UC Riverside

UC Riverside Previously Published Works

Title

Journal Article: Diversity Literature Review in Higher Education; The Next Research Agenda" by Yolanda Moses and Jenny Banh in Multiculturalism in Higher Education Journal (2010)

Permalink

https://escholarship.org/uc/item/1s4679q5

Author

Banh, Jenny

Publication Date

2010

Peer reviewed

Diversity literature Review in Higher Education; The **Next Research Agenda**

Authors conducted a literature review on higher education excellence and diversity themes. Selected articles reviewed over a ten year period overwhelmingly suggest that 1) diversity initiatives positively affect both minority and majority students on campus. Significantly, diversity initiatives have an impact not only on student attitudes and feelings toward intergroup relations on campus, but also on institutional satisfaction, involvement, and academic growth. 2) The literature reported that the effects of racialethnic, gender, social class, and religious diversity on student learning are often positive but have diverse outcomes. 3) The effects of diversity on inter-group relations promote dialogue and multiracial friendships. 4) Ethnic clubs, programming, themed dorms, cultural affairs, mentoring, and surrounding community engagement have a positive effect on the whole student body. 5) The effects of programs that aim to eliminate prejudice and discrimination on diverse college campuses are inconclusive. 6) The literature on learning styles related to different racial-ethnic, gender, class is not robust, but does show that many students may have individual learning styles that are not addressed. Authors suggest that further research is needed in several areas such as in learning styles, diversity programs, and understanding the nuances of racial climates.

Keywords

Diversity, College Students, Higher Education, Learning Styles, Intergroup relations. Minority students

Yolanda T. Moses, PhD Jenny Banh, PhD Candidate Department of Anthropology University of California, Riverside

> "In other words, placing students of diverse backgrounds in a classroom is a necessary but insufficient condition of learning. Merely encountering differences can promote feelings of superiority and inferiority among students rather than growth and development. Particular pedagogical techniques [and diversity programs] promote the type of interaction necessary to create equal status conditions and, thus learning in diverse environments" (Sylvia Hurtado, Diversity Challenged: Evidence on the Impact of Affirmative Action, 2001, p. 5)

INTRODUCTION

If one were to take future predictions of demographics to be correct; the United States will become a "minority majority" nation in 2030. That is to say, there will be no clear "racial" majority population. This is also being reflected in higher education enrollment which predicts that the "Growth of Minorities Will Outpace Rate of Increase for Whites" (Chronicle of Higher Education, September 16, 2006). States such as New York, California and Texas have already demonstrated this demographic change in their population. The rub is that this population change is not being *proportionally* represented in all universities. Minorities still lag behind in college enrollment and graduations in four year institutions (Tinto, 1987, 1993). In addition, while universities are good at outreach and recruitment, their retention of students is not robust (Moses, 1990). Even access is being continually challenged in the wake of the elimination of affirmative action protocols and subsequent court cases (See *Bakke*, *Hopwood*, & *Gratz* cases).

Thus, the topic of "Higher Education, Diversity and Excellence" is important to universities if they are going to adequately prepare for future enrollment and retain the non-traditional students that they will have. Non-traditional students are defined as any student(s) who were not represented in pre-1950s college and university enrollment. For example, The University of California, Riverside (UCR) has already reached this critical mass for all ethnic groups, and reflects this trend in how it collects and analyzes data. This trend must continue to grow and evolve with the new research on diversity demographics and their impact on higher education.

This literature review will address successful diversity programs, ideas, and learning style accommodations that are being used throughout the country to promote the success of diverse students. Originally commissioned as a literature review for the University of California, Riverside (UCR), which was going through an accreditation process by WASC (Western Association of Schools and Colleges) in 2008 and 2009, the authors believe the results of the review provide useful information for institutions looking at exploring the links among diversity, excellence and learning outcomes.

This article is designed and written to answer the following questions:

- What are the effects of racial-ethnic, gender, social class, and religious diversity on student learning?
- What are the effects of diversity on inter-group relations?
- What are the programs that build on diversity as a campus resource? Are the programs that aim to eliminate prejudice and discrimination on diverse college campuses effective?
- What are the learning styles related to different racial-ethnic, gender, class (first generation), religious and other identities?
- How effective are the practices that aim to accommodate these distinctive learning styles within classrooms and the broader campus community?

