

July 2016

Focus Area Policy Brief: Inclusive School Environment Supplemental Appendix

Dr. Sarah K. Bruch
Director of Social and Education Policy
Public Policy Center
Assistant Professor of Sociology
University of Iowa

Harper Haynes
Sociology, M.A.
University of Iowa

Alex Hylka
Political Science
University of Iowa

This supplemental appendix provides further resources for the Policy Brief: Inclusive School Environment.

The first section contains web links for practitioner resources for generalized and specific interventions mentioned in the policy brief, as well as further information regarding evaluations of program efficacy. The intervention may have been evaluated by What Works Clearinghouse (WWC), a division of the Institute of Education Sciences (IES). These evaluations are indicated by the title "IES WWC Report". The WWC holds a stringent standard regarding both the study design and statistical significance of findings; as such, interventions rated effective by the WWC are proven to be successful. However, if a program does not meet the effectiveness rating of the WWC, it does not necessarily indicate the intervention is not worthy of consideration, only that the study of the intervention did not meet the WWC standard.

The second section provides an annotated reference list from all academic citations mentioned in the policy brief. Note that the reference list contains a combination of literature/evidence reviews, and peer-reviewed evaluations of intervention effects. Therefore, while some programs may not have been featured in a WWC report, you may review the references for more information regarding evaluations of the interventions.

Resources

- 1) The National Association for Multicultural Education:
 - a. <http://www.nameorg.org/>
- 2) National Association of Social Workers: Standards for Cultural Competence in Social Work Practice:
 - a. <https://www.socialworkers.org/practice/standards/naswculturalstandards.pdf>
- 3) University of Washington – Center for Multicultural Education:
 - a. <http://education.uw.edu/cme/>
- 4) Teaching Tolerance – A Project of the Southern Poverty Law Center:
 - a. <http://www.tolerance.org/>
- 5) National Education Association – Resources for Addressing Multicultural and Diversity Issues in Your Classroom:
 - a. <http://www.nea.org/tools/resources-addressing-multicultural-diversity-issues-in-your-classroom.htm>
- 6) U.S. Department of Education – What Works Clearinghouse Report:

- a. <http://files.eric.ed.gov/fulltext/ED497054.pdf>
- 7) Brown University: The Education Alliance – Teaching Diverse Learners:
 - a. <https://www.brown.edu/academics/education-alliance/teaching-diverse-learners/>
- 8) Teach For Change – Building Social Justice Starting in the Classroom:
 - a. <http://www.teachingforchange.org/>
- 9) Research-Based Resources - Cultural Competency of Schools And Teachers in Relation To Student Success:
 - a. <http://www.ode.state.or.us/opportunities/grants/saelp/cuturlcmptencebibnwrel.pdf>
- 10) The Jigsaw Classroom:
 - a. <https://www.jigsaw.org/information/>
- 11) Evidence from the Field - An Impact Study of CCC Curriculum Implementations and Professional Learning:
 - a. https://www.collaborativeclassroom.org/sites/default/files/media/pdfs/research/evidence_from_the_field.pdf

Annotated Bibliography

Anderson-Butcher, D. (2010). The promise of afterschool programs for promoting school connectedness. *The Prevention Researcher*, 17(3), 11-15.

Objectives: This article describes two studies related to the development of the Perceived School Experiences Scale (PSES). The PSES may be used by social workers to assess youths' perceptions of three school-related protective factors, including school connectedness, academic press, and academic motivation. **Method:** In Study 1, exploratory and confirmatory analyses were conducted on a calibration (n = 386) and cross-validation sample (n = 387) of middle and high school students. In Study 2, test-retest reliability and predictive validity were established on a sample of high school students (n = 97). **Results:** The resultant 14-item PSES demonstrated acceptable factorial validity and gender invariance in samples of middle and high school students. The PSES also demonstrated acceptable test-retest reliability, and correlated positively with perceived belonging and social competence. **Conclusions:** Overall, the PSES has important implications for social workers as they assess important protective factors and document the effectiveness of their interventions for the children and youth they serve.

Aronson, B., & Laughter, J. (2016). The Theory and Practice of Culturally Relevant Education A Synthesis of Research Across Content Areas. *Review of Educational Research*, 86(1), 163-206.

Many teachers and educational researchers have claimed to adopt tenets of culturally relevant education (CRE). However, recent work describes how standardized curricula and testing have marginalized CRE in educational reform discourses. In this synthesis of research, we sought examples of research connecting CRE to positive student outcomes across content areas. It is our hope that this synthesis will be a reference useful to educational researchers, parents, teachers, and education leaders wanting to reframe public debates in education away from neoliberal individualism, whether in a specific content classroom or in a broader educational community.

Aronson, E. (2010). *Cooperation in the classroom: The jigsaw method*. Pinter & Martin Limited.

The jigsaw classroom is a cooperative learning technique with a three-decade track record of successfully reducing racial conflict and increasing positive educational outcomes.

Astor, R. A., Benbenisty, R., & Estrada, J. N. (2009). School violence and theoretically atypical schools: The principal's centrality in orchestrating safe schools. *American Educational Research Journal*, 46, 423-461. doi:10.3102/0002831208329598

Theories often assume that schools in communities with high violence also have high rates of school violence, yet there are schools with very low violence in high violence communities. Organizational variables within these schools may buffer community influences. Nine "atypical" schools are selected from a national database in Israel. Three years of intense qualitative and quantitative methods are employed at these schools. The most important variable found is the leadership of the principal. These schools emphasize a school reform approach rather than packaged school violence evidence-based programs. The schools demonstrate "outward" oriented ideologies, a schoolwide awareness of violence, consistent procedures, integrated use of cultural and religious symbols, visual manifestations of student care, and the beautification of school grounds.

Banks, J. A. (2006). Improving race relations in schools: From theory and research to practice. *Journal of Social Issues*, 62(3), 607-614.

