High school students’ attitudes towards diverse cultures and ethnicities

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SUMMARY
As the world becomes more diversified and globalized, it is important to better understand how diversity affects our understanding and perceptions of people around us. Despite the continual increase of diversity within the United States, ethnic groups are still severely segregated in public schools, and this segregation is often accompanied by feelings of dislike and/or fear amongst students. With the rapid growth in number of minorities in K-12 education in mind, we investigated how high school students’ ethnic and individual backgrounds affect their attitudes towards the integration of diverse cultures and ethnicities in their learning at school. We also examined their social relationships with others of such diverse backgrounds. Sixty-seven 9th and 10th grade students participated in a survey that took about 15 minutes to complete. Their ethnic and racial background included White (24 students), Native American (Navajo) (15 students), Hispanic (14 students), and Mixed races (14 students). We performed inferential statistics for mean comparisons and correlational analyses. Results showed that although students generally perceived other cultures and ethnic groups positively (70-80%), Hispanic students felt judged by their peers in class due to their ethnic, racial, and cultural backgrounds. Moreover, 20-30% of the students reported their culture not being well-embraced by their school or their friends (especially Native American) and expressed their ‘dislike’ for some ethnic groups. Positive correlations emerged between the number of multi-cultural friends and students’ positive cultural attitudes. These findings have practical implications for curriculum development and educational planning in a global community.

INTRODUCTION
Diversity has long been hailed as an ideal in education. Diversity, equity, and inclusion (DEI) are terms that we hear more often than ever before through various DEI initiatives or programs in organizations and universities. In fact, the racial, ethnic, and cultural complexity of the U.S. population is most visible in the school-age cohort, now with more than 50% students of color (1). However, this increasing diversity seems to lead to increasing racial and social class segregation in the K–12 educational system (2, 3). Studies of Black/White schools show that school experience is characterized more by segregation rather than integration because students’ friendships and social activities are often separated by race (4, 5). Although there is a heavy emphasis on how to combat the disparity between teachers’ and students’ backgrounds (6, 1), some researchers argue that we rarely hear the voices of students from racially, ethnically, linguistically, and economically diverse backgrounds when it come to their views of culturally responsive practice and cultural dynamics in their schools (7). Moreover, students’ anecdotes of peers targeting other students for their ethnic backgrounds, physical characteristics, foods, and ways of speaking indicate that more research should be done to better understand the experiences of students in diverse educational contexts by examining students’ own perspectives.

Perceptions about, and experiences with, discrimination tend to vary by group. For example, in a longitudinal, collaborative research project that aimed to better the experiences of Latino/a students in a small, rural town in Utah, researchers administered an initial survey to all students at the school, regardless of ethnicity (8). The study found that for every single item on the survey, Latino/a students responded less favorably than White students, reflecting more negative thoughts about the school and their experiences at the school than their White student counterparts. The statistically significant differences found between the two groups clearly marked the difference between their quality of education at the same school; the Latino/a students felt less welcome, less liked their teachers and school, and felt less prepared for and confident about their academic success than the White students.

Latino/a students are not the only ones that feel inequality, however. At a predominantly White, wealthy high school in the northeast United States, a study found that the White students rarely talked about racial issues (9). However, for minority students, this was a predominant point of discussion. Some African American students even commented that they valued their education only when they were surrounded by their own culture. If they did not feel comfortable, they claimed that they could not focus on learning and started to question their choice of school. Ultimately, they preferred to go to school in their own minority-dominant district (9). These types of students’ remarks are important for two reasons. First, they show the impact racial relations have on learning. Second, they illuminate a disjunct between society’s desire for diverse education along with the great lengths it will go to (including busing) to achieve it and the reality in the classrooms. Educators must be careful not to embrace diversity in classrooms blindly; students’ attitudes and experiences must be acknowledged and valued. In other words, diverse classrooms are not an end goal. Instead, they are a starting point for addressing the issues that can
arise when students have differences in ethnic, racial, and/or linguistic backgrounds, among other factors. Using his position as a 10th and 11th grade history teacher in a linguistically, ethnically, and racially diverse high school, Martell surveyed and interviewed his students regarding race relations and the status of “Whiteness” in the past and present (10). While most students understood the role of race relations in the formation of the United States’ history and were able to cite specific historical instances of racial discrimination, feelings towards present day discrimination were quite divided. Many students of color expressed continuing racism whereas most white students felt that racism was an institution of the past. Of the white students who did acknowledge present racism, they attributed it to a select few individuals rather than understanding it as a systemic problem. Students of color gave examples of racial discrimination, both from their own personal experiences (including in school settings) and from the media (e.g., the Trayvon Martin case). In contrast, white students pointed to the election of President Barack Obama as proof of lack of racism (10). These students showcase the profoundly different experiences and perceptions of minority students, as opposed to their white counterparts.