Methodology

The authors reviewed over 60 select sources for information to answer the above questions. The majority of information was retrieved from the ERIC search engine with the time parameters of 1996-2006. The time scope was widened if studies were not

found within that range. This search predominately generated academic studies and higher education magazine articles. From analyzing the bibliography of some pertinent articles, the authors were led to other relevant material. For example, the bibliography of the Sylvia Hurtado article, "Racial Climates," was quite useful. A directed search through the Digital Dissertation search engine produced two seminal dissertations: the first by Mitchell J. Chang, Racial Diversity in Higher Education: Does a Racially Mixed Student population affect Student educational outcomes, 1996 and another by Anthony Antonio, Friendship Groups in a Multicultural University, 1999, that answered many of the above questions. The WORLDCAT search engine was used to find articles that were not cited in their entirety and to find the libraries that held them. Most preliminary searches for all of a specific author's work were found in JSTOR (1996-2006) and Google Scholar. Authors tried to get the articles that were most recent, within a ten year frame, but did include classic studies and other literature reviews that were older. Some studies that looked at Native American students' racial climates were very old (1988), but were included because they were the only studies that were found that addressed the research questions.

The data was limited to the search terms which used: "Diversity & Higher Education," "Racial Climates," "Learning Styles in Higher Education," "Successful Diversity programs in Higher Education," "Gender and Learning Styles," "Religion and Higher Education," "Class and Higher Education," "Higher Education and Inequality," and "Race and the University." There were additional search terms for each specific ethnic group(s) and learning style such as "African Americans and the University," "Learning styles in college," "Latino Learning Styles," and "Native Americans and College." The interlibrary loan process was extensively used to retrieve dissertations, microfilms, and articles that could be photocopied and sent to the University of California, Riverside *Rivera Library* circulation area.

What are the effects of racial-ethnic, gender, social class, and religious diversity on student learning?

The data showing the positives of diversity on student learning has been robust in past studies (Astin, 1993, Smith et al 1997, Hurtado 2001, etc), which showed that students have more cultural awareness, a higher tendency to vote, and increased overall satisfaction in college. The Department of Education commissioned a literature review that shows a growing body of literature that says that a goal of Higher Education should be to contribute to national goals of democracy (Kezar, 1999) which diversity has been shown to promote. Recent studies also support these findings (Hurtado, 2001, Chang, 1996, Antonio, 1998). Mitchell J. Chang's unpublished dissertation indicates that racial diversity has a direct positive impact on the individual student because he or she may talk more about racial lectures outside of class. Anthony L. Antonio's (1998) unpublished dissertation corroborates some of these results in that his data shows that diversity produces more positive learning outcomes. Astin, Antonio, and Chang all contend that the effects of diversity on student learning are complex and can often be indirect.

The literature review, *The Impact of Diversity on Students* (1996) by Morgan Appel, David Cartwright, Daryl G. Smith and Lisa Wolf (include all authors here as it is first reference in main text), which looked at over 125 sources, found similar positive results from diversity. Their literature review suggests that most diversity initiatives have

a direct and positive impact on students (Appel, Cartwright, Smith, Wolf, 1996). Additionally, the American Council on Education conducted a large faculty survey of 570 faculty members using the Faculty Diversity Questionnaire to gauge what they thought about "diversity." This survey found that faculty members think diversity gives students new perspectives, and helps students examine personal experiences (AAUP & American Council on Education, *Academe reprinted the results*, 2000). This survey also revealed that some faculty believe that diversity helps students with critical thinking and leadership skills. Jonathon Alger's (1997) article supports the notion that there is an educational value of diversity in that it helps students to get the broadest education as possible.

Other national studies show that highly diverse classrooms yielded increased learning in problem-solving and group skill areas (Terenzini, Calbera, Colbeck; Bjorklund, Parente, 2001). Other authors cautioned that "Diversity" can also have the effect of undermining social justice for students because it naturalizes difference instead of analyzing how differences are made and maintained (Baez, 2001). Benjamin Baez also noted that students need to look critically at the history and ideas of cultural diversity. Baez wrote "They can't take diversity for granted because it will be counter-intuitive and reinforce racial and 'other' differences."

