

The Next Generation of Diversity and Intergroup Relations Research

Sylvia Hurtado*

University of California at Los Angeles

Recent court decisions and cultural shifts have led to a new focus for work on equity and equality of outcomes in educational settings. This article reviews the contributions of recent diversity studies and then focuses on a longitudinal study of 4,403 college students attending nine public universities. Results show that student interaction with diverse peers during college results in changes in student cognitive, social, and democratic outcomes by the second year of college. Campus efforts to provide opportunities for students to learn about diverse groups inside and outside the classroom have an appreciable impact on students.

In 2003, social science research evidence played a pivotal role in the Supreme Court's decision on two affirmative action cases at the University of Michigan. Drawing on generations of diversity and intergroup relations studies, the research presented in expert testimony and *amicus* briefs supported the rationale for pursuing diversity as part of the institutional mission of higher education, establishing links between diversity of the student body, individual student learning, and preparation for a diverse workplace in a pluralistic democracy (Gurin, 1999; Gurin, Dey, Hurtado, & Gurin, 2002). Such theoretical and empirical links had not been made in previous legal contexts, nor had the wealth of research on diversity in educational contexts and intergroup relations been synthesized in any consistent way with the involvement of many scholars across the social science disciplines (Chang, Witt, Jones, & Hakuta, 2003).

The body of work supporting the rationale for diversity in higher education was largely uncontested in Court. In fact, Justice Sandra Day O'Connor directly quoted the research stating that diversity is central to the institution's mission

*Correspondence concerning this article should be addressed to Sylvia Hurtado, Higher Education Research Institute, 3005 Moore Hall, 405 Hilgard Ave. University of California, Los Angeles, CA 90095-1521 [e-mail: shurtado@gseis.ucla.edu].

and “. . . numerous studies show that student body diversity promotes learning outcomes, and better prepares students for an increasingly diverse workforce and society, and better prepares them as professionals” (*Grutter v. Bollinger et al.*, p. 18, 2003). However, the benefits of diverse environments brought about by affirmative action may not be immediately evident to individuals within institutions (Chang et al., 2003). Perhaps more importantly, the research clearly indicates the benefits accrue to individuals and organizations under optimal conditions (Gurin et al., 2002), and many educators must strive to create these conditions if they are non-existent in educational institutions. The next generation of diversity and intergroup relations research should explore aspects of the optimal conditions that considerably expand those initially postulated in *The Nature of Prejudice* (Allport, 1954) more than a half a century ago. Additional evidence is needed about the conditions and practical interventions within diverse educational settings that result in preparing individuals for an increasingly diverse workplace, regardless of whether or not affirmative action is the source of this diversity.

The articles in this volume of the *Journal Social Issues* illustrate aspects of the next generation of research on diversity issues and intergroup relations. The works probe deeper into the complexities of intergroup relations that are influenced by the conditions and context in which individuals, positioned differently due to race and gender within these contexts, come to understand aspects of self in relation to others. Niemann and Dovidio (2005, this issue) suggest it is not simply that affirmative action can cause low self-esteem or low job satisfaction, but it is the climate for diversity and support that mediates how affirmative action practices are enacted and subsequently experienced by faculty of color in academe. They touch upon mentoring as one approach that has promise if implemented with the needs of protégés in mind, a point that Girves, Zepeda, and Gwathmey (2005, this issue) expand significantly in identifying the elements of effective mentoring strategies and structures for students and faculty, and illustrate in the approaches of successful programs. The issue of overall institutional support for diversity and effective implementation of mentoring is resonant in both papers. However, mentoring as an institutional intervention is less likely to be successfully implemented in environments where administrators maintain that the talented naturally rise to the top in academic organizations—withstanding that the long-term beneficiaries of informal mentoring at such institutions have traditionally been white males as part of the informal normative structure of academia (Johnsrud & Sadao, 1998). Formal mentoring systems, as an intervention, ensure that the talent development of young people (especially women and underrepresented groups) is not left to chance (Turner & Myers, 1999).

The results of an early intervention program highlighted by Maruyama, Burke, and Mariani (2005, this issue) suggest that college-based programs can be successful in increasing access for students of color but college success can be varied. Although more study is needed, interventions that do not transform the campus

leave the wider academic environment untouched. Irrespective of such interventions, as will be illustrated later in this article, how students of color experience the campus ultimately has impact on their success. Pinel, Warner, and Chua (2005, this issue) show, racial/ethnic minorities and women can increase their stigma consciousness and experience reductions in self-esteem in predominantly white environments. Thus, the nurturing environment of support programs can be carried only so far without general changes in campus-wide practices and attitudes about diversity and diverse populations.