Taylor’s study also examined the level of segregation present at each of the 69 high schools in North Carolina using an entropy index (i.e., a measure of income inequality in a population) (11). While the index showed racial integration at most of the schools, Taylor noted that diversity showed a strong negative association with the quality of teachers, student academic achievement, and graduation rates. More specifically, school districts that had few or no minority high schools had better teachers, higher student achievement, and higher graduation rates.

Overall, these studies have demonstrated that there is still segregation and discrimination among students in school both implicitly and explicitly, which is not necessarily in line with the current DEI movement. In addition, the studies reviewed above are somewhat outdated and did not examine students’ actual social relationships with people of diverse cultures and ethnicities in school. Furthermore, research on this topic does not often specify Native American or mixed-race students. Therefore, we conducted the current study to fill these gaps by exploring high school students’ attitudes towards their own peers from different races, ethnicities, and linguistic backgrounds including Native American and mixed races. The study sought to answer the following two research questions: (1) How do high school students’ different ethnic backgrounds impact their attitudes towards cultural and social diversity? and (2) What are the high school students’ social relationships with others of diverse cultures and ethnicities and how do they embrace them? We hypothesized that high school students’ backgrounds would significantly impact their attitudes towards different cultures and ethnicities.

RESULTS

In this study, we examined high school students’ attitudes towards different cultures and ethnicities in their social life. We asked two research questions about the impact of high school students’ different ethnic backgrounds on their attitudes towards cultural and social diversity and the high school students’ social relationships with others of diverse cultures and ethnicities. Sixty-seven public high school students (45 from grade 9 and 22 from grade 10) in a Southwestern state completed a 15-minute survey which included questions about students’ positive and negative attitudes toward friends from different ethnic and cultural backgrounds. Participants’ ages ranged from 14 to 16 with 34 males and 33 females. Participants’ ethnic backgrounds included White (n=24), Native American (n=15), Hispanic (n=14), and Mixed (n=14). Their primary home language was English (n= 43), but other languages comprised of Spanish (n=4), Navajo (n=5), mixed with English and Navajo (n=8), English and Spanish (n=6), and English, Spanish, and Navajo (n=1).

In order to answer the first research question about how students’ different ethnic backgrounds affect their attitudes towards cultural and social diversity, a series of one-way ANOVAs were computed with participants’ ethnic background as independent variable and attitude dimensions as dependent variables. The first ANOVA model for students’ positive cultural attitudes was not statistically significant ($F_{3,60} = 0.389, p = 0.761$). That is, students with different ethnic groups responded to a question (e.g., I feel comfortable working in groups with students of color on class projects.) in a similar manner. However, there were statistical differences ($F_{3,60} = 2.65, p < 0.05$) among students’ negative cultural attitudes in response to questions such as “I feel uncomfortable when I am around a significant number of people who are culturally different than me”. Or “I dislike interacting with people from different cultures.” Especially, Hispanic students’ responses ($M = 4.3, SD = 0.97$) agreed more strongly with the statement ($p = 0.05$) than those of mixed races ($M = 5.13, SD = 1.15$) with the effect size of $\eta^2 = 0.08$, showing a medium effect. This means that students with the Hispanic background were less comfortable about cultural integration especially in comparison to students with mixed ethnicities. Other groups did not show any statistical difference (Figure 1).