Positive Effects of Diversity

Table 1.0 This table summarizes some pertinent research on the positive effect of Diversity on Learning

Title of Article & Author	Positive Effect of Diversity	Additional Positive Effects of Diversity.	Source:
Linking Diversity and Educational Purpose: How Diversity Affects the Classroom Environment and Student Development By Sylvia Hurtado	Educating students for a Diverse Democracy Diversity as a educational policy is consistent with the goals of the University	Students have a self-perceived improvement in abilities necessary to contribute positively to a pluralistic democracy Studying with someone of a different racial group develops critical skills. Building the skills necessary for bridging cultural differences and cultivate their capacity for other important learning. Ethnic Studies courses are positively associated with student's civic outcomes such as cultural awareness and knowledge.	Book: Diversity Challenged: Evidence on the Impact of Affirmative Action. Chapter 8 Edited by Gary Orfield with Michal Kurlaender
Influences on Student's openness to Diversity and challenge to first year of college. By Pascarella, Edison, Nora, Hagedorn. & Terrezini,	First year students who are exposed to diverse peers that are different in terms of race, gender, class, and interests tend to be more open to diverse perspectives.	They also are willing to challenge their own beliefs.	Journal of Higher Education, 67 (2), 174-1996.
Does Diversity Make a Difference? A Research Report By: Academe [Oct/Sept	1. Faculty members said that diversity a) gives students new perspective & helps them examine personal	3. 92% of Macalister College said having a racially/ ethnically diverse student body is essential to achieve the college mission (& enhance educational experience).	AAUP & American Council on Education, (Academe is Reprinted the results) Oct/Sept 2000

2000]	experiences b) 40% of	4. Need NOT JUST racial diversity but a	
	faculty helps with	"learning centered" (faculty is one part of	
	critical thinking skills	classroom experience) rather than "teaching	
	& leadership skills	centered" model	
	2. America's top liberal		
	colleges have in its core	5. Racial and ethnic diversity can create	
	mission a range of	more conflict but also more learning	
	developmental	(educational outcomes, personal	
	outcomes.	development, sharpen critical thinking)	
Racial Diversity in Higher	Gains by Cross Racial	2. Friendship groups strengthen the	Unpublished: University of
Education: Does a Racially	Friendship:	commitment to racial understanding	California, Los Angeles
Mixed Student population	1. Enhance cross-racial	(indirectly)	Education Dissertation
affect Student educational	interaction outside the		(1996)
outcomes?	group but has no		` ′
	unique impact on gains		
By: M. I. Chang	in cultural awareness		

Racial, Gender, and Ethnic effects on intergroup relations

Minorities in general perceive more of a negative campus climate than Anglo-American students (Reid, 2003; Hurtado, Milem, Clayton-Pedersen, and Allen, 1998) Sylvia Hurtado and Luis Ponjuan's study concluded that Latino students felt more singled out in the classroom than their Anglo counterparts because of their background (9%), tended to perceive a lot of racial tension in the classroom (14%), and heard faculty express stereotypes about racial/ethnic groups in class (18%) at their respective institutions. (237) The authors noted that these finding affect educational outcomes such as retention rate because sense of "belonging" is essential to Latino students (Hurtado and Ponjuan, 2005). In another study, African American women sometimes felt overlooked in the learning process (Moses, 1989). Studies often talk about minorities as men and women as white, women of color are often ignored completely.

Some studies that show the effect of racial and ethnic backgrounds on student learning focus specifically on the home front. Barbara Schneider and Yongsook Lee studied the home background of East Asian students in the primary years. Their research showed that East Asian student did better than Anglo-American students on grade point average (GPA) measures. They conclude it is because of culture, home environment, genetics, communication styles, academic expectations, parental control and monitoring. Their study emphasize that the *home environment* has an overwhelmingly positive effect on student learning. Another study that explored the effect of home environment is by Miguel Ceja. He showed that Chicana students' success was linked to parental encouragement. This article dispels the myth that Chicano parents do not care about the educational attainment of their daughters. These parents directly and indirectly influenced their daughter(s) to pursue higher education in many ways (Ceja, 2004).