For example, campus administrators invest in recruiting diverse individuals to college campuses, and yet more effort is needed in improving mentoring relationships and intergroup relations on campus to ensure that there will be long-term institutional benefits of retaining more students and faculty of color while helping them to succeed. According to Knight and Hebl (2005, this issue), justification for an affirmation action practice framed as directly benefiting individual employees or as benefiting the entire organization is more likely to win support, especially among a white majority. Therefore, not simply having the programs in place but also framing their use and overall benefits for more members of the campus community is an essential condition. This notion of “framing” may go a long way in changing the culture in education. In a similar vein, Rabinowitz, Wittig, von Braun, Franke, and Zander-Music (2005, this issue) find that holding more egalitarian beliefs and a positive orientation toward interacting with outgroups are related to more positive attitudes toward outgroups. Their work suggests that interventions that affect attitudes of high-status group members at the high school level hold promise for paving the way for smoother intergroup relations in colleges and workplaces, and could reduce the need for programs such as affirmative action if attitudes are changed to incorporate more egalitarian practices to match beliefs.

In a transformative approach, Torre and Fine (2005, this issue) explore the higher education context relocated to accommodate women in prison. They highlight the broad range of benefits to society, the individuals, and inmates' children in increasing college access for this population. In its most overt form, this approach of “affirmative action” is taken to mean democratizing access and developing talent wherever it may be found. The benefits they document are compelling and suggest that we have much to gain as a society from such an effort. This research helps to reframe the discussion about whom we educate and why it may be in the best interest of the public to consider new interventions. In fact, researchers and policymakers can benefit from having this type of diversity research on record, even if there is a lack of political will or even opposition to an intervention that provides higher education access to an incarcerated, largely minority population. For example, much of the preexisting social science evidence was brought to light as a result of the conflict that ensued over the Michigan affirmative action cases, and helped to bolster the evidence on the social contributions of such an intervention.

An Illustrative Study of the Benefits of Diversity in Higher Education

What other ways might we extend the next generation of diversity and intergroup relations research to achieve democratic ends beneficial to society? Four years ago, I embarked on such a study of 10 public universities, with the aim to provide further evidence about how the benefits of diversity accrue to individuals in terms of a broad range of democratic skills and dispositions. It was an effort to move beyond the affirmative action debates of the time, to examine approaches that make diversity central to the purposes of higher education that included preparation of the next generation of leaders. That is, the purpose of the research was to begin to reframe the discussions by empirically demonstrating how diversity is essential to learning in higher education and to begin to establish the nature and effects of intentional campus practices that make diversity central to the educational and public service mission of the institution. To extend our understanding of how diversity works in practice on college campuses, we examined many of the measures and constructs represented in original studies used in the affirmative action cases at the University of Michigan (Gurin, 1999; Gurin et al., 2002; Gurin et al., 2004) along with several new outcomes that tapped into students' democratic sensibilities (e.g., beliefs about the role of conflict in a democracy, concern for the public good). Although the results have been presented elsewhere on different portions of the study that include classroom studies, site visits and focus groups, and a longitudinal survey component (Hurtado, 2003; Hurtado, Engberg, Ponjuan, & Landreman, 2002), I will summarize and provide highlights of the findings of the longitudinal survey for the purposes of this article. In doing so, I illustrate how empirical evidence can help to reframe the discussions about diversity to not only improve intergroup relations in higher education but also to achieve long-term individual and societal benefits.

Linking diversity interactions and educational outcomes. Building on the theory and research of developmental and cognitive psychologists, we hypothesized that diversity in the student body provides the kind of experience base and discontinuity needed to evince more active thinking processes among students, moving them from their own embedded worldviews to consider those of another (or their diverse peers) (detailed in Gurin et al., 2002; Hurtado, Dey, Gurin, & Gurin, 2003). This theory of how diversity works in education suggests that most of us are cognitively inclined to rely on familiar ways of thinking that include habits, routine, and even stereotypes that dominate our world view (Bargh, 1997; Gurin et al., 2002; Langer, 1979). When encountering unfamiliar and novel situations, people, and experiences, however, it becomes difficult to rely on these familiar ways of thinking and acting. Moreover, most developmental theories posit that social interaction is necessary to elicit the cognitive disequilibria that spurs growth and development in students at this stage of their lives (Chickering & Reisser, 1993;

Muss, 1988; Perry, 1970; Piaget, 1975). To learn or grow cognitively, individuals need to recognize cognitive conflicts or contradictions, situations that psychologist Diane Ruble (1994) suggests lead to a state of uncertainty, instability, and possibly anxiety. Thus, recognizing different ways of thinking (internally) or in social encounters (externally) with diverse peers may lead to many dimensions of growth. Peer interactions during college affect various dimensions of growth that include both cognitive skills (Perry, 1970), values (Astin, 1993), and attitudes (Alwin, Cohen, & Newcomb, 1991), so it stands to reason that interactions with diverse peers also illicit development in more ways than one.

