



## Multicultural School Climate Inventory

Sherry Marx and Deborah Byrnes  
Utah State University

This paper presents the 22-item Multicultural School Climate Inventory (MSCI), a scale developed to measure students' perceptions of the multicultural climate of their school. Survey questions were generated from a critical understanding of multicultural education, with attention to culturally and linguistically diverse school children. Through examination of school climate and multicultural literature, a definition of multicultural school climate was generated. 1511 students at a secondary school (grades 8-9) took the survey over a three year period. Grounded in literature, these questions were designed to address the needs of real students attending a specific secondary school. The MSCI proved to be such a helpful tool for examining and ultimately improving multicultural school climate from the perspective of diverse students that the authors share the instrument here, making it available to school faculty and scholars wishing to examine and thereafter improve multicultural school climate. Reliability coefficients and validity measures are reported for the scale, as well as for four subscales that emerged (Liking School, Educator-Student Relationships, Cultural Relevancy, and School Success). Findings suggest that the scale and subscales have high internal consistency and known-group construct validity.

*Keywords:* multicultural school climate, diverse students, survey instrument

In the United States, the growing ethnic and racial diversity of the population is mirrored in its schools where Whites account for just 56% of enrolled students, African Americans for 15%, and Latinas/os for 21% (Planty et al., 2009). The 2010 census reports that 12% of U.S. residents (40 million people) are foreign-born and 11% of the native born population have at least one foreign-born parent (Walters & Trevelyan, 2011). Among the foreign-born population entering the country from 2005 to 2007, 52% were Latin American or Caribbean and 30% were from Asian countries (Walters & Trevelyan, 2011). Given these circumstances, students in the US are more linguistically diverse than ever before, with 21% of school children speaking a language other than English in their homes and nearly 20% of these children reporting difficulties speaking English (Aud et

al., 2011). Nationwide, more than 11% of children receive English-language services in schools (Keigher, 2009).

These demographic trends have long been established and will continue diversifying the US population well into the future. However, despite this well-understood information, school districts across the United States are often reluctant to proactively address changes in school demographics. Rather, it is typical that schools seek to maintain school culture that reflects the Whiteness and the homogeneity of years gone by (Evans, 2007; Marx & Larson, 2012; Young & Laible, 2000), or that perhaps never existed. In this manifestation of school climate, whiteness and English language dominate school culture, including curriculum; reading materials; expectations; décor; interactions with students, parents, and guardians; and understandings of what constitutes a

successful educational experience (e.g., Banks & Banks, 2012; Chubbuck, 2004; Leonardo, 2009; Marx, 2006, 2008a; Pollock, 2004).

Overall, Latinas/os, English language learners, Native Americans, and African Americans have higher dropout rates than their White peers, with Latinas/os, the largest ethnic “minority” group, dropping out of school at the rate of 17.6% (Aud et al., 2011). African American and American Indian/Alaska Native also have high dropout rates of 9.3% and 13.3%, respectively (Aud et al., 2011). All these numbers provide a stark comparison to the White dropout rate of 5.2% (Aud et al., 2011). They imply that large proportions of students of color, including the growing populations of Latinas/os and English language learners, are not experiencing academic success. Students having poor schooling experiences are more likely to drop out of school and high dropout rates lead to communities with “high rates of unemployment, crime, ill health, and chronic despair” (Balfanz & Legters, 2004, p. 1). It is in everyone’s best interest when children are happy and successful in school.

Until now, a publically available, validated survey instrument built on a critically conceptualized understanding of multicultural school climate has not been available to education practitioners and scholars. In response to this absence and to our own need for such an instrument, we created the Multicultural School Climate Inventory (MSCI), a 22-item survey instrument that can be used to measure key aspects of multicultural school climate in a given school from the perspectives of students. It is our hope that this survey instrument will help practitioners and scholars learn more about the schools they work with so they can help improve the educational experience they offer diverse students. While our own study participants were primarily Latina/o and White, this instrument is based on critical multicultural education school climate issues that are relevant to all diverse students.

### Literature Review

In seeking to understand and define multicultural school climate, we examined literature in school climate, multicultural education, and social theory, which we discuss below.

#### School Climate

In their recent literature review of school climate, Cohen, McCabe, Michelli, and Pickeral (2009) write that “There is not one universally agreed-upon definition of school climate” (p. 181). Instead, many scholars define school climate loosely as “*atmosphere, feelings, tone, setting, or milieu* of the school” (p. 181, italics in original); more often, however, school climate is not defined at all. Given the importance of this concept to our paper, we use Cohen and colleagues’ definition of school climate as “the quality and character of school life” (p. 181). They explain that, “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” (p. 181); it also “recognizes the social, emotional, ethical, academic, and environmental dimensions of school life” (p. 201). The authors break school climate into four dimensions, “safety,” “teaching and learning,” “relationships,” and “environmental-structural” (p. 184). Although school climate is a quality of the entire school, they write that “School climate has a profound impact on individual experience (citing Comer, 1980)” (Cohen, McCabe, Michelli, & Pickeral, 2009).

#### Multicultural School Climate

We were able to find just three articles since 1990 that used the term “multicultural school climate” (Diaz, 1992; Lawrence, 2005; Sass-Lehrer, Gerner de Garcia, & Rovins, 1997). The Diaz (1992) and Sass-Lehrer, Gerner de Garcia, and Rovins (1997) papers are available on the ERIC database and are not peer-reviewed. They are general reports that describe foundational multicultural educational ideas for teachers. The Lawrence (2005) article focuses on teacher perceptions of school climate and its impact on antiracist teaching. However, none of these papers define the concept of multicultural school climate nor describe a way to examine it in schools. To better understand what a successful multicultural school climate means, we looked to the field of multicultural education.

#### Multicultural Education

Multicultural education is a “broad concept” with multiple dimensions, but it is generally understood as acknowledging the impact of students’ race, gender, sexual-orientation, culture, social class, exceptionality – including the interactions of all these things – on their lives and their schooling experiences (see Banks & Banks, 2010, p. 20). Given the linguistic diversity of American school children today, it is also important to recognize the influences of native language and English language ability (Marx, 2006; Kubota & Lin, 2009; Ovando, Combs, & Collier, 2006), as well as that of families, communities, and histories (González et al., 1993; González, Moll, & Amanti, 2005).