Turning attention the role of gender is the Karen Bradley article, *The Incorporation of Women into Higher Education: Paradoxical Outcomes*. This study discussed the effects of gender in the selection of majors. Although in some countries, such as the United States, there is more gender parity in education, there are still

"paradoxical outcomes," according to Bradley. Sixty percent of graduates of higher education are women in the U.S. "One outcome is that gender differentiation has declined surprisingly little" (p.1) Women are still more likely to graduate from the social sciences, arts, humanities, and law. Men are more likely to graduate from the natural sciences, mathematics, and engineering. There are few differences between developed and underdeveloped countries. These fields, such as education and nursing, that female students "select," pay far less than the natural sciences (Bradley, 2000).

Invisible Diversity Effects on Student Learning: Marital Status and Social Class

There are some studies that report being married does have an effect on stress in students (Cricket, Meehan, Negy, 2003). Dawna Cricket, Martita Meehan, and Charles Negy's research concluded that married students have more stress in adaptation than single students in college. Their study examined whether there are "adaptation" differences between married and unmarried students. The results indicate that married student have *moderate* difficulties adjusting to higher education relative to unmarried students. Married students have poorer social adjustment to college because of juggling home and marriage responsibilities, the authors noted. (Cricket, Meehan, Negy, 2003).

Being from a different social class also has an effect on student learning as well. Michelle M. Tokarczyk's chapter titled "Promises to Keep: Working Class Students and Higher Education" stated that often working class students themselves do not know that they are a group that needs special assistance. Tokarczyk made the point that there are many *structural* barriers to the success of working-class students. Some examples are from academically underperforming high schools where remedial work was conducted. In addition these "first generation" students often face "habitus" and "cultural capital" challenges (Nora, 2004). This study indicated that students are more likely to enroll in college if they felt *personally accepted* by the institution and if their academic interests matched the academic offerings at the institution. Students who reported fewer precollege leadership experiences, lower academic performances in their courses, and who perceived less institutional support were more likely to drop out of college (Nora, 2004).

These first generation students also faced sociolinguistic challenges to their college success (White, 2005). That is to say, the students often did not understand the university linguistic culture or the structure of academia. "Across the two-year study, first generation students: completed fewer credit hours; studied less; took fewer courses in the natural sciences, mathematics, and the arts and humanities; had lower college grades; were less likely to join a Greek organization; and worked more hours per week than their classmates whose parents had both completed a bachelor's degree or above." (Pascarella, Wolniak, Pierson, Terenzini, 2003, pg. 425).

Invisible Diversity and Effects on Student Learning: Students with a Disability

The literature on disabilities is emphatic in that it reports students with a disability have many barriers to overcome to achieve positive learning outcomes. For example, students who had learning disabilities who perceived that they had access to a lot of academic and social support, shaped their reactions differently in terms of how they handled their disability as compared to those who did not (Troiano, 2003). Thus, the

students who were identified earlier as "learning disabled" did better in class. John Hall and Teresa Tinklin (1998) interviewed some students with disabilities who felt they were "written off" academically. Their study showed that academically-challenged students with visual impairments had problems accessing information. students who had physical impairments had problems getting to the library and getting books because the aisles were too narrow for their wheelchairs. In addition, the routes to the classrooms via the elevators were seldom direct and often circuitous (Hall and Tinklin, 1998). The West, Kregel, Getzel, Zhu, Ipsen, and Martin study indicated that, generally, students with disabilities were satisfied, but felt there were still barriers. Other barriers included the perception that some professors did not care about the student's success, and a lack of understanding and cooperation from administrators, faculty, staff, and other students. (West, Kregel, Getzel, Zhu, Ipsen, and Martin, 1993)

What are the effects of diversity on inter-group relations?