James A. Banks was born in the racially segregated Arkansas delta the year that Pearl Harbor was attacked and the United States entered World War II. The justifications of war as a means to promote democracy abroad contradicted with the lived realities at home. His childhood and early teenage years were marked by private ruminations about the racial inequalities he confronted in the public—at schools, churches, water fountains, and more. The stereotypical racist images in textbooks were contrasted with what and who he knew of people in his family and community. These experiences and his early contemplations about "why were the slaves represented as being happy in textbooks?" (Banks, 2006, p. 2), set the stage for Banks' indelible legacy to intergroup relations. He is widely renowned as the "father of multicultural education" in the United States. In his commentary, Banks draws on this long-standing,

unwavering, and deep commitment to education, equity, and justice. He explores ways in which theory and basic research can inform programs in schools to improve race relations. He shows how the articles contained in this issue, more than the majority of the existing research, grapple with the complexity of intergroup interventions. Banks stresses that interventions must take into account the diversity of participants or students; what may work for one group, say the majority group, may not necessarily work for minority groups.

Battistich, V., Schaps, E., & Wilson, N. (2004). Effects of an elementary school intervention on students' "connectedness" to school and social adjustment during middle school. *Journal of primary prevention, 24*(3), 243-262.

This research examined the effects at follow-up during middle school of a comprehensive elementary-school intervention program, the *Child Development Project*, designed to reduce risk and promote resilience among youth. Parental consent to participate in the middle school study was obtained for 1,246 students from six program and six matched comparison elementary schools. Three of the program elementary schools were in the "high implementation" group, and three were in the "low implementation" group during the elementary school study. Findings indicated that, studywide, 40% of the outcome variables examined during middle school showed differences favoring program students, and there were no statistically reliable differences favoring comparison students. Among the "high implementation" group, 65% of the outcome variables showed differences favoring program students. Overall, program students were more engaged in and committed to school, were more prosocial and engaged in fewer problem behaviors than comparison students during middle school. Program students who experienced high implementation during elementary school also had higher academic performance, and associated with peers who were more prosocial and less antisocial than their matched comparison students during middle school. Implications of these findings for prevention programming are discussed.

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child development, 78*(1), 246-263.

Two studies explored the role of implicit theories of intelligence in adolescents' mathematics achievement. In Study 1 with 373 7th graders, the belief that intelligence is malleable (incremental theory) predicted an upward trajectory in grades over the two years of junior high school, while a belief that intelligence is fixed (entity theory) predicted a flat trajectory. A mediational model including learning goals, positive beliefs about effort, and causal attributions and strategies was tested. In Study 2, an intervention teaching an incremental theory to 7th graders ($N=48$) promoted positive change in classroom motivation, compared with a control group ($N=43$). Simultaneously, students in the control group displayed a continuing downward trajectory in grades, while this decline was reversed for students in the experimental group.

Borman, G. D., Grigg, J., & Hanselman, P. (2015). An effort to close achievement gaps at scale through self-affirmation. *Educational Evaluation and Policy Analysis, 0162373715581709*.

In this districtwide scale-up, we randomly assigned seventh-grade students within 11 schools to receive a series of writing exercises designed to promote values affirmation. Impacts on cumulative seventh-grade grade point average (GPA) for the district's racial/ethnic minority students who may be subject to stereotype threat are consistent with but smaller than those from prior smaller scale studies. Also, we find some evidence of impact on minority students' standardized mathematics test scores. These effects address a substantial portion of the achievement gap unexplained by demographics and prior achievement—the portion of the gap potentially attributable to stereotype threat. Our results suggest that persistent achievement gaps, which may be explained by subtle social and psychological phenomena, can be mitigated by brief, yet theoretically precise, social-psychological interventions.

Brown, R., & Evans, W. P. (2002). Extracurricular activity and ethnicity creating greater school connection among diverse student populations. *Urban Education, 37*(1), 41-58.

A youth's sense of connection to school has been theorized by several traditions to be an important predictor of school success and student behavior inside and out-side of school.

Using a diverse sample of adolescents (N =1,755), this study focuses on the relationship between youth participation in extracurricular activities and a greater sense of school connection, particularly for non-European American students. In addition, we examined differences in participation rates for different categories of extracurricular activities. Results revealed that students who participated, regardless of ethnicity, had greater levels of school connection. Results also revealed that European American students had a significantly greater level of involvement, whereas Hispanic American students had significantly less involvement. These results are discussed in terms of creating accessible and attractive extracurricular activity opportunities for diverse students.

Carter, P. L. (2006). Straddling boundaries: Identity, culture, and school. *Sociology of education*, 79(4), 304-328.

This article presents the results of an investigation of the following questions: How do low-income African American and Latino youths negotiate the boundaries between school and peer group contexts? Do variable forms of negotiation exist? If so, what are they, and how do they manifest? In addressing these questions, the author posits two arguments that directly challenge the “acting white” thesis. The first is that black and Latino students’ academic, cultural, psychological, and social experiences are *heterogeneous*. This article examines three groups of low-income African American and Latino students who differ in how they believe group members should behave culturally—the cultural mainstreamers, the cultural straddlers, and the noncompliant believers. Second, this article returns to the sociological signification of four dimensions of the phenomenon of (resistance to) acting white and highlights the varied responses of the three groups to the social boundaries that collective identities engender and that status hierarchies in schools produce. Straddlers appear to traverse the boundaries between their ethnic peer groups and school environments best. The analyses are based on a combination of survey and qualitative data that were collected from a series of in-depth individual and group interviews with an interethnic, mixed-gender sample of 68 low-income, African American and Latino youths, aged 13–20.

Centers for Disease Control and Prevention. (2009). *School connectedness: Strategies for increasing protective factors among youth*. Retrieved from <http://www.cdc.gov/HealthyYouth/AdolescentHealth/pdf/connectedness.pdf>

Efforts to improve child and adolescent health typically have featured interventions designed to address specific health risk behaviors, such as tobacco use, alcohol and drug use, violence, gang involvement, and early sexual initiation. However, results from a growing number of studies suggest that greater health impact might be achieved by also enhancing protective factors that help children and adolescents avoid multiple behaviors that place them at risk for adverse health and educational outcomes. Enhancing protective factors also might buffer children and adolescents from the potentially harmful effects of negative situations and events, such as exposure to violence. Protective factors include personal characteristics such as a positive view of one’s future; life conditions such as frequent parental presence in the home at key times (e.g., after school, at dinner time);² and behaviors such as active participation in school activities.³ School connectedness is a particularly promising protective factor. This publication defines and describes the components of school connectedness and identifies specific actions that schools can take to increase school connectedness.

Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers college record*, 111(1), 180-213.

Educators have written about and studied school climate for 100 years. School climate refers to the quality and character of school life. 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. However, school climate is more than individual experience: It is a group phenomenon that is larger than any one person’s experience. 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 and the care of the physical environment. School climate refers to spheres of school life (e.g. safety, relationships, teaching and learning, the environment) as well as to larger organizational patterns (e.g., from fragmented to cohesive or “shared” vision, healthy or unhealthy, conscious or unrecognized). These definitions were collaboratively developed and agreed upon at a consensus-building meeting of national practice and policy leaders organized in April 2007 by the National Center for Learning and Citizenship, Education Commission of the States, and the Center for Social and Emotional Education.

Cook, J. E., Purdie-Vaughns, V., Garcia, J., & Cohen, G. L. (2012). Chronic threat and contingent belonging: protective benefits of values affirmation on identity development. *Journal of personality and social psychology, 102*(3), 479.

Two longitudinal field experiments in a middle school examined how a brief “values affirmation” affects students’ psychological experience and the relationship between psychological experience and environmental threat over 2 years. Together these studies suggest that values affirmations insulate individuals’ sense of belonging from environmental threat during a key developmental transition. Study 1 provided an analysis of new data from a previously reported study. African American students in the control condition felt a decreasing sense of belonging during middle school, with low-performing students dropping more in 7th grade and high-performing students dropping more in 8th grade. The affirmation reduced this decline for both groups. Consistent with the notion that affirmation insulates belonging from environmental threat, affirmed African American students’ sense of belonging in Study 1 fluctuated less over 2 years and became less contingent on academic performance. Based on the idea that developmentally sensitive interventions can have long-lasting benefits, Study 2 showed that the affirmation intervention was more effective if delivered before any drop in performance and subsequent psychological toll could unfold. The role of identity threat and affirmation in affecting the encoding of social experience, and the corresponding importance of timing treatments to developmentally sensitive periods, are explored.

Cooper, R. (1999). Improving intergroup relations: Lessons learned from cooperative learning programs. *Journal of Social issues, 55*(4), 647-663.

This article discusses the need for cooperative learning groups in integrated schools in order to promote more cross-race relationships than might otherwise be the case. We review research on 8 cooperative learning procedures. Evidence for the effectiveness of these programs in facilitating cross-race peer interaction is presented.

Davis, T. M., & Welcher, A. N. (2013). School quality and the vulnerability of the Black middle class: The continuing significance of race as a predictor of disparate schooling environments. *Sociological Perspectives, 56*(4), 467-493.

Scholarship discussing the impact of class on black disadvantage centers around three general claims: (1) higher socioeconomic status (SES) curtails the disadvantages associated with race, (2) class does little to mitigate racial disadvantage because of the persistence of racism, and (3) race and class interact to produce different outcomes for persons from different race-class groups. Despite the abundance of research in the area, few studies explicitly examine whether race and class interact to influence school quality. Using data from the eighth grade wave of the Early Childhood Longitudinal Study and other sources, the authors find significant racial disparities in school quality that class and residential context cannot account for. However, neighborhood poverty rates did increase the probability of private school enrollment for higher SES blacks compared to lower SES blacks and higher SES whites. The authors conclude that race remains an enduring obstacle to educational equity for poor as well as nonpoor blacks.

Diller, J. V., & Moule, J. (2005). *Cultural competence: A primer for educators*. Thomson/Wadsworth.

Dessel, A. (2010). Prejudice in schools: Promotion of an inclusive culture and climate. *Education and Urban Society*, 42(4), 407-429.

Public schools represent the pluralism of American society. Unfortunately, many children experience their public school environment as unwelcoming or even violent. Prejudicial attitudes contribute to problematic intergroup relations in public school settings. Furthermore, teachers are often unprepared to work with the diversity of class, linguistic groups, sexual orientation, and other sociocultural backgrounds that make up the student body in their classrooms. This article discusses theories of prejudice and how they inform an understanding of bullying, conflict, and violence in schools. Evidence-based prejudice reduction approaches are presented that teachers and school administrators can use to improve school culture and climate.

Frenzel, A. C., Pekrun, R., & Goetz, T. (2007). Perceived learning environments and students' emotional experiences. *Learning and Instruction*, 17, 478 – 493.

A multilevel approach was used to analyse relationships between perceived classroom environments and emotions in mathematics. Based on Pekrun's (2000) [A social-cognitive, control-value theory of achievement emotions. In J. Heckhausen (Ed.), *Motivational psychology of human development* (pp. 143–163)] social-cognitive, control-value theory of achievement emotions, we hypothesized that environmental characteristics conveying control and value to the students would be related to their experience of enjoyment, anxiety, anger, and boredom in mathematics. Multilevel modelling of data from 1623 students from 69 classes (grades 5–10) confirmed close relationships between environmental variables and emotional experiences that functioned predominantly at the individual level. Compositional effects further revealed that classes' aggregate environment perceptions as well as their compositions in terms of aggregate achievement and gender ratio were additionally linked to students' emotions in mathematics. Methodological and practical implications of the findings are discussed.

Hattie, J. (2009). *Visible learning*. New York, NY: Routledge.

This introduction has highlighted the amazing facility of those in the education business to invent solutions and see evidence for their pet theories and for their current actions. Everything seems to work in the improvement of student achievement. There are so many solutions and most have some form of evidence for their continuation. Teachers can thus find some support to justify almost all their actions—even though the variability about what works is enormous. Indeed, we have created a profession based on the principle of 'just leave me alone as I have evidence that what I do enhances learning and achievement'.