In our conceptualization of multicultural education for the MSCI, we focus particularly on linguistically, culturally, and racially diverse school children, giving attention to critical multicultural education, a perspective that focuses on the “structural analysis of unequal power relationships, analyzing the role of institutionalized inequities” (Sleeter, 2012, p. 572). It is widely acknowledged that diverse students and their families can experience systematic inequities in and outside of schooling that make their schooling experience less equitable and supportive than schooling experienced by their more mainstream classmates. Systematic inequality is often veiled in the hidden curriculum and unwritten policies of the school, unspoken but nevertheless present (Banks & Banks, 2010; Ricento &

Hornberger, 1996). When constructing the MSCI, we gave attention to dimensions of multicultural education and social theory that acknowledge systematic inequality and address successful education for linguistically, culturally, and racially diverse school children. In particular, we looked to critical race theory (CRT) and critical studies in whiteness, culturally responsive/relevant teaching, educator-student relationships, and the importance of a whole-school investment in multicultural education. Each of these subjects will be discussed below.

### **Critical Race Theory and Critical Studies in Whiteness**

These related social theories have been adopted by the field of education to understand and address systematic racial inequality in schooling (Ladson-Billings & Tate, 1995). They understand racism as "a system of advantage based on race" (Tatum, 2003, p. 11), rather than the opinions or actions of individuals acting outside the norms of society. CRT recognizes racism as integrated into the norms of society, "endemic in American life, deeply ingrained legally, culturally, and even psychologically" (Ladson-Billings & Tate, 1995, p. 52). Critical studies in Whiteness compliments CRT by examining the unearned privileges of Whites in society (Kendall, 2006; Lea & Helfand, 2004; Lee, 2005; Leonardo, 2009; Marx, 2006; Pollock, 2004). Together, CRT and critical studies in whiteness allow scholars and educators to understand inequality in school as a systematic, historical phenomenon that is often times subtle, yet continues to marginalize diverse school children.

CRT and critical studies in Whiteness are appropriate frameworks for studying American education because more than 87% of the teacher workforce and 84% of the principalship are White (National Education Association [NEA], 2010; US Department of Education, 2007), while nearly half the study body population are children of color (Planty et al., 2009). While recent numbers are not available, in 1996, 97% of the teacher population was estimated to be monolingual in English (Darling-Hammond & Sclan, 1996). Teachers and administrators in the US are also largely the products of predominantly White schools and White teacher and administrator education programs, as well as a predominantly White society that continually influences beliefs in what is appropriate and right, (e.g., Kendall, 2006; Ladson-Billings & Tate, 1995; Leonardo, 2009; Marx, 2006; Ryan, 2003). Resistance to recognizing, appreciating, and integrating the rich cultural and linguistic heritages diverse learners bring with them to the US school context can be linked to White cultural norms that position whiteness as raceless and, therefore, neutral (e.g., Lipsitz, 2006; Marx, 2006; Rothenberg, 2011). White and English language norms are also linked to the strong beliefs many educators have in the importance of

linguistic, cultural, and even racial assimilation (Crawford, 2000; Nieto, 2005; Sleeter, 1992). Students of color and linguistically diverse students are disadvantaged by the reproduction and maintenance of this culture in a school climate that continually places them outside the realm of what is normal. Including CRT and critical studies in Whiteness in our understanding of multicultural education allows us to take a critical perspective on school climate with attention to equity in education.

### **Culturally Responsive/Relevant Teaching**

Educators who are aware of systematic inequalities can recognize them and pointedly address them through teaching and learning. The premise of culturally responsive or relevant teaching is that educators develop lessons and strategies that emerge from and are relevant to the lives and cultures of their students (e.g., Gay, 2010; Ladson-Billings, 2009; Sleeter, 2012). In the words of Gay (2010), culturally relevant teaching "filters curriculum content and teaching strategies through [students'] cultural frames of reference to make the content more personally meaningful and easier to master" (p. 26). In this way, the whole education process, from curriculum to teaching strategies, becomes an equity pedagogy that "facilitate[s] the academic achievement of students from diverse racial, cultural, gender, and social-class groups" (Banks & Banks, 2010, p. 22).

For students who speak languages other than, or in addition to, English, a critical component of culturally relevant teaching is valuing the languages children bring with them to school (Garza, 2009; Gutiérrez et al., 2002; Szpara & Ahmad, 2007). Rejection of a child's native language can be interpreted by the child as a rejection of self, home, family, and support system (Delpit, 2006). Adding on to a child's home culture and language, rather than seeking to replace them, is a fundamental component of successfully teaching diverse students (Lambert, 1974; Valenzuela, 1999). Teaching in ways that are culturally and linguistically relevant to students can make schooling more interesting, more comprehensible, and ultimately more meaningful to diverse students (Gay, 2010; Krashen, 2003; LeClair, Doll, Osborne, & Jones, 2009; Szpara & Ahmad, 2007). By doing so, it can make schooling more successful. Although the success of culturally relevant teaching is well documented in education literature, educators and teacher education students are often resistant to the concept, given its departure from teaching in ways that are White-centric or seemingly culturally neutral (Marx & Larson, 2012; Sleeter, 2012).

### **Educator-Student Relationships**

For students of every linguistic, cultural, and racial group, positive relationships with the educators in their schools are critical to feeling welcome, safe, and a part of the school community. Valenzuela (1999) has pointed out that, "Relationships with teachers exert a tremendous impact on the kinds of schooling orientations

that develop in school... Productive relations with teachers and among students make schooling worthwhile and manageable" (p. 30). Getting to know students as holistic individuals and family members with rich cultural and familial influences on their lives enables educators to understand children in rich, multidimensional ways that positively contrast with the deficit, one-dimensional understanding of "struggling learner" that many educators hold about immigrant students, English language learners, Latinas/os and other students of color (e.g., Bishop & Berryman, 2007; Brown, 2006; Garcia, 2001; Garza, 2009; González et al., 1993; González, Moll, & Amanti, 2005; Ladson-Billings, 2009; Marx, 2006; Noddings, 2003, 2005; Valencia, 1997).