For purposes of this study, the outcomes were defined as cognitive skills, social cognitive outcomes, and democratic sensibilities—all of which are intended to incorporate a wider view of the social world. Recent theory and research also suggest that such epistemological, intrapersonal, and interpersonal development are interwoven in ways that enable individuals to make decisions contextually, enable them “to choose what they believe and mediate their relations with the external world” (Baxter Magolda, 2001). These are essential interrelated areas of growth to prepare students for living and working in an increasingly complex, and diverse world (Bikson & Law, 1994).

In designing the work, a focus on social interaction with diverse peers was essential, for previous research has found a diverse student body to be a necessary but not sufficient condition for learning and development to occur (Gurin et al., 2002). Since many students come to campuses from segregated neighborhoods and backgrounds (Orfield, Bachmeier, James, & Eitle, 1997), social interaction across race/ethnicity and other social differences vary from individual to individual as well as whether the student is of majority or minority group status on a campus. Thus, the study captured multiple measures of social interaction across race to establish more concretely differences in frequency, quality, and context that may affect a host of cognitive, social and democratic skills in college. The research also documented several intentional educational practices or interventions associated with diversity to examine their relationship with a broad set of values, skills, and knowledge necessary to prepare students for participation in a diverse democracy.

Methods. The data for this longitudinal study originated from a national research project. Students who participated in the project attended one of 10 public universities that varied in geographic location (e.g., Midwest, Northeast, Southwest, Northwest), size (e.g., 5,000 to 30,000 undergraduate enrollment), and student enrollment demographics (e.g., 5–95% students of color). Institutions were selected based on the following criteria: (a) a strong commitment to diversity initiatives as exemplified through curricular and cocurricular programming; (b) recent success in diversifying their student enrollment; and (c) a commitment to public service and the development of significant partnerships with the local community.

One of the key approaches of the project included a longitudinal survey of students who matriculated during the Fall 2000 academic year. The survey was designed to assess how students' exposure to diversity, through both classroom and informal interactions, influenced their cognitive, social-cognitive, and democratic learning and development. The first-year survey focused primarily on students' precollege socialization experiences, whereas the follow-up survey specifically addressed the impact of the college experience. Students were administered the first-year survey during orientation sessions and additional waves were distributed in courses that attracted a large number of first-year students. The follow-up survey was administered to students at the end of their second year of college using multiple waves of both paper and web-based surveys.

One of the participating campuses was dropped from the longitudinal study due to extremely low second-year response rates. For the remaining nine campuses, the return rate for those students who responded to the first-year survey was approximately 36% ($n = 13,520$) and the second-year return rate, based on the first-year respondent pool, was 35% ($n = 4,757$). The relatively low return rates reflect the difficulty of conducting longitudinal research at large public universities, especially those that experience student attrition or find it difficult to maintain updated student contact information. In order to correct for the low response rates and generalize results to the original sample population, statistical weights were created to account for the probability of students responding to both the first- and second-year surveys. The dataset contained 4,403 students who completed both the first- and second-year surveys and whose responses could be matched across the two time points.

The statistical weighting techniques used to correct for low survey response rates required three steps: a logistic regression analysis to obtain predicted probabilities of responding in year 1 and year 2, poststratification weighting, and a weight adjustment technique. Researchers employ this weighting technique to adjust the sample upward to the original population, thereby ensuring that low responding groups (e.g., race/ethnic groups) are weighted to reflect the original population (Babbie, 2001; Kish, 1965). The general formula used to develop the weight variable is: $\text{Total weight} = (1/\text{probability of selection} \times 1/\text{predicted probability of response} \times \text{poststratification weight})$. The weight variable used for this study accounted for the probability of students responding to both the first- and second-year surveys. In order to ensure that the weighted sample did not produce incorrect standard errors and inflated t -statistics results, due to a larger weighted sample size, an adjusted weight variable was also created ($\text{total weight variable}/\text{mean of the total weight variable}$) and employed in the analyses.

Highlights of results. The results of two groups of findings are highlighted here. First, the nature and role of student *informal interaction* with racially/ethnically diverse peers in relation to the outcomes in the longitudinal study

(controlling for student background, climate issues, participation in campus-facilitated practices, and participation in 9/11 events and activities) are examined. The idea was to identify the unique contribution of informal interaction with diverse peers on the dependent measures, over and above students' initial predispositions, other college experiences, and the impact of a unique social historical event—9/11—experienced by students in the sample. Next, the independent effects (holding the same factors constant noted above) were examined of four *campus practices* that intentionally acquaint students with racial/ethnic diversity on college campuses.