The ANOVA results showed that there was no statistical difference in participants’ responses for the positive social attitudes (e.g., I feel that reading and discussing literature about different cultures, ethnic groups, religions, economic...

Figure 1. Participants’ Cultural Attitudes by Ethnicity. When students answered questions regarding their positive cultural attitudes (e.g., “I feel comfortable working in groups with students of color on class projects.”), they did not show any significant difference across ethnic affiliation ($F_{3,60} = 0.389, p = 0.761$). However, when responding to negative cultural attitudes questions (e.g., “Most other cultures are backward compared to my culture.”), Hispanic students tended to agree more strongly than students of mixed races ($F_{3,60} = 2.65, p < 0.05$). This indicated that Hispanic-identifying students were not as comfortable as mixed-race students on issues of cultural integration. Other groups did not show any statistical difference. 1 = Strongly Agreed; 7 = Strongly Disagreed. Negative cultural attitudes between Hispanic and Mixed groups were statistically significant.
status, gender, or sexual orientation would add to my education and views of the world) \( F_{3,60} = 1.29, p = .282 \). Most students provided neutral responses (M = 2.79, SD = 0.68). On the other hand, students’ responses to negative social attitude (e.g., I have felt judged by my peers in class based on my ethnic background, race, culture, religion, gender, and/or sexual orientation) showed a statistical difference \( F_{3,60} = 2.98, p < 0.05 \). Post-hoc analyses showed that a significant difference emerged between Hispanic students (M = 2.80, SD = 0.84) and Navajo students (M = 3.44, SD = 0.7) with the medium effect size of \( \eta^2 = 0.09 \). That is, Hispanic students showed a tendency to agree with this statement more than Native American students. No other group comparisons were statistically significant. More specifically, seven Hispanic students (10.5%) agreed and one Navajo student (1.6%) strongly agreed. Likewise, with the statement “There are times when I have felt uncomfortable or unsafe at school due to my own gender, ethnic background, religious upbringing, economic status, and/or sexual orientation,” there were two Hispanic students who strongly agreed and an additional four who agreed (a combined total of nearly 10%) (Figure 2).

Despite the diverse classes in which these surveys were administered, students admitted to having very few friends who spoke with accents (Table 1, Appendix). In fact, ten of them (14.9%) had no close friends from diverse cultures and thirty-nine (58.2%) only had one or two. Although not significant, there were differences in number of diverse-culture or accented friends across ethnic groups. While only one White student (1.5%) and no Hispanic students had more than four close friends with accents, two Mixed (2.9%) and two Native American students (2.9%) claimed to have five or more accented friends. However, although the relationship itself was not strong, correlational analyses showed that there was a significant association \( r = 0.23, p < 0.05 \) between the number of multi-cultural friends and the positive cultural attitudes. There was also a somewhat weak, but statistically significant relationship between the number of foreign countries traveled and the positive cultural attitudes \( r = 0.29, p < 0.05 \).

As for the question “Imagine that a classmate sounds very different than you” (Table 1, Appendix), although the majority of the students (97%) responded positively (e.g., “It would be interesting” or “I wouldn’t mind it at all”), one student stated that “I wouldn’t want him/her in my class”, and two students chose a statement of “It would be difficult, but it’s ok”. Similarly, with the question, “How would you feel if a classmate sounded different from you?”, 50 (75%) responded that they would not mind, but 2 (3%) stated that they would not like it, but they could deal with it. Students’ ethnic background did not yield any statistical differences in their responses to these questions.

Lastly, more direct questions were asked of students regarding how they felt about embracing diverse culture in school and whether they would like any particular races or ethnic groups. The majority of the students responded positively to these questions. Surprisingly, however, around 20-30% of the participants answered with negative responses (e.g., their culture not being embraced among their friends, or at school, or they felt different from other students because of their race or ethnicity). Detailed responses and percentages on the social relationships and embracement about cultural and ethnic diversity are presented below (Table 1). Among these negative responses, particularly Native American students reported their concerns about their culture not being embraced at school or among their friends, followed by the Hispanic students (Figure 3).