An important component of positive educator-student relationships is authentic caring, what Noddings describes as an empathetic "feeling with" (2003, p. 30). According to Noddings, this kind of caring goes beyond being concerned with students' performances on academic tasks. Valenzuela (1999) emphasizes that linguistically and culturally diverse learners often are alienated from schooling because they are not treated with authentic caring by the adults who work with them. Similarly, Garza (2009) notes that, "Educators must develop meaningful, caring relationships with students to provide channels of understanding that establish respect for students" (p. 300). He explains that "for some Latino students, respect involves validating their language and cultural identity" (p. 300). Many of these scholars note that students who feel welcomed and cared for by the educators in their schools tend to like school and stay enrolled. Authentic caring can be defined in many ways and has many nuances. In our study we focus on what we consider to be a critical component of authentic caring: students' perceptions of being known and cared for as individuals, as well as their feelings that their language and culture are respected aspects of their identity. Regardless of teachers' or administrators' intentions or practices, it is the students' experience of those intentions and practices that contribute to a positive school climate.

#### **Whole-School Investment**

When examining multicultural school climate, it is fundamental to recognize "the school as a social system" with "norms, values, statuses, and goals like other social systems" (Banks & Banks, 2010, pp. 24-25). Thus, a multicultural school climate can only be successful when the whole school, including its leaders, are invested in its fruition. Successful leadership for multicultural education in schools is a topic that is not well studied (Andersen & Ottesen, 2011; Ryan, 2003). However, studies by Angelides, Antoniou, and Charalambous (2010), Gillborn (1995), Magno and Schiff (2010), Marx and Larson (2012), Neische and Keddie (2011), Scheurich (1998), and Zembylas and Iasonos (2010), many of them international, show the powerful impact school leaders have when they turn their attention

to improving school climate for diverse students. School leaders ensure that policies, curricula, and teacher training, among other important aspects of schooling, are consistent and represent the norms of the school. In this way, school leaders can ensure a whole school investment in diverse students. If they are not dedicated to the topic, they can ensure a whole school disinvestment in diverse students as well. A collective investment is key to pulling the varied dimensions of successful education for diverse school children together into "an empowering school culture and social structure" (Banks & Banks, 2010, p. 22).

#### **Literature Summary**

The dimensions of schooling described above are not exhaustive, but highlight important aspects of multicultural education for linguistically, culturally, and racially diverse school children that were considered when forming the MSCI. All these dimensions are clearly interrelated. Educators with a strong understanding of the systematic social inequalities explained by CRT and critical studies in Whiteness are more likely to address this inequality by adopting curricula and teaching strategies that make use of students' "cultural frames of reference" (Gay, 2010, p. 26). These same educators are likely to develop positive, supportive relationships with their students that ensure students are cared for and feel safe in school. A whole-school investment in the successes of diverse students led by school leaders ensures supportive schooling is available to all diverse students in the school at all times, facilitated by all teachers and administrators. However, this description of a successful multicultural school climate is certainly ideal. In the "real world" of schools, it is the case that many schools and educators do not find this kind of empowering climate valuable or achievable. It is also common that individual teachers create supportive microclimates for diverse students that their larger school structures do not support. At the same time, schools may believe they are creating this environment but, in fact, are not meeting the needs of their diverse students (Bondy, 2011; Garcia, 2011; Marx & Larson, 2012).

It is important to note that the MSCI was strongly influenced by these bodies of literature as it was developed. However, these were considered influential literatures, not predictive subscales. Indeed, the qualities described above often overlap and some, like culturally relevant teaching, are more overt than others, such as creating an equitable school environment. Not surprisingly, the subscales that emerged on the survey are related but somewhat different from the literatures we present in this section.

#### **Multicultural School Climate Definition**

The diverse bodies of literature we present above allow us to construct a definition of multicultural school climate as: *The quality and character of school life for diverse schoolchildren, including interpersonal*

*relationships, teaching and learning, and organizational cohesion that ensure equity, happiness, and success in schooling.* This definition highlights the integrated dimensions of general school culture (Cohen et al., 2009), the systematic nature of school climate and inequity (May & Sleeter, 2010), and the goal of diverse school children succeeding in school through various, integrated aspects of schooling (Banks & Banks, 2010). It also highlights “diverse schoolchildren,” ensuring they do not get lost under the umbrella of “all” (Kubota, 2004; Marx, 2009; Pollock, 2004).

### **Instrument**

Likely because “multicultural school climate” has not been previously defined in education literature, we could find no example of an existing survey tool used to measure such an entity. Substituting the term “diversity” for multicultural in our EBSCOhost database search yielded a few more results, but when applied to school climate, the only relevant result was the mention of the “School Diversity Inventory” in a brief “guide to new resources” in the journal *Multicultural Perspectives* (Smith, Echols, Perkins, Bryant, & Howell, 2002, p. 51). The SDI was created by a professor at the University of Maryland in 2000 and seems to be a substantial survey that measures both faculty/staff and student perceptions of several “domains” of diverse school climate, including “diversity policies and practices,” “openness to diversity,” “inclusion,” and “intergroup relations.” However, subsequent studies of the inventory are missing in the literature, likely because of the expense associated with administering and scoring the instruments (see the SDI website for more information on the inventory and expenses: <http://www.education.umd.edu/EDCP/schoolassess/order.html>).

In addition, to order materials, one must also complete and submit a “qualification form.” This inventory is clearly aimed at school districts, rather than scholars. Given the difficulty in accessing this inventory, we did not consider it in the construction of our own MSCI. The paucity of existing and available surveys focused on multicultural school climate prompted us to create our own survey, not from existing materials, but from the literature we introduce above.