Table 1 shows the effects of students' informal interaction with diverse peers on outcomes in the longitudinal study. (Full regression models are available from the author). Most studies document the frequency of interaction with diverse peers, but this study includes scales documenting students' quality of interaction (reports of positive and negative interactions). As a result, the findings for these measures of student interaction differ slightly from previous research.

Students' analytical problem-solving skills were positively related to the quality of interaction, while students' complex thinking skills were most related to the positive interactions they have with diverse peers ($p = < .001$). Negative interactions across race/ethnicity and informal contexts were negatively related to these cognitive outcomes, respectively, but are smaller in magnitude ($p = .05$).

Although statistical associations varied from marginal significance to relatively strong effects, results indicate that facilitating student interactions to manage disequilibria and conflict is important. Informal, *negative interactions* with diverse peers resulted in *lower scores* on many outcomes—including lower self-confidence in leadership, cultural awareness, concern for the public good, support for race-based initiatives, and tolerance of lesbian, gay, and bisexual people ($p = < .05$) with relatively stronger associations ($p = < .01$ or less) with students' self-efficacy for social change, perspective-taking, support for institutional diversity practices, development of a pluralistic orientation, belief that conflict enhances democracy, and the importance placed on making civic contributions. Students who reported mostly negative interactions also were likely to think they have fundamental value differences with students from other racial/ethnic groups ($p = < .001$). Moreover, negative interactions are likely to heighten social identity awareness, that is, greater identification with others in the same racial category (see also Rabinowitz et al., 2005, this issue). When left to chance, negative interactions can reinforce differences between groups rather than include a serious exploration of commonalities.

In contrast, students who report meaningful and *positive* interactions with diverse peers tend to score *higher* on many important outcomes. The largest associations ($p = < .001$) were evident on cultural awareness, interest in social issues, self-efficacy for social change, belief in the importance of creating greater social awareness, perspective-taking skills, the development of a pluralistic

Table 1. Students' Informal Interaction with Racially/Ethnically Diverse Peers and Outcomes in the Longitudinal Study

Outcome	Positive Interactions	Negative Interactions	Frequency of Interactions
<i>Cognitive</i>			
Analytical problem-solving skills	.057**	-.029*	.021
Attributional complexity	.146***	.005	.001
Retention (returning in Fall 2002) ¹	.963	.995	.965
<i>Socio-cognitive</i>			
Leadership skills	.044*	-.031*	.026*
Cultural awareness	.130***	-.031*	.040**
Interest in social issues	.143***	-.003	.006
Low self-efficacy for social change ²	-.104***	.052***	-.017
Importance of creating social awareness	.075***	-.022	.025
Racial inequality is not a problem in society	-.065**	.051***	.059***
Social identity awareness	.058**	.057***	.011
Perspective-taking	.089***	-.082***	.032*
Social inequity is ok	-.084***	.077***	-.024
Support for institutional diversity and equity	.045	-.056***	-.007
Discomfort with racial/ethnically diverse peers	-.050*	.136***	-.014
<i>Democratic sensibilities</i>			
Pluralistic orientation	.153***	-.107***	.052***
Interest in poverty issues	.149***	-.004	.031*
Conflict enhances democracy	.034	-.047**	.055***
Concern for the public good	.112***	-.034*	.003
Importance of civic contribution	.064**	-.039**	.036*
Support for race-based initiatives	.076***	-.029*	-.030*
Tolerance for LGB people	.030	-.029*	.033*
Helped others in the community vote ¹	1.260*	.981	.880
Voted in Federal or State elections ¹	1.006	.979	1.276***
Voted in student government elections ¹	.919	1.008	1.075
Difference of values with other racial/ethnic groups	-.034	.075***	-.102***

Note. Significance levels of beta coefficients, * $p < .05$; ** $p < .01$; *** $p < .001$. See Appendix for actual beta coefficients.

¹Results from logistic regression analysis.

²Regression was run predicting low self-efficacy for social change but reversed to ease discussion in the text.

orientation, interest in poverty issues, concern for the public good, and support for race-based initiatives. The latter finding is further confirmed by results that show students with positive crossracial encounters are likely to view racial inequality as a problem we must address and are less likely to accept that some degree of social inequity is acceptable in our society.

