher retention. These research findings have contributed to the U.S. Department of Education examining ways to use school climate and culture as an organizing data-driven concept that recognizes the range of pro-social efforts (e.g. character education, social emotional learning, developmental assets, community schools) and risk prevention/mental health promotion efforts that protect children and promote essential social, emotional, ethical and civic learning (Jennings, 2009).

Footnotes:

[i]The list of the factors noted above overlaps with recent research by Osher and colleagues (Osher & Kendziora, in press), who found four major factors in their school climate research: safety, challenge, support and social-emotional learning. Felner and his colleagues (2003) have also conducted extensive and sound school climate research for many years (Felner, Aber, Cauce, & Primavera, 1985; Felner et al., 2001). The factors (in the following parentheses) that have emerged from his work overlap with and support the four major factors noted above: Safety (Clarity of Rules and Expectations, Disciplinary Harshness, Safety Problems); Relationships (Negative Peer Interactions, Positive Peer Interactions, Participation in Decision Making, Support for Cultural Pluralism); Teaching and learning (Teacher Support, Instructional Innovation/Relevance, Student Commitment/ Achievement Orientation); and, the Institutional Environment (Student Commitment) (Brand et al., 2003). Other research has underscored how the climate of the classroom colors and shapes school climate (Koth, Bradshaw & Leaf, 2008).

[ii]This work overlaps with recent research findings about risk/ protective factors which the Search Institute has synthesized into their "developmental assets" framework (Scales & Roehlkepartain, 2003) and 21st Century skills (Partnership for 21st Century Skills, 2009). Each of these organizations have synthesized important pro-social and risk prevention research findings to develop models and instructional goals that complement the social emotional learning/character education research noted above.

If you would like to receive abstracts for the citations noted below or care to share other empirical school climate research studies that have been published in peer–reviewed journals, please write to info@schoolclimate.org.

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