One aim of this book is to develop an explanatory story about the key influences on student learning—it is certainly not to build another "what works" recipe. The major part of this story relates to the power of directed teaching, enhancing what happens next (through feedback and monitoring) to inform the teacher about the success or failure of their teaching, and to provide a method to evaluate the relative efficacy of different influences that teachers use.

It is important from the start to note at least two critical codicils. Of course, there are many outcomes of schooling, such as attitudes, physical outcomes, belongingness, respect, citizenship, and the love of learning. This book focuses on student achievement, and that is a limitation of this review. Second, most of the successful effects come from innovations, and these effects from innovations may not be the same as the effects of teachers in regular classrooms—the mere involvement in asking questions about the effectiveness of any innovation may lead to an inflation of the effects. This matter will be discussed in more detail in the concluding chapter, where an attempt is made to identify the effects of "typical" teachers compared to "innovations" in teaching. Indeed, the role of "teaching as intervention" is developed throughout the chapters in this book.

Hanselman, P., Bruch, S. K., Gamoran, A., & Borman, G. D. (2014). Threat in context school moderation of the impact of social identity threat on racial/ethnic achievement gaps. *Sociology of Education*, 87(2), 106-124.

Schools with very few and relatively low-performing marginalized students may be most likely to trigger social identity threats (including stereotype threats) that contribute to

racial disparities. We test this hypothesis by assessing variation in the benefits of a self-affirmation intervention designed to counteract social identity threat in a randomized trial in all 11 middle schools in Madison, Wisconsin. We find that school context moderates the benefits of self-affirmation for black and Hispanic students' grades, with partial support among standardized achievement outcomes. Self-affirmation reduced the very large racial achievement gap in overall grade point average by 12.5 percent in high-threat school contexts and had no effect in low-threat contexts. These self-affirmation activities have the potential to help close some of the largest racial/ethnic achievement gaps, though only in specific school contexts.

Karcher, M. J. (2002a). Connectedness and school violence: A framework for developmental interventions. In E. Gerler (Ed.), *Handbook of school violence* (7–40). Binghamton, NY: Haworth.

Adolescent connectedness significantly impacts violence in schools. The main goals of this chapter are to define the mechanisms by which promoting connectedness can prevent youth violence and to present a framework for constructing developmental intervention programs to prevent violence in schools. Developmental interventions provide myriad opportunities for school counselors and prevention programs to prevent violence in schools. Central to developmental interventions is the tenet that by helping youth establish a balance of connectedness to school, family, and friends, youth will become less likely to engage in violent behavior (Hawkins, Farrington, & Catalano, 1998; Mulvey & Cauffman, 2001). Three principles from a framework for implementing developmental interventions are presented to highlight how connectedness-promoting interventions can fill a very important void in comprehensive violence prevention programming in the schools. To illustrate these principles, two developmental interventions are profiled at the end of the chapter.

Karcher, M. J. (2002b). The cycle of violence and disconnection among rural middle school students: Teacher disconnectedness as a consequence of violence. *Journal of School Violence*, 1(1), 35–51. doi:10.1300/J202v01n01_03

A hypothesized relationship between early violent behavior and subsequent connectedness in middle school was examined. Using self-report survey data and a hybrid structural model, the impact of violent behavior on connectedness to teachers and to school among 136 predominantly Caucasian, rural middle school students was examined. After accounting for parenting practices, which explained most of the variance in violence and connectedness, the data revealed a direct effect of violent behavior on connectedness. The data suggest that middle school students who have engaged in violent behavior are likely to experience disconnection from their teachers, and that this disconnection may provide a target for educators' efforts to prevent violence in schools.

Khalifa, M.A., Gooden, M.A., and J.E. Davis. (2016). *Culturally Responsive School Leadership: A Synthesis of the Literature*. Review of Educational Research.

Culturally responsive school leadership (CRSL) has become important to research on culturally responsive education, reform, and social justice education. This comprehensive review provides a framework for the expanding body of literature that seeks to make not only teaching, but rather the entire school environment, responsive to the schooling needs of minoritized students. Based on the literature, we frame the discussion around clarifying strands—critical self-awareness, CRSL and teacher preparation, CRSL and school environments, and CRSL and community advocacy. We then outline specific CRSL behaviors that center inclusion, equity, advocacy, and social justice in school. Pulling from literature on leadership, social justice, culturally relevant schooling, and students/communities of color, we describe five specific expressions of CRSL found in unique communities. Finally, we reflect on the continued promise and implications of CRSL.

Kuperminc, G. P., Leadbeater, B. J., & Blatt, S. J. (2001). School social climate and individual differences in vulnerability to psychopathology among middle school students. *Journal of School psychology*, 39(2), 141-159.

The present study used a person–environment-fit framework to examine the interaction of psychological vulnerabilities and perceptions of school climate to explain the emergence of behavioral and emotional problems during the middle school years. Cross-sectional and

1-year longitudinal analyses were conducted using data from 230 female and 230 male sixth- and seventh-grade students (50% non-Hispanic white, 27% Hispanic, 22% African American, and 3% other) attending a large ethnically and socioeconomically diverse middle school. Positive perceptions of school climate moderated the negative effects of self-criticism on both internalizing and externalizing problems and of a lack of efficacy on internalizing problems. Youth with high levels of self-criticism did not show expected increases in internalizing and externalizing problems when they perceived a positive school climate. Results were consistent with the idea that careful attention needs to be given to the social-emotional environment of middle schools, particularly for young adolescents preoccupied with issues of self-definition.

Loukas, A., Suzuki, R., & Horton, K. D. (2006). Examining school connectedness as a mediator of school climate effects. *Journal of Research on Adolescence, 16*(3), 491-502.