This MSCI was originally designed to address the needs of real students attending a specific secondary school. It proved to be such a helpful tool for examining multicultural school climate from the perspective of diverse students that we share the instrument here to make it available to other educators and scholars wishing to examine and thereafter improve multicultural school climate. The MSCI begins with several demographic questions about age, grade, race/ethnicity, gender, and languages spoken in addition to English so analysis can be made on every given indicator or combination thereof. It contains 22 questions written in Likert scale format ranging from 1 Strongly Disagree to 5 Strongly Agree. We also included the open-ended question: “Do you think

that being a member of your particular ethnic group (White, African American/Black, Latino/Hispanic, etc.) affects your education here? How?” This question allows those administering the survey to gather a qualitative sense of student perceptions of their own ethnic/racial experience in school. The survey was printed on the front and back of a single piece of paper; it took approximately 15 minutes to complete. The survey is reproduced in Table 1 below.

### **Setting and Participants**

The MSCI was given to all students in a secondary school (grades 8-9) in a semi-rural area of the Intermountain West (see Marx, 2008; Marx & Larson, 2012). The school has a small but growing Latina/o population (about 5.5%) and is otherwise predominantly White. The school setting is important given the growing numbers of Latina/o, immigrant, and non-native English speaking students in traditionally White, English-only speaking areas of the United States. While most Latinas/os still reside in the “traditional” immigration gateway states of California, Florida, Illinois, New Jersey, New York, and Texas, they also account for large and growing populations in Arizona (30.2% of state population), Colorado (20.1%), Washington (25.9%), Connecticut (12.1%) and Utah (11.8%) (Bump, Lowell, & Pettersen, 2005; Pew Hispanic Center, 2008). The Latina/o population in every state in the US has grown since the 1990s, with growth in the less traditional states most rapid (Bump et al., 2005). As a result, smaller communities across the US are experiencing unprecedented growth of Latina/o immigrants and school children (Godziak & Martin, 2005). Many teachers and administrators in these communities are working with Latina/o students, many of whom are English language learners (ELLs), for the first time in their careers. At the same time, schools and regions with longer experiences working with culturally and linguistically diverse students often have equally long histories of not meeting their students’ academic needs (Balfanz & Legters, 2004; Evans, 2007). Thus, while our site school may at first glance seem a nontraditional setting for conducting a multicultural school climate survey, it is actually quite timely and potentially applicable to numerous school districts across the US.

The survey was given to all students in the school in spring 2005 and spring 2008. After consultation with the school principal and multicultural education colleagues, we decided to omit two questions that were repetitive and six open-ended questions that were vague and did not prompt useful responses on the 2005 instrument in the 2008 version. The one strong open-ended question, “Do you think that being a member of your particular ethnic group (White, African American/Black, Latino/Hispanic, etc.) affects your education here? How?” remained on the 2008 survey. Thus, the survey we present in this paper is the final,

Table 1  
Student Survey

The purpose of the survey is to learn more about how all the students in the school feel about their time at \_\_\_\_\_. This survey is anonymous and is designed to ask you to share your honest opinions. Please do not put your name anywhere on the survey. All answers will remain confidential. Please return it to your teacher when you are finished. Thank you very much for taking the time to complete this survey.

**Part 1**

1. I am 12 / 13 / 14 / 15 / 16 years old.
2. I am in 8<sup>th</sup> / 9<sup>th</sup> grade. (Circle one)
3. I am male / female. (Circle one)
4. My ethnic background is: White / African American or Black / Native American / Latino or Hispanic / Polynesian / African / Other (Circle one)
5. I do / do not speak a language other than English. (Circle one)
6. The language I speak besides English is Spanish / Navajo / Russian / Other: \_\_\_\_\_ (Circle one)

**Part II**

For the questions below circle the number that best represents your thoughts about the questions asked.

- 1 = Strongly Agree
- 2 = Agree
- 3 = Don't have an opinion
- 4 = Disagree
- 5 = Strongly Disagree

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. Overall, I like attending _____.   | 1 | 2 | 3 | 4 | 5 |
| 2. I like my teachers.  | 1 | 2 | 3 | 4 | 5 |
| 3. I like the administrators (principals, etc.) at school.  | 1 | 2 | 3 | 4 | 5 |
| 4. I feel welcome at _____.   | 1 | 2 | 3 | 4 | 5 |
| 5. My family feels welcome at _____.  | 1 | 2 | 3 | 4 | 5 |
| 6. I feel well prepared for school.   | 1 | 2 | 3 | 4 | 5 |
| 7. I feel that I fit in well with students of other cultural and language backgrounds here at school. | 1 | 2 | 3 | 4 | 5 |
| 8. I feel that I fit in well at school.   | 1 | 2 | 3 | 4 | 5 |
| 9. I think that an important part of succeeding in school is blending into American culture.          | 1 | 2 | 3 | 4 | 5 |
| 10. An important part of succeeding in school is speaking English.                                    | 1 | 2 | 3 | 4 | 5 |
| 11. I am confident that I am doing what it takes to succeed in school.                                | 1 | 2 | 3 | 4 | 5 |
| 12. My teachers seem prepared to help me succeed in school.   | 1 | 2 | 3 | 4 | 5 |

*Multicultural School Climate Inventory*

13. My teachers seem to understand me and relate to me.		1	2	3	4	5
14. I feel that I can relate to my teachers.		1	2	3	4	5
15. I feel that my teachers can relate well to me.	1	2	3	4	5	
16. My teachers include my home culture and language in their classes.		1	2	3	4	5
17. I see people like me in school text books, pictures, posters, and leadership positions around the school.		1	2	3	4	5
18. I feel that my teachers know my family well.	1	2	3	4	5	
19. I feel that my teachers know me well.		1	2	3	4	5
20. My home culture and home language are valued by the school.		1	2	3	4	5
21. My teachers have had experiences similar to mine.		1	2	3	4	5
22. I know what I need to do to be successful in my classes at _____.		1	2	3	4	5

**Part III**

1. Do you think that being a member of your particular ethnic group (White, African American/Black, Latino/Hispanic, etc.) affects your education here? How?

revised 2008 version. All statistical analysis below refers to the items the 2005 and 2008 survey share.

Surveys were distributed by teachers during their first-period class, with copies of the Spanish version given to teachers to pass out at their discretion. Given the two year nature of the school, different student bodies completed the survey over this four year period. 825 students responded in 2005 and 867 responded in 2008, for a total of 1,692 student respondents. Given the predominantly White and Latina/o makeup of the school, students from other ethnic groups combined accounted for less than one percent of students. Due to their small numbers, they were not included in the analysis. Similarly, students who marked more than one race/ethnicity on the survey were excluded, as were those who marked no race/ethnicity. 1,420 White and 91 Latina/o survey responses were analyzed, for a total of 1511.