The frequency of interaction measure suggests that students have both positive and negative interactions with diverse peers and, once quality of interaction is

controlled, substantial intergroup contact is significantly associated with several important outcomes. For example, students who reported frequent contact with diverse peers displayed greater attributional complexity, self-confidence in cultural awareness, development of a pluralistic orientation, believe that conflict enhances democracy, and tend to vote in federal and state elections. They also were less likely to perceive value differences with other racial/ethnic groups. In short, substantial interaction with diverse peers has the effect of providing students with many opportunities to learn how to resolve conflict and practice democratic skills. The only anomaly in the analyses was the result of a suppressor effect. After controlling for quality of interaction, those with frequent interaction were likely to believe that racial inequality is not a problem in society. It may be that frequent contact (irregardless of quality) means that some students see diverse peers often and may begin to believe we have actually resolved racial inequality in society.

Table 2 shows the independent effects of each of four campus diversity-related practices on outcomes in the longitudinal study of students. Each campus practice attempts at fostering greater interaction and learning about diverse populations. In analyses of the independent effects of these practices, the effects were controlled for students predispositions on each outcome, background characteristics, levels of informal interaction with diverse peers, and participation in 9/11 activities in 2001. In terms of the actual practices, curricular initiatives included measures of student participation in service learning, enrolling in integrated diversity courses (courses that include readings on different racial/ethnic groups), and participation in intergroup dialogue. The diversity courses are identified as integrated because two of the 10 campuses do not have diversity course requirements and instead have undertaken curriculum integration initiatives. Both service learning and intergroup dialogue represent an experiential component that complements course content. The intergroup dialogue is typically a facilitated intensive discussion across two or more social identity groups extending over the course of a term. Many of these dialogues constitute a course component. In addition, the impact of student participation in campus-facilitated, extracurricular diversity events and activities (the last column in Table 2) was assessed.

It is striking to note that students who have an opportunity to take a diversified curriculum by the second year of college tended to score higher on 19 of 25 outcomes in the study. It is not entirely the case that particular types of students take diversity courses (although some of this is evident in the classroom studies we have conducted), for the research controlled for students' entry dispositions on all of the outcomes at first year student orientation. Strongest effects of diversity courses were evident on complex thinking skills (attributional complexity), retention, cultural awareness, interest in social issues, the importance of creating social awareness, and support for institutional diversity initiatives. Students who took an integrated curriculum also were likely to believe that racial inequality is still a problem and less likely to accept that some social inequity is acceptable in

Table 2. Effects of Campus Practices on Outcomes in the Longitudinal Study

Outcomes	Service Learning	Diversity Courses	Intergroup Dialogue	Extracurricular Diversity Events
<i>Cognitive</i>				
Analytical problem-solving skills	.011	-.017	.034*	-.014
Attributional complexity	.004	.081***	.038*	.029
Retention (returning in Fall 2002) ¹	1.169	1.301***	.920	1.073
<i>Socio-cognitive</i>				
Leadership skills	.035**	.007	.029*	.047***
Cultural awareness	-.009	.088***	.021	.100***
Interest in social issues	.022	.084***	.029*	.055***
Low self-efficacy for social change ²	-.022	-.041*	-.028	-.055***
Importance of creating social awareness	.022	.070***	.034*	.071***
Racial inequality is not a problem in society	-.012	-.146***	-.004	-.073***
Social identity awareness	.006	.039*	-.002	.141***
Perspective-taking	.014	.042**	.050***	.002
Social inequity is ok	.008	-.060***	-.017	-.084***
Support for institutional diversity and equity	.010	.086***	.011	.090***
Discomfort with racial/ethnically diverse peers)	-.007	.015	.001	-.011
<i>Democratic Sensibilities</i>				
Pluralistic orientation	-.005	.031*	.057***	.039**
Interest in poverty issues	.025	.069***	.044**	.092***
Conflict enhances democracy	-.017	.074***	.055***	-.040*
Concern for the public good	.054***	.071***	.021	.056***
Importance of civic contribution	.098***	.057***	.007	.082***
Support for race-based initiatives	.028*	.108***	-.004	.128***
Tolerance for LGB people	-.003	.057***	.003	.005
Helped others in the community vote ¹	1.067	.988	1.090	1.150***
Voted in Federal or State elections ¹	.905*	1.144***	.971	1.068
Voted in student government elections ¹	.977	1.049	.998	1.296***
Difference of values with other racial/ethnic groups	.008	-.013	-.007	-.044*

Note. Significance levels of beta coefficients, * $p < .05$; ** $p < .01$; *** $p < .001$. See Appendix for actual beta coefficients.

¹Results from logistic regression analysis.

²Regression was run predicting low self-efficacy for social change but reversed to ease discussion.

society. These students expressed more interest in poverty, in the importance of making a civic contribution, concern for the public good, support for race-based initiatives, and tolerance for lesbian, gay, and bisexual people. Students who took diversity courses also were more likely to vote in federal or state elections. These results suggest that campus efforts to integrate the curriculum, or adopt a diversity requirement, have far-reaching effects on a host of educational outcomes that prepare students as participants in a diverse democracy.