Mitchell Chang's unpublished dissertation indicated that racial diversity has a direct positive impact on the individual white student as well as on all students in general. The more diverse the student body, the greater the likelihood that the white student will socialize with someone of a different racial ethnic group and/or discuss racial issues. His empirical and quantitative study showed that students in diverse environments tend to socialize more with different racial groups. These same students will also discuss racial issues more inside and outside the classroom. Chang wrote that diversity promotes an overall (indirect) satisfaction with college which would positively impact retention. In terms of inter-group relations, diversity does not affect intellectual-social self concept and has no effect on college GPA, according to Chang (Chang, 1996).

Anthony L. Antonio's (1998) unpublished dissertation corroborates many of these results. His data supports the benefits of diversity on inter-group relations. He showed that "diversity" has positive outcomes for students. The purpose of his study was to investigate racial diversity and its influence on students at the level of friendship groups. The results demonstrated that although most students think their campus is racially segregated, most friendship groups are racially and ethnically mixed. Students who had the most diverse friends met them in the dorms, came from racially diverse high schools and neighborhoods; and reported less inclination to share personal feelings and problems within their friendship group. The gains by cross-racial friendships indicated in the study were that they enhance cross-racial interaction outside the group, but have no unique impact on gains in cultural awareness. Friendship groups also strengthen the commitment to racial understanding, albeit indirectly.

There are negative effects perceived by minorities around inter-group relations as well. One study reported that minority students perceive more discrimination in predominately white institutions than in historically black colleges/universities (HBCU) and women's colleges (Townsand, 1994; Bradley, 2000; Reid and Radhakrishnan, 2003). In another study, Asian American students reported one of the highest rates of personal interaction with discrimination, which tended to make them withdraw from groups (Cress and Ikeda, 2003). African American students at three elite white institutions felt racial micro-aggressions and overt racism, which also tended to make them withdraw from inter-group contact (Solórzano, Ceja, Yosso, 2000). This study concluded that although

academically proficient, African American students who experienced these hostile campus environments dropped out of classes and schools.

While the authors found many more articles on the positive aspects of diversity on inter-group relations, they wanted to also know what if there *is* diversity, and yet no significant interethnic engagement among the racially diverse students? In *Diverse in Name Only? Intercultural Interaction at a Multicultural University* (2004) by Rona Tamiko Halualani, Anu S. Chitgopekar, Jennifer Morrison and Patrick Dodge, the authors of this study analyzed the frequency and nature of intercultural contact among multicultural university students. It essentially concluded that multiethnic diverse students generally have curt and non-robust interactions in and outside of the classroom. The study concluded that Latino-White/European American contact and White/European American Asian-American interaction was limited to usually academic interactions in the classroom only. Latino Americans and African American interactions took place more often after school and involved work and social life. There is an overall exclusion of African American student interactions, which mirrors another study about the *chilly* life of these students.

Three other studies showed that barring students from diversity "denies important educational tools for preparing students for their futures." (57) These studies show that diversity not only positively affects inter-groups relations in the present, but prepares them for *future* positive inter-group interactions (AAUP & American Council on Education, *Academe* Reprinted the results, 2000). Another effect of diversity on intergroup relations is diminishing racism, especially if the teacher employs specific cooperative pedagogies (Aguirre and Messineo, 1997). **According to Hurtado**, "Institutions can become deliberate agents of socialization. They can design and implement systematic and comprehensive educational programs to help all members of the campus community to identify and confront prejudice." (Hurtado, et. al., 1998). In the latter part of this article the authors will discuss specific educational and cultural programs to facilitate the lowering of intergroup conflict.

Table 2: Effects of Diversity on Intergroup Learning

Title/ Author	Positive Diversity	Negative Diversity	Source
Friendship Groups in a Multicultural University By Antonio Anthony	1.Diversity promotes Civic responsibility (See also Bowen & Bok 1998).		Unpublished University of California, Los Angeles Education dissertation (1998)
Racial and Ethnic Diversity in the Classroom: Does it promote Student Learning? By: P. Terenzini; A	High diversity classrooms show in self-reported learning is HIGHER in 1) problem solving and 2) group skills.		Journal of Higher Education Vol. 72. No 5. (Sept-Oct 2001), pp 509-531
Calbera; C. Colbeck; S. Bjorklund; J. Parente			