**Results**

**Reliability**

An internal test of the 22-item survey scale yielded an alpha coefficient of .94 for the overall scale. While a high value for Cronbach’s alpha indicates good internal consistency of the items in the scale, it does not mean that the scale is uni-dimensional. To better understand the different dimensions that contribute to a positive multicultural school climate, items were divided into four subscales.

**Subscales**

The subscales were created by running two factor analyses, one with the Latina/o students and one with the White students. The principal components analysis yielded different factors depending upon which group of students was used. This is not surprising given that students in these two groups have been shown to respond differently when responding to school climate questions (Marx, 2008; Marx & Larson, 2012). Although all survey items emerged out of our integrated literature framework, the ways students answered them showed us which questions they found inherently connected. In other words, students tended to respond similarly to these items, thus indicating the existence of a subscale within the overall survey. The authors decided to use the Latina/o four factor solution as a starting place and then to adjust items based on theoretical concerns coupled with the placement making intuitive sense. The four subscales that emerged were Liking School, Educator-Student Relationships, Cultural Relevancy, and School Success.

Alpha-reliability coefficients for the subscales indicated high internal consistency (see Table 2). Given that White students greatly outnumbered Latina/o students in the sample, alpha-reliability coefficients were run separately for both groups to assure that the subscales were internally consistent for both Latinas/os and Whites. As shown in Table 2, the subscales worked well for both groups with reliability coefficients ranging from .81 to

.92. The subscale intercorrelations are reported in Table 3. The subscale score intercorrelations are not so high as to suggest multicollinearity, which indicates that the

subscales tap different but related dimensions of school climate. Means and standard deviations for the total scale and subscales are shown in Table 4.

Table 2  
*Multicultural Climate School Inventory Items and Subscales with Alpha Reliability Coefficients*

Subscales and Items		All students N=1504	Latina/o N=91	White N=1413
Q#	Subscale 1– Liking School	.86	.88	.84
1	Overall, I like attending ____.			
2	I like my teachers.			
3	I like the administrators (principals, etc.) at school.			
4	I feel welcome at ____.			
5	My family feels welcome at ____.			
7	I feel that I fit in well with students of other cultural and language backgrounds here at school.			
Q#	Subscale 2 –Educator-Student Relationships	.91	.92	.91
12	My teachers seem prepared to help me succeed in school.			
13	My teachers seem to understand me and relate to me.			
14	I feel that I can relate to my teachers.			
15	I feel that my teachers can relate well to me.			
Q#	Subscale 3 – Cultural Relevancy	.83	.87	.83
9	I think that an important part of succeeding in school is blending into American culture.			
16	My teachers include my home culture and language in their classes.			
17	I see people like me represented in the curriculum, the posters around the school, etc.			
18	I feel that my teachers know my family well.			
19	I feel that my teachers know me well.			
20	My home culture and home language are valued by the school.			
21	My teachers have had experiences similar to mine.			
Q#	Subscale 4 – School Success	.81	.83	.81
6	I feel well prepared for school			
8	I feel that I fit in well at school.			
10	An important part of succeeding in school is speaking English.			
11	I am confident that I am doing what it takes to succeed in school.			
22	I know what I need to do to be successful in my classes at ____.			

*Multicultural School Climate Inventory*

Table 3  
*Multicultural School Climate Inventory Subscale Zero-order Correlations*

Multicultural School Climate Inventory Subscale	2	3	4
1. Liking School	.694	.689	.719
2 Educator-Student Relationships	—	.739	.546
3. Cultural Relevancy		—	.613
4. School Success			—

Note. All coefficients are significant at  $p < .001$ .  $N=1504$

Table 4  
*MSCI Scale and Subscales Scores for Latina/o and White Students*

Total Scale	Group	N	Mean	SD	Range
	Latino/a	81	63.57	18.37	22-110
	White	1265	56.14	15.19	22-110
	Total	1346	56.59	15.50	22-110
Subscales					
Liking School	Latino/a	90	16.69	5.81	6-30
	White	1394	14.78	4.62	6-30
	Total	1484	14.90	4.72	6-30
Educator-Student Relationships	Latino/a	89	11.89	4.25	4-20
	White	1397	11.10	3.84	4-20
	Total	1486	11.15	3.87	4-20
Cultural Relevancy	Latino/a	87	22.64	6.13	7-35
	White	1322	19.58	5.23	7-35
	Total	1409	19.76	5.33	7-35
School Success	Latino/a	86	12.48	4.80	5-25
	White	1358	10.79	3.92	5-25
	Total	1444	10.89	4.00	5-25

### **Validity**

To support construct validity, the known-group method was utilized. This method involves analyzing responses from two groups whom would be expected to differ in responses on the variables being measured. The literature would suggest that, in a predominantly White school in a semi-rural area, White students would perceive the school climate differently and more positively than a small but growing Latina/o population. A finding of such a difference provides additional support for the validity of the scale.

One-way ANOVAs were used to test for differences between Latina/o and White students on the total scale and each of the subscales. Perceptions of school climate differed significantly for the total scale ( $F [1,1344] = 17.71, p < .001$ ) and on three of the four subscales (Liking School,  $F [1, 1407] = 13.93, p < .001$ ; Cultural Relevancy,  $F [1, 1407] = 27.61, p < .001$ ; and School Success,  $F [1, 1442] = 14.6, p < .001$ ). Differences approached significance on the fourth scale, Educator-Student Relationships ( $F [1, 1484] = 3.46, p < .06$ ). SPSS or other statistical software will nicely account for unequal sample size in an ANOVA if other assumptions regarding the homogeneity of variance and normality of distribution do not occur. In this data set, there were some abnormalities (regarding homogeneity of variance and normality of distribution) and there were unequal groups, thus an appropriate non-parametric alternative, the Kruskal-Wallis Test, was also run in case the typical robustness of ANOVA had been comprised. The Kruskal-Wallis test resulted in the same statistically significant findings with the exception that the Liking School variable was significant at the .002 level instead of .001. For both tests, in all cases, differences were in the expected direction. As can be seen in Table 4, Latina/o students were less positive about their school climate than White students.