Extracurricular diversity events and activities produced significant effects on 17 of 25 outcomes, with the greatest number of effects on socio-cognitive and democratic outcomes. Students who participated in extracurricular diversity activities tended to express self-confidence in leadership skills, cultural awareness, self-efficacy for social change, have higher interests in social issues, valued creating social awareness, and supported institutional diversity initiatives. They also were more likely to believe that racial inequality is a problem and reject the notion that some degree of social inequity is acceptable in society. These campus diversity practices had similar strong effects on many of the same democratic sensibilities as taking a diversity course, with two exceptions: Students who participated in campus facilitated diversity activities were more likely to help members of their community get out to vote and themselves were more likely to vote in student government elections. They were not, however, significantly more likely to vote in federal or state elections than their peers.

It is important to note that participation in intergroup dialogue has a focused independent effect, with the most significant effects on students' perspective-taking skills (or capacity to see the world from someone else's perspective), the development of a pluralistic orientation, and the belief that conflict enhances democracy. It should be noted that the independent contribution of participation in a facilitated dialogue was assessed over and above students' informal interactions and participation in other diverse activities. Overall, the students appear to be engaging in difficult discussions and realizing they have much to learn from their differences—and perhaps are even more confident about dealing with conflict. These outcomes are consistent with the pedagogy and engagement activities of the practice of intergroup dialogue on four of the campuses that have structured interaction across communities with social differences. More modest effects of dialogue participation were evident on students' analytical problem solving, attributional complexity, leadership, cultural awareness, and value placed on creating greater social awareness.

Similarly, service learning also had focused independent impact on student outcomes, with strong positive effects on students' self-confidence in their leadership skills. As we might expect, participation in service learning contributed to students' democratic skills and sensibilities, including a concern for the public good, and valuing the importance of making civic contributions. It is interesting to note, however, that service learning participants were not more likely to vote in

student elections and were somewhat less likely to have voted in state and federal elections. They appear to have chosen to express their citizenship participation outside of the established political process. It may be that the 2000 election created disillusionment with the political process, leading students to seek alternative ways of expressing their concern for the public good and citizenship. These students were not only affected by the results of the 2000 election but also by the events surrounding 9/11. The results here are reported as independent of these socio-historical influences; subsequent work will further explore how 9/11 responses affected their intergroup contacts, attitudes, and outcomes—opening the door for a new generation of studies on this and subsequent cohorts of students in the contemporary era.

Implications of the illustrative study. The results of these analyses have several important implications. First, this study provides support for much of the theory and previous research on changes in student cognitive, social and democratic outcomes that can be attributed to interactions with diverse peers (Gurin et al., 2003). Although previous research examined some of these outcomes four years after college entry, it is important to note that the research presented here confirms that changes occur even during the first two years of college while students are still engaged in their college pursuits. This project highlights a great deal of variability in student interactions with diverse peers, and attempted to extend previous research by identifying the frequency and quality of these social interactions. The study demonstrates that the quality of student interactions with diverse peers is key (positive and meaningful interaction) in producing a host of important outcomes. If interactions are left to chance, students are likely to revert to familiar and solidified positions when encountering conflict—a fact supported by the theory and the empirical findings of lower scores on many outcomes among students who reported having negative interactions with diverse peers. These students are not only least skilled in intergroup relations, they are also least likely to exhibit the habits of mind that will prepare them for a diverse and global world.

Frequency of interaction with diverse peers on campus provides students with more experience to become accustomed to social difference, hone intergroup skills, and prepare them for diverse workplaces. It should be noted that frequency often depends on having sufficient numbers of diverse peers not only on a campus but also in majors, in classrooms, and in a variety of out of classroom contacts. Future research will need to further explore this notion of how contact differs in these specific contexts, and understand how quality and frequency of interaction operate within contexts to affect a range of outcomes.

Second, this study firmly establishes that many campus efforts to intentionally provide opportunities for students to learn about diverse social groups inside and outside the classroom have an appreciable impact on students by their second year of college. Specifically, a diversified curriculum has a consistently positive

effect, as do campus facilitated extracurricular activities, on most of the outcomes monitored longitudinally in this study. In addition, course-linked experiences such as intergroup dialogue and service learning have significant effects on a specific set of outcomes particularly tailored to their goals and purposes. Overall, the study results imply the need for more work on intentional, structured interactions among diverse communities on campus, facilitated by skillful faculty and administrators, to enhance the learning and preparation of students for citizenship in a diverse democracy. The interventions studied here include diversifying the curriculum, service-learning, intergroup dialogue, and diversity cocurricular programs—all of which bring about desirable outcomes in undergraduate education. However, the powerful results of informal interactions with diverse peers make it more difficult to ignore the fact that intergroup relations are extremely variable on college campuses and this has implications for the values, skills and knowledge that students eventually acquire in entering a more global, socially complex, and diverse workplace.