Among 38 students (57%) who mentioned ‘yes’ to the question “Are there advantages to being of one race or ethnicity?” (Table 1), White (n=18) students were the majority followed by Native American (n=8), Hispanic (n=6), and Mixed (n=6). Relatedly, the last question showed a similar pattern. As for a question about “Do you dislike any ethnic groups?”, 27% (n=18) of the students responded with “Yes”. The highest number (n=8) came from White students, followed by Native American (n=4), Hispanic (n=3), and Mixed (n=3). This pattern indicates that despite the diversity efforts in education, White students seem to still hold feelings of cultural and ethnic superiority over any other ethnic groups.

**DISCUSSION**

In our study, we examined how high school students’ different backgrounds affected their attitudes towards the integration of diverse cultures and ethnicities in their learning.

**Table 1.** Selected items related to social relationships and embracement about cultural and ethnic diversity (n=67). N = number of respondents, % = percentage

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>Yes% (N)</th>
<th>No% (N)</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>27. Do you embrace your cultural background?</td>
<td>77 (51)</td>
<td>21 (14)</td>
<td>2</td>
</tr>
<tr>
<td>28. Is your culture embraced among your friends?</td>
<td>72 (48)</td>
<td>26 (17)</td>
<td>2</td>
</tr>
<tr>
<td>29. Is your culture embraced at school?</td>
<td>65 (43)</td>
<td>33 (22)</td>
<td>2</td>
</tr>
<tr>
<td>30. Are there advantages to being of one race or ethnicity?</td>
<td>57 (38)</td>
<td>43 (29)</td>
<td>0</td>
</tr>
<tr>
<td>31. Do you feel different from other students because of your race or ethnicity?</td>
<td>29 (19)</td>
<td>71 (48)</td>
<td>0</td>
</tr>
<tr>
<td>32. Do you dislike any ethnic groups?</td>
<td>27 (18)</td>
<td>73 (49)</td>
<td>0</td>
</tr>
</tbody>
</table>

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**Figure 2.** Participants’ Social Attitudes by Ethnicity. Similarly to the cultural attitudes results, there was no significant difference \( F_{3,60} = 1.29, p = .282 \) by ethnic affiliation when students were asked positive social attitudes questions (e.g., I feel that reading and discussing literature about different cultures, ethnic groups, religions, economic status, gender, or sexual orientation would add to my education and views of the world). However, when asked negative social attitudes questions (e.g., I have felt judged by my peers in class based on my ethnic background, race, culture, religion, gender, and/or sexual orientation.), Hispanic students agreed more strongly than Native American students \( F_{3,60} = 2.98, p < 0.05 \). This indicates that Native American students felt more comfortable in diverse social situations than their Hispanic peers. No other group comparisons were statistically significant. 1 = Strongly Agreed; 5 = Strongly Disagreed; Negative social attitudes between Hispanic and Native American groups were statistically significant.
their culture was not appreciated in the academic realm. Specifically, Native American students not only reported not embracing their own culture or having their culture be embraced by their friends, but they also felt (with much more frequency than other racial groups) that their culture was not appreciated in the academic realm and investigated their social relationships with others of such diverse backgrounds. First, we examined how high school students’ different ethnic backgrounds impacted their attitudes towards cultural and social diversity. Second, we investigated high school students’ social relationships with others of diverse cultures and ethnicities and how they embraced them. We conducted a survey study with 67 high school students from diverse ethnic backgrounds of White, Native American, Hispanic, and Mixed races. Our findings showed that although students with different ethnic groups generally felt comfortable with other cultures and ethnic groups, Hispanic students felt less comfortable about the cultural integration in comparison to those of mixed races. Additionally, students’ positive attitudes did not reveal any differences across ethnic groups, but students’ responses to negative social attitude questions differed significantly among different groups.