### **Limitations**

The MSCI has several limitations that those wishing to work with it must be aware. First, it must be remembered that the MSCI focuses particularly on linguistically, culturally, and racially diverse school children. Other dimensions of multiculturalism, such as sexual orientation, economic status, etc., are not included on this instrument. Second, the MSCI was tested in a two-year secondary school with a predominately White and small, but growing, Latina/o student body in a semi-rural area of the Intermountain West. Although the MSCI was constructed using the tenets of critical multicultural education and associated multicultural and social theories, it was tested only with White and Latina/o students. Applicability of the MSCI for more diverse and/or different student bodies must be determined through additional testing of the instrument. Third, the MSCI only focuses on student perspectives. It does not include

surveys for parents and educators, important components of holistic school climate measurement (Cohen et al., 2009). It is our hope that future scholars will use the MSCI as a basis on which to build these further dimensions of inquiry. Fourth, we also recognize that a 22-item survey has inherent limitations due to its length. However, the short length offers convenience for educators and children who do not want to interrupt class time in order to take an extensive survey. Our site school gave the survey during morning announcement time. Quantitative results can be quickly assessed, while the open-ended qualitative question allows educators and scholars the opportunity to learn more about student feelings regarding their racial/ethnic experience in school.

### **Conclusion**

The MSCI we present in this paper is meant to enable school leaders, teachers, and scholars to assess existing school climate for evidence of multicultural practices and environments that are known to support the learning experiences of ethnically and linguistically diverse school children. Examining student responses across ethnicity allows for a quick understanding of school climate aspects that may be working for some students, but not for others, and enables school leaders to focus on important areas of change. The MSCI can then be used to assess whether changes initiated by schools have an impact on student perspectives across ethnic groups. Indeed, schools may be surprised to learn their school climate is not as conducive to the happiness and academic achievement of diverse students as they might hope or imagine. The MSCI in this situation becomes an important tool for gathering evidence of student perceptions. In our site school, for example, MSCI results were a catalyst for improving school culture for Latina/o and ELL students. Changes in curriculum, teaching strategies, and overall attitude toward these students and their families brought about positive, measurable change in MSCI results three years later. Over the same period of time, yearly standardized test scores showed that Latina/o and ELL students made remarkable gains in Math, Science, and Language Arts, approximately doubling their passing rates in three years. These increased gains in positive feelings about school and academic success offer more evidence for the integrated nature of school happiness and academic success. More on the MSCI project at our site school can be found in Marx, 2008, and Marx and Larson, 2012.

We suggest that the MSCI can help schools and scholars better understand the school climate experienced by diverse students in schools and also recognize areas of disparity among students. MSCI results can be a meaningful catalyst for change that improves multicultural school climate and positively impacts student happiness and success. The MSCI can then be used again – or at any time – to examine the effectiveness

of changes made. Understanding and improving the happiness and academic success of all students in school should be an undertaking all of us, scholars and practitioners, prioritize. A tool as convenient as the MSCCI makes the first step easy. The next step, creating meaningful change, is the real challenge.

#### References

- Andersen, F. C., & Ottesen, E. (2011). School leadership and ethnic diversity: approaching the challenge. *Intercultural Education, 22*(4), 285-299.
- Angelides, P., Antoniou, E., & Charalambous, C. (2010). Making sense of inclusion for leadership and schooling: A case study from Cyprus. *Leadership in Education, 13*(3), 319-334.
- Aud, S., Hussar, W., Kena, G., Bianco, K., Frohlich, L., Kemp, J., & Tahan, K. (2011). *The Condition of Education 2011* (NCES 2011-033). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Balfanz, R., & Legters, N. (2004). *Locating the dropout crisis: Which high schools produce the nation's dropouts? Where are they located? Who attends them?* Center for Research on the Education of Students Placed at Risk. Baltimore, MD: CRESPAR: Johns Hopkins University. Retrieved February 23, 2012, from: <http://www.csos.jhu.edu/crespar/techReports/Report70.pdf>
- Banks, J., & Banks, C. M. (Eds.) (2010). *Multicultural Education: Issues and Perspectives* (7<sup>th</sup> ed.). Hoboken, NJ: John Wiley & Sons.
- Bishop, R., & Berryman, M. (2007). *Culture speaks: Cultural relationships and classroom learning*. Wellington, New Zealand: Huia Publishing.
- Bondy, J. M. (2011). Normalizing English language learner students: a Foucauldian analysis of opposition to bilingual education. *Race Ethnicity and Education, 14*(3), 387-398.
- Brown, H. D. (2006). *Principals of language learning and teaching* (5<sup>th</sup> ed.). Englewood Cliffs, NJ: Prentice Hall.
- Bump, M. N., Lowell, L. B., & Pettersen, S. (2005). The growth and population characteristics of immigrants and minorities in America's new settlement states. In E. M. Gozdzik & S. F. Martin (Eds.) *Beyond the Gateway: Immigrants in a changing America*, (pp. 19-49). Lanham, Maryland: Lexington Books.
- Chubbuck, S. M. (2004). Whiteness enacted, whiteness disrupted: The complexity of personal congruence. *American Educational Research Journal, 41*(2), 301-333.
- Cohen, J., McCabe, E., Michelli, N., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record, 111*(1), 180-213.
- Comer, J. P. (1980). *School power: Implications of an intervention project*. New York: Free Press.
- Crawford, J. (2000). *At war with diversity: US language policy in an age of anxiety*. Clevedon, England: Multilingual Matters Ltd.
- Darling-Hammond, L., & Sclan, E. M. (1996). Who teaches and why: Dilemmas of building a profession for twenty-first century schools. In J. Sikula (Ed.), *Handbook of research on teacher education* (2<sup>nd</sup> ed.). New York: Macmillan.
- Delpit, L. (2006). *Other people's children: Cultural conflict in the classroom*. New York: New Press.
- Diaz, C. (1992). Multicultural education for the 21<sup>st</sup> century. NEA school restructuring series. Washington, DC: National Education Association.
- Evans, A. E. (2007). School leaders and their sensemaking about race and demographic change. *Educational Administration Quarterly, 43*(2), 159-188.
- Garcia, E. (2001). *Hispanic education in the United States: Raíces y Alas*. Lanham, MD: Rowman and Littlefield.
- Garcia, E. (2011). ¡Ya Basta!: Challenging restrictions on English language learners. *Dissent, 58* (4), 47-50.
- Garza, R. (2009). Latino and White high school students' perceptions of caring behaviors: Are we culturally responsive to our students? *Urban Education, 44*(3), 297-321.
- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2<sup>nd</sup> edition). New York: Teachers College Press.
- Gillborn, D. (1995). *Racism and antiracism in real schools*. Philadelphia, PA: Open University Press.
- Godziak, E., & Martin, S. (Eds.) (2005). *Beyond the gateway: Immigrants in a changing America*. Lanham, MD: Lexington Books.
- González, N., Moll, L., Floyd-Tenery, M., Rivera, A., Rendon, P., Gonzales, R., & Amanti, C. (1993). Learning from households: Teacher research on funds of knowledge. Educational practice series. Santa Cruz, CA: National Center for Research on Cultural Diversity and Second Language Learning.
- González, N., Moll, L., & Amanti, C. (2005). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gutiérrez, K. D., Asato, J., Pacheco, M., Moll, L. C., Olson, K., Horng, E. L., Ruiz, R., García, E., & McCarty, T. (2002). "Sounding American?": The