Researchers have suggested that good-quality school climates foster a sense of connection to the school and in this way contribute to fewer emotional and behavioral problems. However, few studies have directly assessed the role of school connectedness as a mediator of school climate effects. Using path analysis, this brief report examined whether four aspects of student perceived school climate (cohesion, friction, competition among students, and overall satisfaction with classes) were indirectly associated with subsequent early adolescent conduct problems and depressive symptoms through school connectedness. Participants were four hundred and eighty-nine 10- to 14-year old middle school students involved in two waves of a study. The results showed that school connectedness mediated the relations between perceived cohesion, perceived friction, and overall satisfaction with classes and subsequent student conduct problems 1 year later. School connectedness was not, however, predictive of subsequent depressive symptoms and thus did not mediate the school climate effects on early adolescent emotional problems.

Ma, X. (2003). Sense of belonging to school: Can schools make a difference?. *The Journal of Educational Research, 96*(6), 340-349.

Using education survey data from 6,883 Grade 6 students in 148 schools and from 6,868 Grade 8 students in 92 schools in New Brunswick, Canada, the author applied student and school characteristics to explain differences among students and schools regarding students' sense of belonging to school. Results of hierarchical linear modeling showed that in Grades 6 and 8, discrepancies in students' sense of belonging were mainly within schools, rather than between schools. At the student level, sense of belonging in both grades was affected more by students' mental and physical conditions and less by their individual and family characteristics. Students' self-esteem was the single most important predictor of their sense of belonging, followed by their health status. At the school level, school climate (academic press or expectation in Grade 6 and disciplinary climate in Grade 8) was more important than school context in shaping students' sense of belonging.

Mahoney, J. L., Larson, R. W., Eccles, J. S., & Lord, H. (2005). Organized activities as developmental contexts for children and adolescents. *Organized activities as contexts of development: Extracurricular activities, after-school and community programs, 3-22.*

School-age children in the United States and other Western nations spend almost half of their waking hours in leisure activities (Larson & Verma, 1999). How young persons can best use this discretionary time is perceived as inconsequential or even counterproductive to the health and well-being of young persons. Consistent with this view, the past 100 years of scientific research has tended either to ignore this time or to focus selectively on the risks present during the out-of-school hours. More recently, however, there is increased interest in viewing out-of-school time as an opportunity for young persons to learn and develop competencies that are largely neglected by schools. Researchers are beginning to recognize that along with family, peer, and school, the organized activities in which some youth participate during these hours are important context of emotional, social, and civic development. At the same time, communities and the federal government in the United States are now channeling considerable resources into creating organized activities for young people's out of school time. The primary aim of this volume is to bring scientific research to bear on how this time can be used constructively.

Mattison, E., & Aber, M. S. (2007). Closing the achievement gap: The association of racial climate with achievement and behavioral outcomes. *American Journal of Community Psychology, 40*, 1–12. doi:10.1007/s10464-007-9128-x

This study investigated the relationship between school racial climate and students' self-reports of academic and discipline outcomes, including whether racial climate mediated and/or moderated the relationship between race and outcomes. Using the Racial Climate Survey-High School Version (M. Aber et al., unpublished), data were gathered from African American (n = 382) and European American students (n = 1456) regarding their perceptions of racial climate. About 18% of the respondents were low-income and approximately 50% were male. Positive perceptions of the racial climate were associated with higher student achievement and fewer discipline problems. Further, race moderated the relationship between racial climate and both achievement and discipline outcomes. Finally, racial differences in students' grades and discipline outcomes were associated with differences in perceptions of racial climate. Results suggest careful attention should be given to the racial climate of secondary schools, particularly for adolescents who perceive schools as unfair.

McGregor, J. (1993). Effectiveness of role playing and antiracist teaching in reducing student prejudice. *The Journal of Educational Research, 86*(4), 215-226.

This study examined the effectiveness of role playing and antiracist teaching to reduce the racial prejudice of students. Meta-analysis was used to integrate findings from studies examining those strategies. Studies were located according to predetermined criteria, summarized, and the results converted to a standardized score, or "effect size." Twenty-six relevant studies were located, yielding 43 effect sizes. Descriptive and inferential statistics were used to interpret the effect-size data. Through multiple-regression techniques, 65% of the variance was explained, and several moderating variables were found to influence the strategies' effectiveness. The results indicate that role playing and antiracist teaching significantly reduce racial prejudice, and they do not differ from each other in their effectiveness. The implications of the results for education policy and future research are discussed.

McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting student connectedness to school: Evidence from the national longitudinal study of adolescent health. *Journal of School Health, 72*, 138–146. doi:10.1111/j.1746-1561.2002.tb06533.x

Increasing evidence shows that when adolescents feel cared for by people at their school and feel like a part of their school, they are less likely to use substances, engage in violence, or initiate sexual activity at an early age. However, specific strategies to increase students' connectedness to school have not been studied. This study examined the association between school connectedness and the school environment to identify ways to increase students' connectedness to school. Data from the in-school and school administrator surveys of the National Longitudinal Study of Adolescent Health (75,515 students in 127 schools) and hierarchical linear models were used to estimate the association between school characteristics and the average level of school connectedness in each school. Positive classroom management climates, participation in extracurricular activities, tolerant disciplinary policies, and small school size were associated positively with higher school connectedness.

National School Climate Council. (2007). *The School Climate Challenge: Narrowing the gap between school climate research and school climate policy, practice guidelines and teacher education policy*. Retrieved from <http://www.schoolclimate.org/climate/advocacy.php>

Over the last two decades, there has been a growing appreciation that school climate, the quality and character of school life, fosters — or undermines — children's development, learning and achievement. Research confirms what teachers and parents have claimed for decades: a safe and supportive school environment, in which students have positive social relationships and are respected, engaged in their work and feel competent, matters. A growing number of reports, studies and legislation emphasize the importance of positive school climate in reducing achievement inequities, enhancing healthy development and promoting the skills, knowledge and dispositions that provide the foundation for 21st century school — and life — success. This paper targets school leaders regarding the gap

between findings from school climate research and school climate policy and practice, including teacher education and community support and engagement.

Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008). The Positive Impact of Social and Emotional Learning for Kindergarten to Eighth-Grade Students: Findings from Three Scientific Reviews. *Technical Report. Collaborative for Academic, Social, and Emotional Learning (NJ1)*.