Conclusion

Diversity in campus social structures, knowledge production and dissemination, and experience is central to the teaching and learning and public service mission of higher education. As educators we claim that we do not leave learning to chance. Similarly we can no longer leave intergroup relations to chance, because they play a central role in ensuring that students can function in a diverse workforce and pluralistic democracy. A few campuses have begun to extend intergroup relations to the level of pedagogical practice in efforts to reduce prejudice and enhance intergroup contact and learning in classrooms (Zuniga & Nagda, 1993). This is a promising avenue for further research and practice.

Higher education plays a central role in shaping the leadership, change agents, and professionals who will take responsibility in closing the gaps and devising creative solutions to contemporary social problems that are both global and local. While some may not agree with all of the outcomes in the studies of this volume, there is now more general agreement that students need social and cognitive skills that prepare them for living and working in a diverse society (Association of American Colleges and Universities, 2002; Bikson & Law, 1994). The research provides an additional set of outcomes upon which to judge the educational value of diversity efforts and initiatives, providing a stronger rationale for making such efforts more central to the education of undergraduates.

Although the various research projects presented here provide an array of information affirming the validity of the Michigan U.S. Supreme Court decisions' focus on the benefits to all students of campus diversity, there is much work to be done in determining how campus diversity can be maintained and even increased. Such work will want to build upon the work presented in this issue of the *Journal of*

Social Issues, for these articles make significant headway in identifying issues and framing them in postsecondary contexts. For example, building upon Knight and Hebl (2005, this issue), more needs to be known about ways of framing the campus diversity interventions in terms of providing benefits to both individuals and the general public. These interventions need to be extended to settings like prisons (e.g., Torre & Fine, 2005, this issue), for the social benefits of this education are clear in terms of disrupting a cycle of poverty and crime, even if current policies have yet to take advantage of them.

Going further, a deeper understanding of campus diversity will be attained when researchers understand how diversity affects the different groups and even subgroups within our society. Are the affects on American Indians similar to those for African Americans, and are those for new African immigrants similar to those for other African Americans? What are the commonalities and differences across groups, and are those affected by regional or socioeconomic factors? It is clear that those in the minority experience the campus differently, are supported by some intervention programs, but also continue to encounter climate and intergroup relations issues in the wider campus environment.

Although supporters of campus diversity widely viewed the Michigan decisions as a victory, there is a real danger that universities will back away from their commitment to ensuring access and success for specific underrepresented groups. Such backtracking can be the result of an unwillingness to confront opposition to diversity and affirmative action initiatives. One way to confront opposition is to establish further and in greater depth the benefits of campus diversity and particular programs. Experimental as well as quasi-experimental or field work is needed to further explore the organization, societal, and individual impacts of interventions designed to reduce inequality. These interventions also need to be investigated within the broader cultures that support or constrain them. Programs do not function in isolation, as they are typically designed in response to a problem in the larger environment. Finally, the centrality and impact of diversity programs needs to be examined. Programs that exist around the margins of institutions will have lesser impact than if an institution commits itself to an examination of diversity issues as a part of its core mission and functions (e.g., curriculum, knowledge production, and mentoring for academic and career success). If particular institutions were to go so far as to make diversity central to their activities of teaching and learning, such a cultural shift may have decidedly different impacts on student achievement, retention, graduation, and job placement and long-term career success.

References

- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Alwin, D. F., Cohen, R. I., & Newcomb, T. L. (1991). *Political attitudes over the life span*. Madison: University of Wisconsin Press.