- consequences of new reforms on English language learners. *Reading Research Quarterly*, 37(3), 328-343.
- Keigher, A. (2009). Characteristics of public, private, and Bureau of Indian Education elementary and secondary schools in the United States: Results from the 2007-08 Schools and Staffing Survey (NCES 2009-321). National Center for Education Statistics, Institute of Education Sciences, US Department of Education. Washington, DC. Retrieved March 20, 2012 from <http://nces.ed.gov/pubs2009/2009321.pdf>.
- Kendall, F. (2006). *Understanding white privilege: Creating pathways to authentic relationships across race*. New York: Routledge.
- Krashen, S. D. (2003). *Explorations in language acquisition and use*. Portsmouth, NH: Heinemann.
- Kubota, R. (2004). Critical multiculturalism and second language education. In B. Norton & K. Toohey (Eds.), *Critical pedagogies and language learning* (pp. 30-52). Cambridge University Press.
- Kubota, R., & Lin, A. (2009). *Race, culture, and identities in second language education: Exploring critically engaged practice*. New York: Routledge.
- Ladson-Billings, G. (2009). *The dream keepers: Successful teachers of African American children*. San Francisco: Jossey-Bass Publishers.
- Ladson-Billings, G., & Tate, W. F. IV (1995). Toward a critical race theory of education. *Teachers College Record*, 97(1), 47-68.
- Lambert, W. E. (1974). Culture and language as factors in learning and education. In F. E., Aboud, & R. D. Meade (Eds.), *The Fifth Western Symposium on Learning*. Bellingham, WA: Western Washington State College.
- Lawrence, S. (2005). Contextual matters: Teachers' perceptions of antiracist classroom practices. *Journal of Educational Research*, 98(6), 350-365.
- LeClair, C., Doll, B., Osborn, A., & Jones, K. (2009). English language learners' and non-English language learners' perceptions of the classroom environment. *Psychology in the Schools*, 46(6): 568-577.
- Lea, V., & Helfand, J. (Eds.). (2004). *Identifying Race and Transforming Whiteness in the Classroom*. New York: Peter Lang.
- Lee, S. (2005). *Up against Whiteness: Race, school, and immigrant youth*. New York: Teachers College Press.
- Leonardo, Z. (2009). *Race, whiteness, and education*. New York: Routledge.
- Lipsitz, G. (2006). *The possessive investment in whiteness: How White people profit from identity politics*. Philadelphia: Temple University Press.
- Magno, C., & Schiff, M. (2010). Culturally responsive leadership: Best practice in integrating immigrant students. *Intercultural Education*, 21(1), 87-91.
- Marx, S. (2006). *Revealing the Invisible: Confronting Passive Racism in Teacher Education*. New York: Routledge Press.
- Marx, S. (2008). Not Blending In: Latino Students in a Predominantly White School. *Hispanic Journal of Behavioral Sciences*, 30(1), 69-88.
- Marx, S. (2009). "It's not them; It's not their fault": Manifestations of racism in the schooling of Latina/os and ELLs. In R. Kubota & A. Lin (Eds.), *Race, Culture, and Identities in Second Language Education: Exploring Critically Engaged Practice*. New York: Routledge.
- Marx, S., & Larson, L. (2012). Taking off the Colorblind Glasses: Recognizing and Supporting Latina/o Students in a Predominantly White School. *Education Administration Quarterly*, 48 (2), 259-303.
- May, S., & Sleeter, C. E. (2010). Introduction. In S. May & C. E. Sleeter (Eds.), *Critical multiculturalism: Theory & praxis* (pp. 1-18). New York, NY: Routledge.
- National Education Association (March, 2010). Status of the American public school teacher 2005-2006. Washington, D.C.: NEA RESEARCH. Retrieved February 23, 2012, from <http://www.nea.org/assets/docs/HE/2005-06StatusTextandAppendixA.pdf>
- Neische, R., & Keddie, A. (2011). Foregrounding issues of equity and diversity in educational leadership. *School Leadership and Management*, 31(1), 65-77.
- Nieto, S. (2005). Public education in the 20<sup>th</sup> century and beyond: High hopes, broken promises, and an uncertain future. *Harvard Educational Review*, 75(1), 43-64.
- Noddings, N. (2003). *Caring, a feminine approach to ethics & moral education (second edition)*. Berkeley: University of California Press.
- Noddings, N. (2005). *The challenge to care in schools: An alternative approach to education (2<sup>nd</sup> ed.)*. New York: Teachers College Press.
- Ovando, C. J., Combs, M. C., & Collier, V. P. (2006). *Bilingual & ESL classrooms: Teaching in multicultural contexts (4<sup>th</sup> ed)*. New York: McGraw-Hill.
- Pew Hispanic Center (2008). Statistical portrait of Hispanics in the United States, 2008. Table 13. Hispanic population by state: 2008. Retrieved