This report summarizes results from three large-scale reviews of research on the impact of social and emotional learning (SEL) programs on elementary and middle-school students—that is, programs that seek to promote various social and emotional skills. Collectively the three reviews included 317 studies and involved 324,303 children. SEL programs yielded multiple benefits in each review and were effective in both school and after-school settings and for students with and without behavioral and emotional problems. They were also effective across the K-8 grade range and for racially and ethnically diverse students from urban, rural, and suburban settings. SEL programs improved students' social-emotional skills, attitudes about self and others, connection to school, positive social behavior, and academic performance; they also reduced students' conduct problems and emotional distress. Comparing results from these reviews to findings obtained in reviews of interventions by other research teams suggests that SEL programs are among the most successful youth-development programs offered to school-age youth. Furthermore, school staff (e.g., teachers, student support staff) carried out SEL programs effectively, indicating that they can be incorporated into routine educational practice. In addition, SEL programming improved students' academic performance by 11 to 17 percentile points across the three reviews, indicating that they offer students a practical educational benefit. Given these positive findings, we recommend that federal, state, and local policies and practices encourage the broad implementation of well-designed, evidence-based SEL programs during and after school.

Protzko, J., & Aronson, J. (2016). Context Moderates Affirmation Effects on the Ethnic Achievement Gap. *Social Psychological and Personality Science*, 1948550616646426.

We attempted to replicate a self-affirmation intervention that produced a 40% reduction in the academic achievement gap among at-risk students. The intervention was designed as a protection against stereotype threat—, which creates stress and suppresses the performance, engagement, and learning of students stereotyped as intellectually inferior. In previous research, Black and Hispanic students who engaged in a values-affirmation exercise significantly improved their academic performance over the course of a school semester. We attempted to replicate these salutary effects in both an inner-city school and a more wealthy suburban school—contexts not tested in the original research. Despite employing the same materials, we found no effect of the affirmation on academic performance. We discuss these results in terms of the possibility that negatively stereotyped students benefit most from self-affirmations in environments where their numbers portray them neither as clearly “majority” nor minority.

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., & Udry, J. R. (1997). Protecting adolescents from harm: Findings from the national longitudinal study on adolescent health. *Journal of the American Medical Association*, 278, 823–832. doi:10.1001/jama.278.10.823

The main threats to adolescents' health are the risk behaviors they choose. How their social context shapes their behaviors is poorly understood. To identify risk and protective factors at the family, school, and individual levels as they relate to 4 domains of adolescent health and morbidity: emotional health, violence, substance use, and sexuality. Cross-sectional analysis of interview data from the National Longitudinal Study of Adolescent Health. A total of 12118 adolescents in grades 7 through 12 drawn from an initial national school survey of 90118 adolescents from 80 high schools plus their feeder middle schools. The interview was completed in the subject's home. Eight areas were assessed: emotional distress; suicidal thoughts and behaviors; violence; use of 3 substances (cigarettes, alcohol, marijuana); and 2 types of sexual behaviors (age of sexual debut and pregnancy history). Independent variables included measures of family context, school context, and individual characteristics. Parent-family connectedness and perceived school connectedness were protective against every health risk behavior measure except history of pregnancy. Conversely, ease of access to guns

at home was associated with suicidality (grades 9-12: $P < .001$) and violence (grades 7-8: $P < .001$; grades 9-12: $P < .001$). Access to substances in the home was associated with use of cigarettes ($P < .001$), alcohol ($P < .001$), and marijuana ($P < .001$) among all students. Working 20 or more hours a week was associated with emotional distress of high school students ($P < .01$), cigarette use ($P < .001$), alcohol use ($P < .001$), and marijuana use ($P < .001$). Appearing “older than most” in class was associated with emotional distress and suicidal thoughts and behaviors among high school students ($P < .001$); it was also associated with substance use and an earlier age of sexual debut among both junior and senior high students. Repeating a grade in school was associated with emotional distress among students in junior high ($P < .001$) and high school ($P < .01$) and with tobacco use among junior high students ($P < .001$). On the other hand, parental expectations regarding school achievement were associated with lower levels of health risk behaviors; parental disapproval of early sexual debut was associated with a later age of onset of intercourse ($P < .001$). Family and school contexts as well as individual characteristics are associated with health and risky behaviors in adolescents. The results should assist health and social service providers, educators, and others in taking the first steps to diminish risk factors and enhance protective factors for our young people.

Riehl, C.J. (2000). The Principal's Role in Creating Inclusive Schools for Diverse Students: A Review of Normative, Empirical, and Critical Literatures on the Practice of Educational Administration. *Review of Educational Research* 70(1): 55-81.

Public schools in the United States are serving a more heterogeneous student population now than ever before. Drawing on normative, empirical, and critical literatures, this review explores the role of school administrators in responding to the needs of diverse students. Three administrative tasks are highlighted: fostering new meanings about diversity, promoting inclusive school cultures and instructional programs, and building relationships between schools and communities. Administrative work that accomplishes these tasks can be thought of as a form of practice, with moral, epistemological, constitutive, and discursive dimensions. Inclusive administrative practice is rooted in values of equity and social justice; it requires administrators to bring their full subjectivities to bear on their practice, and it implicates language as a key mechanism for both oppression and transformation.

Schneider, S. H., & Duran, L. (2010). School climate in middle schools: A cultural perspective. *Journal of Research in Character Education*, 8(2), 25–37.

In 2007-08 and 2008-09, 2,500 randomly-selected middle school students completed an annual survey on school climate and character development. In examining differences based upon grade, gender, race/ethnicity, school, and length of program participation, significant differences were found for all but length of program participation. Responses of Hispanic/Latino students varied considerably from those of White and Asian students, with personal relationships with teachers emerging as more important than modeling of positive behaviors—opposite from the preference of White and Asian students. These findings confirm that perceptions of school climate are impacted by students' ethnic background, gender, and age. In order to improve school climate, school leaders and researchers alike must first obtain a complete understanding of what a positive school climate would look and feel like for students who strongly identify with particular cultures.