In particular, Hispanic students showed more tendency of agreeing with this statement (i.e., their feeling being judged by their peers in class based on their ethnic background, race, culture, religion, gender, and/or sexual orientation) than Native American students. In addition, the majority of the Hispanic students (10 out of 14) agreed with the statement that there were times when they had felt uncomfortable or unsafe at school due to their gender, ethnic background, religious upbringing, economic status, and/or sexual orientation. These findings of Hispanic students’ feelings of inequality or negative judgements are in line with the previous research, showing that Latino/a students felt less welcome, prepared for, and confident about their academic success than White students (8). In fact, these learning issues could be triggered by Latino students’ own experiences among peers at school. This finding can be especially critical in the current education context, given that the study was conducted in a public high school in a Southwest state where 31% of the total population is Hispanic with 54% of White, 5% of Black, 4% of Native American, and 4% of Asian/Pacific Islander (12). This result implies that even though the issue of cultural, racial, and ethnic diversity has been emphasized and various efforts have been made in schools, the current DEI education needs to be re-evaluated in public school situations, at least in high school settings.

When it comes to their cultural embrace at school and social relationships with others, more than half of the students (58%) reported that they had one or two close friends from diverse cultures. However, about 15% of the students said they had no such friends, and a very limited number of students mentioned multiple friends from diverse cultures and ethnicities. We hypothesized that there were some meaningful and positive correlations between the number of multi-cultural friends or the number of foreign countries traveled and positive cultural attitudes. That is, students who were most exposed to diverse cultures and ethnicities through their own personal lives tended to be more receptive of the concept of diversity. Even though the study was done with university students, another study demonstrated that variables such as many study-abroad experiences or many international friends were important factors that could influence students’ positive perceptions of others (13).

Another important finding is about some of the students’ negative responses to cultural embracement questions. Even though 70-80% of the responses were positive, the remaining 20-30% of the students still reported that their culture was not well-embraced by their school or by their friends. Especially, the concerns were higher among Native American students. In fact, the high school where students participated in the study was comprised of 49% White, 26% Native American, 21% Hispanic, 2% two or more races, 1% Asian, and 1% Black. It is a multi-cultural and multi-racial school, but the ratio of Native American and Hispanic populations is particularly high. Therefore, this finding about Native American students’ current perspectives of cultural embracement at school is noteworthy. Indeed, issues related to Indigenous students’ educational segregation has long been documented; in fact, Native Americans have the lowest educational attainment rates of any ethnic group in the United States (14). Researchers have attributed this educational disparity gap that American Americans experience to the lack of cultural relevance in mainstream educational settings. Some scholars assert that the campus climate of schools can be aggressively anti-Indian at times (15). It has also been reported that Native American students perceive a cultural bias against them in classroom curriculum as well as pedagogical practices (14). Therefore, schools need to pay careful attention to these students’ voices and possibly make efforts to incorporate more diverse cultures into their curriculum and school activities.

The last finding about the ethnicity question was a somewhat expected one. As seen from Martell’s study about the status of “Whiteness”, White students found their culture to be more advantageous than those of others (10). However, it is important to know that 27% of the students (18 out of 67) stated that they disliked any other ethnic groups with eight of those responses being from the White students. Even though each individual student could have their own background and personal reasons to like or dislike certain ethnic groups, this finding should be taken into consideration by K-12 educators or policy makers. One may not want to embrace certain cultures or ethnic groups, but if one dislikes a particular ethnic group, it can create more socially unacceptable consequences.

Overall, “multicultural education” has become a buzzword in education, and one would be hard-pressed to find a school that does not claim to espouse it. However, as Ngo points
out, “multicultural” education often boils down to sharing trivial tidbits of culture, such as food, dance, or folktales (16). However, as Ngo mentioned, this approach is problematic. First, the “healing past wounds” initiative ignores past (and present) social inequities. Second, the emphasis on “celebrating” student differences often reduces culture to tangible artifacts. Third, the culture of empathy does little, if anything, to remedy educational inequalities, which is the very goal of multicultural education (16). It is partly for these reasons that Ngo claims that multicultural education serves to sustain and exacerbate the very problems that it was meant to ameliorate. We have seen some of the issues from the findings of the current study as well. Perhaps this multicultural education is successful up to 70-80% in the current educational contexts; still, 20-30% of the students have been experiencing issues of inequality. The findings of our study offer many groups of people (teachers, students, parents, policy makers or any education practitioners) important implications with a message that schools should consider developing more culture-sensitive, integrated curricula for students from diverse cultures and ethnicities. This diversity education should be a top priority in education, as it has been shown that as support for classroom and school diversity increase, feelings of safety and self-worth also increase while feelings of victimization and loneliness decrease (17).