- February 23, 2012 from:  
<http://pewhispanic.org/files/factsheets/hispanics2008/Table%2013.pdf>
- Planty, M., Hussar, W., Snyder, T., Kena, G., KewalRamani, A., Kemp, J., Bianco, K., & Dinkes, R. (2009). *The condition of education 2009* (NCES 2009-081). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Pollock, M. (2004). *Colormute: Race talk dilemmas in an American school*. Princeton, NJ: Princeton University Press.
- Ricento, T. K., & Hornberger, N. H. (1996). Unpeeling the onion: Language planning and policy and the ELT professional. *TESOL Quarterly*, 30(3), 401-427.
- Rothenberg, P. S. (Ed) (2011). *White privilege* (4<sup>th</sup> ed.). New York: Worth Publishers.
- Ryan, J. (2003). Educational administrators' perceptions of racism in diverse school contexts. *Race, Ethnicity & Education*, 6(2), 145-165.
- Sass-Lehrer, M., Gerner de Garcia, M., & Rovins, B. (1997). *Creating multicultural school climate for deaf children and their families*. Washington, DC: Laurent Clerc National Deaf Education Center, Gallaudet University.
- Scheurich, J. (1998). Highly successful and loving, public elementary schools populated mainly by low-SES children of color: Core beliefs and cultural characteristics. *Urban Education*, 33(4), 451-491.
- Sleeter, C. (1992). *Keepers of the American dream: A study of staff development and multicultural education*. London; Washington, D.C.: Falmer Press.
- Sleeter, C. (2012). Confronting the marginalization of culturally responsive pedagogy. *Urban Education*, 47(3), 562-584.
- Smith, G., Echols, C., Perkins, F., Bryant, E., & Howell, L. (2002): Guide to new resources, *Multicultural Perspectives*, 4(4), 41-52
- Szpara, M. Y., & Ahmad, I. (2007). Supporting English-language learners in a social studies class: Results from a study of high school teachers. *The Social Studies*, 98, 189-195.
- Tatum, B. D. (2003). *“Why are all the black kids sitting together in the cafeteria?” And other conversations about race* (5<sup>th</sup> anniversary revised edition). New York: Basic Books.
- US Department of Education, National Center for Education Statistics. (2007). *The Condition of Education 2007* (NCES 2007-064). Washington, DC: US Government Printing Office.
- Valencia, R. R. (Ed.). (1997). *The evolution of deficit thinking: Educational thought and practice*. London: Falmer Press.
- Valenzuela, A. (1999). *Subtractive schooling*. Albany, NY: State University of New York Press.
- Walters, N. P., & Trevelyan, E. N. (2011, November). The newly arrived foreign-born population of the United States: 2010. *American Community Survey Briefs*. Retrieved March 14, 2012 from <http://www.census.gov/prod/2011pubs/acsbr10-16.pdf>
- Young, M. D., & Laible, J. (2000). White racism, antiracism, and school leadership preparation. *Journal of School Leadership*, 10, 374-415.
- Zembylas, M., & Iasonos, S. (2010). Leadership styles and multicultural education approaches: An exploration of their relationship. *International Journal of Leadership in Education*, 13(2), 163-183.

**Article Citation**

Marx, S. & Byrnes, D. (2012). Multicultural school climate inventory. *Current Issues in Education*, 15(3). Retrieved from <http://cie.asu.edu/ojs/index.php/cieatasu/article/view/960>

**Author Notes**

Sherry Marx, PhD  
School of Teacher Education and Leadership  
Utah State University  
2805 Old Main Hill  
Logan, Utah 84321  
USA  
[Sherry.marx@usu.edu](mailto:Sherry.marx@usu.edu)

Sherry Marx is an award winning researcher who specializes in examining whiteness and racism in school settings. She teaches classes in multicultural education, ESL education, and qualitative research.

Deborah Byrnes, PhD  
School of Teacher Education and Leadership  
Utah State University  
2805 Old Main Hill  
Logan, Utah 84321  
USA  
[Deborah.byrnes@usu.edu](mailto:Deborah.byrnes@usu.edu)

Deborah Byrnes has spent several decades studying how we can best develop teachers who are culturally aware and sensitive to the school experiences of all learners. She teaches classes in social studies education and action research.



**Current Issues in Education**

Mary Lou Fulton Teachers College • Arizona State University  
PO Box 37100, Phoenix, AZ 85069, USA

Manuscript received: 6/29/2012  
Revisions received: 10/21/2012  
Accepted: 10/30/2012



## **Current Issues in Education**

Mary Lou Fulton Teachers College • Arizona State University  
PO Box 37100, Phoenix, AZ 85069, USA

---

Volume 15, Number 3

December 5, 2012

ISSN 1099-839X

---

Authors hold the copyright to articles published in *Current Issues in Education*. Requests to reprint *CIE* articles in other journals should be addressed to the author. Reprints should credit *CIE* as the original publisher and include the URL of the *CIE* publication. Permission is hereby granted to copy any article, provided *CIE* is credited and copies are not sold.

---



### Editorial Team

#### Executive Editor

**Melinda A. Hollis**  
**Rory O’Neill Schmitt**

#### Assistant Executive Editor

**Meg Burke**

#### Layout Editors

**Elizabeth Reyes**

#### Copy Editors/Proofreaders

**Lucinda Watson**

#### Authentications Editor

**Lisa Lacy**

**Hillary Andrelchik**

**Joy Anderson**

**Laura Busby**

**Michelle Crowley**

#### Section Editors

**Evan Fishman**

**Ayfer Gokalp**

**Kathleen Hill**

**Sultan Kilinc**

**Younsu Kim**

**Carol Masser**

**Bonnie Mazza**

**Leslie Ramos Salazar**

**Melisa Tarango**

#### Faculty Advisors

**Dr. Gustavo Fischman**

**Dr. Jeanne Powers**

---