Shnabel, N., Purdie-Vaughns, V., Cook, J. E., Garcia, J., & Cohen, G. L. (2013). Demystifying values-affirmation interventions writing about social belonging is a key to buffering against identity threat. *Personality and Social Psychology Bulletin*, 39(5), 663-676.

Two experiments examined for the first time whether the specific *content* of participant-generated affirmation essays—in particular, writing about social belonging—facilitated an affirmation intervention's ability to reduce identity threat among negatively stereotyped students. Study 1, a field experiment, revealed that seventh graders assigned to a values-affirmation condition wrote about social belonging more than those assigned to a control condition. Writing about belonging, in turn, improved the grade point average (GPA) of Black, but not White students. In Study 2, using a modified “belonging-affirmation” intervention, we directly manipulated writing about social belonging before a math test described as diagnostic of math ability. The more female participants wrote about belonging, the better they performed, while there was no effect of writing about belonging for males. Writing

about social belonging improved performance only for members of negatively stereotyped groups. Implications for self-affirmation theory and practice are discussed.

Skiba, R., Simmons, A. B., Peterson, R., McKelvey, J., Forde, S., & Gallini, S. (2004). Beyond guns, drugs and gangs: The structure of student perceptions of school safety. *Journal of School Violence, 3*, 149–171. doi:10.1300/J202v03n02_09

In 2007-08 and 2008-09, 2,500 randomly-selected middle school students completed an annual survey on school climate and character development. In examining differences based upon grade, gender, race/ethnicity, school, and length of program participation, significant differences were found for all but length of program participation. Responses of Hispanic/Latino students varied considerably from those of White and Asian students, with personal relationships with teachers emerging as more important than modeling of positive behaviors—opposite from the preference of White and Asian students. These findings confirm that perceptions of school climate are impacted by students' ethnic background, gender, and age. In order to improve school climate, school leaders and researchers alike must first obtain a complete understanding of what a positive school climate would look and feel like for students who strongly identify with particular cultures.

Sprott, K. (2014). Culturally Competent Common Core Practices: A Delphi Study. *Journal of Research Initiatives, 1*(2), 8.

Research has shown that standards and benchmarks lack guidance for diverse learners with regard to the lesson planning and practice. The Common Core Standards (CCSS) for English Language Arts (ELA) and Mathematics, a national state-led crusade, seeks to safeguard rigorous grade level content to prepare all students for college and career readiness. This study identifies five *Culturally Competent Common Core Practices* that can provide anchors for informing the instructional process in culturally contextualized ways. The Delphi study shows that the educator's self-awareness fosters the level of cognitive consciousness that facilitates effect interaction with diverse populations.

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research, 83*(3), 357-385.

For more than a century, there has been a growing interest in school climate. Recently, the U.S. Department of Education, Center for Disease Control and Prevention, Institute for Educational Sciences, a growing number of State Departments of Education, foreign educational ministries, and UNICEF have focused on school climate reform as an evidence-based school improvement strategy that supports students, parents/guardians, and school personnel learning and working together to create ever safer, more supportive and engaging K–12 schools. This work presents an integrative review on school climate research. The 206 citations used in this review include experimental studies, correlational studies, literature reviews, and other descriptive studies. The review focuses on five essential dimensions of school climate: Safety, Relationships, Teaching and Learning, Institutional Environment, and the School Improvement Process. We conclude with a critique of the field and a series of recommendations for school climate researchers and policymakers.

U.S. Department of Education. WWC Evidence Review Protocol for Character Education Interventions. (n.d.). Retrieved July 18, 2016, from <http://ies.ed.gov/ncee/wwc/document.aspx?sid=23>

Character education is an inclusive concept regarding all aspects of how families, schools, and related social institutions support the positive character development of children and adults. *Character* in this context refers to the moral and ethical qualities of persons as well as the demonstration of those qualities in their emotional responses, reasoning, and behavior. Character is associated with such virtues as respect, responsibility, trustworthiness, fairness, caring, and citizenship. Character education *programs* are activities and experiences organized by a provider for the purpose of fostering positive character development and the associated core ethical values (also described as moral values, virtues, character traits, or principles).

Vandell, D. L., Reisner, E. R., & Pierce, K. M. (2007). Outcomes Linked to High-Quality Afterschool Programs: Longitudinal Findings from the Study of Promising Afterschool Programs. *Policy Studies Associates, Inc.*

This study by researchers at the University of California, Irvine, the University of Wisconsin-Madison and Policy Studies Associates, Inc. finds that regular participation in high-quality afterschool programs is linked to significant gains in standardized test scores and work habits as well as reductions in behavior problems among disadvantaged students. These gains help offset the negative impact of a lack of supervision after school. The two-year study followed almost 3,000 low-income, ethnically diverse elementary and middle school students from eight states in six major metropolitan centers and six smaller urban and rural locations. About half of the young people attended high-quality afterschool programs at their schools or in their communities.

Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, 331(6023), 1447-1451.

A brief intervention aimed at buttressing college freshmen's sense of social belonging in school was tested in a randomized controlled trial ($N = 92$), and its academic and health-related consequences over 3 years are reported. The intervention aimed to lessen psychological perceptions of threat on campus by framing social adversity as common and transient. It used subtle attitude-change strategies to lead participants to self-generate the intervention message. The intervention was expected to be particularly beneficial to African-American students ($N = 49$), a stereotyped and socially marginalized group in academics, and less so to European-American students ($N = 43$). Consistent with these expectations, over the 3-year observation period the intervention raised African Americans' grade-point average (GPA) relative to multiple control groups and halved the minority achievement gap. This performance boost was mediated by the effect of the intervention on subjective construal: It prevented students from seeing adversity on campus as an indictment of their belonging. Additionally, the intervention improved African Americans' self-reported health and well-being and reduced their reported number of doctor visits 3 years postintervention. Senior-year surveys indicated no awareness among participants of the intervention's impact. The results suggest that social belonging is a psychological lever where targeted intervention can have broad consequences that lessen inequalities in achievement and health.