Finally, future research could be conducted by addressing some of the limitations of the current study. A sample size could be bigger with students from other public schools because the current study only recruited participants in a south-west region. Another study could be conducted in different regions, to include different perspectives. Similarly, studies conducted in multi-cultural metropolises could present different results. The age group could be expanded to middle schoolers as their age level to form their identity could yield different perspectives towards diverse cultures and ethnicities. Moreover, direct interviews or focus group meetings could be useful by collecting their qualitative responses as they could offer insights into students’ thought processing and reactions more deeply. Finally, the study did not include any direct stereotyping measures after watching or listening to speech stimuli made by speakers from diverse cultures or ethnicities. However, a direct approach could strengthen the design of the study.

MATERIALS AND METHODS

The following section discusses the participants, data collection procedures, and instruments. All procedures were in accordance with the university’s Internal Review Board, the Director of Research and Assessment for the school district involved, and the school principal of the participating school.

Participants

Sixty-seven 9th and 10th grade students participated in this study. There were 45 9th graders and 22 10th graders. The high school was situated in a small city in the southwestern United States. Participants consisted of both males (n=34) and females (n=33) who were relatively diverse in ethnicity. The most (n=24, or 36%) considered themselves to be White, 15 (22%) identified as Native American, 14 (21%) Hispanic, and 14 (21%) selected more than one option (labelled ‘Mixed’). Participants were between 14 and 16 years old and came from somewhat diverse home language backgrounds. Participants’ first home language was English (n=43), but other languages comprised of Spanish (n=4), Navajo (n=5), mixed with English and Navajo (n=8), English and Spanish (n=8), and English, Spanish, and Navajo (n=1).

Data Collection Procedures and Analyses

Prior to data collection, a teacher who recognized the value of the study agreed to assist as a facilitator. Accordingly, the teacher introduced the survey opportunity to students. The teacher taught two classes of 9th grade and three classes of 10th grade general English (neither pre-AP nor special education). Students who were interested in the survey were given a link in which the study was described and a research ethics consent form was introduced. Once participants submitted their consent forms as well as their guardians’ consents, they were able to complete the survey. The entire survey took about 12-15 minutes to complete.

Once responses were collected from high school students, all information was de-identified and saved in a password-protected system. Responses from students who submitted the consent forms were used for the data analysis. Statistical analyses were performed by using a series of ANOVAs and bivariate correlations via IBM SPSS Statistics Version 29. Tukey’s Honest Significant Difference (HSD) tests were used for post-hoc analyses to assess the significance of differences between pairs of group means. For survey item consistency, Cronbach Alpha (item consistency) reliability analysis was also added. Statistical significance was reported and interpreted at the critical alpha point of 0.05 or lower.

Instruments

The primary data collection of the study was a survey response. A survey was administered to students in order to elicit their attitudes regarding their classmates’ cultural and diversity issues in general. The questions included high school students’ social experiences with friends from diverse cultures and ethnic groups. Also, an additional twenty questions were added from the Bogardus Social Distance Scale, Neuliep and McCroskey’s (18) Ethnocentrism Scale, and the survey used by Hughes et al. (10). This survey also served to collect demographic information about each of the participants.

In the survey on the top of the beginning front page, two terms “ethnic” and “culture” were explained as follows.

**Ethnic:** Relating to a group of people that has the same racial, national, religious, linguistic or cultural background.

**Culture:** Attitudes, customs, and beliefs that distinguish one group from another.

The survey consisted of 36 items. There were five background information questions (grade, age, gender, ethnicity, and first language spoken at home). Then, the survey included 11 social friend and relationship questions (e.g., How many close friends do you have that sound different than you? Or How many places have you traveled abroad?). These questions were asked with options: (a) 0, (b) 1-2, (c) 3-4, (d) 5-6, and (e) more than 6. These social relationship questions included more items about their feelings of certain situations such as “How would you feel if a classmate sounded different from you?” Or “Imagine that a classmate sounds very different than you”. For the first question, participants were given five
options as follows:
(a) I wouldn’t like it at all.
(b) I wouldn’t like it, but I could deal with it.
(c) I wouldn’t mind.
(d) It would be different, but I’d like it.
(e) I’d think it’s cool— I’d want to be friends with them.