- Association of American Colleges and Universities (AAC&U). (2002, October). *Greater expectations: A new vision for learning as a nation goes to college*. Washington, DC: AAC&U.
- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Babbie, E. (2001). *The practice of social research*. Belmont, CA: Wadsworth.
- Bargh, J. A. (1997). The automaticity of everyday life. *Advances in Social Cognition*, 10, 2–48.
- Baxter Magolda, M. B. (2001). *Making their own way: Narratives for transforming higher education to promote self-development*. Sterling, VA: Stylus.
- Bikson, T. K., & Law, S. A. (1994). *Global preparedness and human resources*. Santa Monica, CA: Rand Institute.
- Chang, M. J., Witt, D., Jones, J., & Hakuta, K. (Eds.). (2003). *Compelling interest: Examining the evidence on racial dynamics in colleges and universities*. Stanford, CA: Stanford University Press.
- Chickering, A., & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco: Jossey-Bass.
- Girves, J. E., Zepeda, Y., & Gwathmey, J. K. (this issue). Mentoring in a post-affirmative action world. *Journal of Social Issues*.
- Grutter v. Bollinger et al. (2003). *Opinion of the Court*, 539, U.S.1–32.
- Gurin, P. (1999). *Expert report of Patricia Gurin*, in *The compelling need for diversity in higher education, presented in Gratz et al. v. Bollinger et al. and Grutter et al. v. Bollinger et al.* Washington, DC: Wilmer, Cutler, & Pickering.
- Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002, Fall). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72(3), 330–366.
- Gurin, P., Lehman, J. S., Lewis, E., with Dey, E. L., Gurin, G., & Hurtado, S. (2004). *Defending diversity: Affirmative action at the University of Michigan*. Ann Arbor: University of Michigan Press.
- Hurtado, S. (2003). Preparing college students for a diverse democracy. Final report to the U.S. Department of Education, Office of Educational Research and Improvement, Field Initiated Studies Program. (see website www.umich.edu/~divdemo/presentations.htm for pdf copy).
- Hurtado, S., Dey, E. L., Gurin, P., & Gurin, G. (2003). The college environment, diversity, and student learning. In J. Smart (Ed.), *Higher education: Handbook of theory and research, vol. XVIII* (pp. 145–189). Amsterdam: Kluwer Academic Press.
- Hurtado, S., Engberg, M. E., Ponjuan, L., & Landreman, L. (2002). Students' precollege preparation for participation in a diverse democracy. *Research in Higher Education*, 43(2), 162–186.
- Johnsrud, L. K., & Sadao, K. C. (1998). The common experience of "otherness": Ethnic and racial minority faculty. *Review of Higher Education*, 21(4), 315–342.
- Kish, L. (1965). *Survey sampling*. New York: John Wiley & Sons.
- Knight, J. L., & Hebl, M. R. (this issue). Affirmative reaction: The influence of type of justification on nonbeneficiary attitudes toward affirmative action plans in higher education. *Journal of Social Issues*.
- Maruyama, R., Burke, M., & Mariani, C. (this issue). The role of pre-collegiate partnership programs in environments ambivalent about affirmative action: Reflections and outcomes from an early implementation. *Journal of Social Issues*.
- Muss, R. E. (1988). *Theories of adolescence*. (5th ed.). New York: Random House.
- Niemann, Y. F., & Dovidio, J. F. (this issue). Affirmative action and job satisfaction: Understanding underlying processes. *Journal of Social Issues*.
- Orfield, G., Bachmeier, M. D., James, D. R., & Eitle, T. (1997). Deepening segregation in American public schools: A special report from the Harvard Project on School Desegregation. *Equity & Excellence in Education*, 30(2), 5–24.
- Perry, W. (1970). *Forms of intellectual and ethical development in the college years: A scheme*. New York: Holt, Rinehart & Winston.
- Piaget, J. (1975/1985). *The equilibrium of cognitive structures: The central problem of intellectual development*. Chicago: University of Chicago Press. (Original work published in 1975).
- Pinel, E. C., Warner, L. R., & Chua, P. (this issue). Getting there is only half the battle: Stigma consciousness and maintaining diversity in higher education. *Journal of Social Issues*.
- Rabinowitz, J. L., Wittig, M. A., von Braun, M., Franke, R., & Zander-Music, L. (this issue). Understanding the relationship between egalitarianism and affective bias: Avenues to reducing prejudice among adolescents. *Journal of Social Issues*.

- Ruble, D. (1994). Developmental changes in achievement evaluation: motivational implications of self-other differences. *Child Development*, 65(4), 1095–1110.
- Torre, M. E., & Fine, M. (this issue). Bar none: Extending affirmative action to higher education in prison. *Journal of Social Issues*.
- Turner, C. S. V., & Myers, S. L. (1999). *Faculty of color in academe: Bittersweet success*. Upper Saddle River, NJ: Pearson Education.
- Zuniga, X., & Nagda, B. A. (1993). Dialogue groups: An innovative approach to multicultural learning. In D. Schoem, L. Frankel, X. Zuniga, & E. Lewis (Eds.), *Multicultural teaching in the university* (pp. 233–248). Westport, CT: Praeger.

SYLVIA HURTADO is Professor and Director of the Higher Education Research Institute at UCLA's Graduate School of Education and Information Studies. Her research focuses on student development, diversity in higher education, and sociology of education. She obtained her AB from Princeton University, M.Ed., from Harvard Graduate School of Education, and Ph.D., from UCLA.