Waters, S. K., Cross, D. S., & Runions, K. (2009). Social and ecological structures supporting adolescent connectedness to school: A theoretical model. *Journal of School Health*, 79(11), 516-524.

Adolescence is a time of great change. For most young people, this is a healthy and happy experience; however, for some it is characterized by many health, social, and academic challenges. A student's feeling of connectedness to school helps meet these challenges. Little is known, however, about the school characteristics that promote this connection and, more importantly, how this connection occurs. This article reviews the connectedness literature and integrates health promotion, adolescent development, and ecological frameworks to describe how a school context fosters this connection.

Watkins, N. D., & Aber, M. S. (2009). Exploring the relationships among race, class, gender, and middle school students' perceptions of school racial climate. *Equity & Excellence in Education*, 42(4), 395-411. doi:10.1080/10665680903260218

Although school climate has been thought to be especially important for racial minority and poor students (Booker, 2006; Haynes, Emmons, & Ben-Avie, 1997), little research has explored the significance of racial climate for these students. Furthermore, research in the area has tended to treat race, socioeconomic class, and gender separately, ignoring the ways in which they interact. Using quantitative survey data from 842 African American and white middle school students, this study examined the associations of race, class, and gender with school racial climate perceptions. Results indicated students' perceptions of racial climate differed by race, class, and gender. African American, poor, and female students perceived the racial climate in more negative terms than their white, non-poor, and male counterparts, respectively. Results also indicated joint associations between race and class and climate perceptions. Non-poor, African American students perceived a more negative racial climate than did non-poor Whites. There was limited support for a race and gender interaction. African American females tended to perceive less racial fairness in school than African American males. We discuss the conceptual and methodological tradeoffs of examining students' school racial climate perceptions from a perspective that considers race, class, and gender jointly.

Whitlock, J. L. (2006). Youth perceptions of life in school: Contextual correlates of school connectedness in adolescence. *Applied Developmental Science, 10*, 13–29. doi:10.1207/s1532480xads1001_2

A growing body of research shows school connectedness to be a powerful predictor of adolescent health and academic outcomes. This study advances a theoretically grounded definition of school connectedness and triangulates qualitative and quantitative methods to assess contextual correlates to school connectedness in 8th, 10th, and 12th grade youth. A survey examined the relationship between school connectedness and 4 developmental supports: meaningful roles at school, safety, creative engagement, and academic engagement as well as demographic and contextual control variables. Followup focus groups were used to identify other potentially salient contextual correlates. Findings from both methods suggest that school connectedness is strongly affected by opportunities for meaningful input into school policies and the extent to which class material engages student interests. Focus groups highlight the importance of youth-adult exchange in and outside of the classroom. Findings also revealed distinct differences by grade. Implications for school policy and practice as well as for future research in school connectedness are discussed.

Yeager, D. S., Romero, C., Paunesku, D., Hulleman, C. S., Schneider, B., Hinojosa, C., ... & Trott, J. (2016). Using design thinking to improve psychological interventions: The case of the growth mindset during the transition to high school. *Journal of Educational Psychology, 108*(3), 374.

There are many promising psychological interventions on the horizon, but there is no clear methodology for preparing them to be scaled up. Drawing on design thinking, the present research formalizes a methodology for redesigning and tailoring initial interventions. We test the methodology using the case of fixed versus growth mindsets during the transition to high school. Qualitative inquiry and rapid, iterative, randomized “A/B” experiments were conducted with 3,000 participants to inform intervention revisions for this population. Next, 2 experimental evaluations showed that the revised growth mindset intervention was an improvement over previous versions in terms of short-term proxy outcomes (Study 1, N = 7,501), and it improved 9th grade core-course GPA and reduced D/F GPAs for lower achieving students when delivered via the Internet under routine conditions with 95% of students at 10 schools (Study 2, N = 3,676). Although the intervention could still be improved even further, the current research provides a model for how to improve and scale interventions that begin to address pressing educational problems. It also provides insight into how to teach a growth mindset more effectively.

Yeager, D. S., & Walton, G. M. (2011). Social-psychological interventions in education They're not magic. *Review of Educational Research, 81*(2), 267-301.

Recent randomized experiments have found that seemingly “small” social-psychological interventions in education—that is, brief exercises that target students’ thoughts, feelings, and beliefs in and about school—can lead to large gains in student achievement and sharply reduce achievement gaps even months and years later. These interventions do not teach students academic content but instead target students’ psychology, such as their beliefs that they have the potential to improve their intelligence or that they belong and are valued in school. When social-psychological interventions have lasting effects, it can seem surprising and even “magical,” leading people either to think of them as quick fixes to complicated problems or to consider them unworthy of serious consideration. The present article discourages both responses. It reviews the theoretical basis of several prominent social-psychological interventions and emphasizes that they have lasting effects because they target students’ subjective experiences in school, because they use persuasive yet stealthy methods for conveying psychological ideas, and because they tap into recursive processes present in educational environments. By understanding psychological interventions as powerful but context-dependent tools, educational researchers will be better equipped to take them to scale. This review concludes by discussing challenges to scaling psychological interventions and how these challenges may be overcome.

Young, B.L., Madsen, J. and Young, M.A. (2010). Implementing diversity plans: Principals’ perception of their ability to address diversity in their schools. *NASSP Bulletin 94*, 135-157.

Traditionally schools in the past were mostly homogenous, but with demographic shifts, schools are becoming more ethnically diverse, disadvantaged, and multilingual. In contrast,

the teaching population still reflects that outdated homogenous template: “predominantly white and female,” middle-class, and unilingual. This exploratory study examined administrators’ perceptions of their ability to implement a diversity plan. Principals were unable to articulate what “diversity” meant in terms of its strategic implementation; they saw no value in addressing their changing student demographics. Principals were ill prepared to lead on issues of diversity and were unable to address conflicts that often occur among diverse demographic groups. Principals had a sense of diversity awareness but lacked the efficacy to address diversity-related issues with teachers and parents.