For the second question, they were given the following five options:
(a) I wouldn’t want him/her in my class.
(b) It would be difficult, but it’s ok.
(c) It wouldn’t be a problem.
(d) It would be interesting.
(e) It would be a good challenge—I’d want to try it.

The survey included 10 positive and negative cultural attitude questions. Three items were positively oriented and the remaining seven items were negatively oriented. Each item had a seven-point scale with 1 = strongly agree and 7 = strongly disagree. The three positive items were #19, #20, and #21. Some examples of the seven negative attitude items were #17, #23 or #26. Finally, the survey ended with four negative/positive social attitude items. Two items had a negative connotation and two items had a positive orientation. The negative items included #33 and #34. The positively oriented items contained #35 and #36. These four items had a 5-point scale (1 = Strongly agreed and 5 = strongly disagreed). These scale point differences were based on the previous literature which was the basis for the adoption of these instruments. The complete survey questionnaire items are listed (Table 1, Appendix).

Students’ attitudes were operationalized largely in two concepts: (1) positive/negative cultural attitudes and (2) positive/negative social attitudes. Questionnaire items of the same attribute were combined as one composite variable after checking their item reliability. Positive cultural attitudes (3 items) had Cronbach’s alpha reliability of 0.91, negative cultural attitudes (7 items) of 0.87, and positive social attitudes (3 items) had a Cronbach’s alpha reliability of 0.96, negative social attitudes (2 items) of 0.94.

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Appendix

Survey questions.
1. What grade are you in?
2. How old are you?
3. What is your gender?
4. What is your ethnicity?
5. What language do you speak at home?
6. If you listen to someone who sounds different than you, how do you feel?
7. How many close friends do you have that sound different than you?
8. How many places have you traveled abroad?
9. Imagine that a classmate sounds very different than you.
10. Do you want your classmates to sound like you?
11. How would you feel if a classmate sounded different from you?
12. Imagine that your teacher sounds very different from you (has a strong accent).
13. Do you want your teacher to sound like you?
14. How would you feel if a teacher sounded different from you?
15. Have you ever had a class with a teacher that had an accent?
16. If you answered ‘yes’ to number 14, how was your experience?
17. I dislike interacting with people from different cultures.
18. Most other cultures are backward compared to my culture.
19. It is good for people of certain cultures to immigrate to this country.
20. I would feel comfortable dating a person from a different culture.
21. I feel comfortable working in groups with students of diverse culture and ethnicity on class projects.
22. I try to avoid speaking with students from other language backgrounds because I’m afraid I won’t be able to understand them.
23. I try to avoid speaking with students from other language backgrounds because I don’t think they will be able to understand me.
24. My culture should be the role model for other cultures.
25. I feel uncomfortable when I am around a significant number of people who are culturally different than me.
26. I feel irritated when people of different cultural backgrounds speak their language around me.
27. Do you embrace your cultural background?
28. Is your culture embraced among your friends?
29. Is your culture embraced at school?
30. Are there advantages to being of one race or ethnicity?
31. Do you feel different from other students because of your race or ethnicity?
32. Do you dislike any ethnic groups?
33. I have felt judged by my peers in class based on my ethnic background, race, culture, religion, gender, and/or sexual orientation.
34. There are times when I have felt uncomfortable or unsafe at school due to my own gender, ethnic background, religious upbringing, economic status, and/or sexual orientation.
35. I feel that reading and discussing literature about different cultures, ethnic groups, religions, economic status, gender, or sexual orientation would add to my education and views of the world.
36. My teachers take the time to get to truly know me as an individual based on my ethnic background, race, culture, religion, gender, and/or sexual orientation; I am not seen as merely a number in class.