Contradictions: How	improves curricula, campus social interactions & race relations 3.Business: promotes creativity & innovation, fosters problem solving skills & adds to organizational flexibility Chronicle of Higher Ed. Feb 13,	CAUTION: 1# Diversity studies fail to address how the academy admits students or evaluates faculty. 2# Bowen and Bok's- The Shape of the River asks whether racial minorities with lower academic qualifications than whites or Asian Americans succeed in Higher Ed. (yes). These studies don't ask why we classify, and rank students because it creates "winners" or "losers."	Quoted from: Year/ Author/ Journal: Sept-Oct 2001 Academe Chronicle of Higher Ed. Feb 13, 1998
Emerging Picture of how Students benefit By D. Smith, G. Gerbick, M. Figueroa, G. Watkins, T. Levitan, L.	enhances the learning process for all students. 2. Membership in special ethnic, gender and cultural clubs are shown to help in retention. 3. Students of color do not self-segregate but Anglo students do.	5. Serious engagement with diversity in curriculum and staffing has a positive effect on racial attitudes. 6. There is evidence for a need to comprehensively change teaching methods, curriculum, and campus climate that would benefit <u>all</u> students.	Association of American Colleges and Universities Washington D. C. 1997
Diverse in Name Only? Intercultural Interactions at a Multicultural University By Rona Tamiko Halualani, Anu S. Chitgopekar, Jennifer Huynh Thi Ahn Morrison, and Patrick Shaou-Whea Dodge	American students positively	Asian-American and European-American usually have limited engagement based solely on forced academic classroom work. All groups excluding Latino- Americans do not have multiple or robust engagements with African Americans.	2004 Journal of Communication

What are the programs that build on diversity as a campus resource? Are they effective?

Across the nation, there are many programs that build on diversity as a campus resource. While these authors who write about these programs make many assertions about their benefits, the authors conclude that there is not enough qualitative and quantitative data to show that these programs are successful. For example, One way campuses are building on diversity is in keeping their minority student from dropping out of college (Focus on retention). Previous research on this indicated that students who

were the least engaged in campus activities tended to drop out more often (Tinto, 1993). Retention of minority students appears to be a very important strategy to build on diversity as a campus resource. First generation students have been shown to thrive in "small group interventions" (Folger, Carter, and Chase, 2004). One older (1994) but seminal study, *How Universities Successfully Retain and Graduate Black Students*, written by Laird Townsend, offered a look at successful college programs that have retained African American students. He found that University of South Carolina (USC), Xavier University, Fisk University, Grambling State, and University of Virginia student-retention programs were all successful in retaining and graduating African American Students for a number of reasons.

Grambling University is a successful institution because they have a learning complex with 26 fulltime faculty members, plus a handful of doctoral students that tutor undergraduates. There are free computer-learning programs and tutoring sessions by honor students. Xavier University encourages students to join organizations and clubs. Fisk University has a nurturing environment that cares about the student. Fisk University convinces young people that they have the ability to succeed. University of South Carolina has a course called Seminar 101 that teaches students how to study and take notes. They also have seminars promoting African American (A.A.) culture. University of Virginia graduated 71.5 percent of its 1985 cohort of African class in six years. The University of Virginia sends out three letters to students before they arrive. They also have a picnic for parents and students. Two orientation programs called Harmabe ("getting together" in Swahili) orient students when they arrive. That university has peer mentors, a "critical mass" of A.A. students, and 20-25 A.A. organizations for students to join.

Ethnic studies programs and classes have been to shown to build on diversity as a campus resource (Szelenyi, 2001; Appel, Cartwright, Smith, Wolf, 1996). Evelyn H-DeHart contends that institutions embrace diversity in theory, but that they do not do much to implement it. Their inadequate support for ethnic studies is a case in point. The "managing differences" model of diversity does not seriously question the status quo. DeHart further argues that current diversity efforts on campus help perpetuate the racial order as historically constructed, with the ethnic remaining peripheral (DeHart, 2001). In addition, as Moses notes universities are structured in a way that can be unwelcoming to non-traditional students (Moses, 1990).

Other literature noted that to have effective diversity programs, institutions must utilize the "whole community" in their efforts(Sandora, 1998). This article argued that in order for the institution to have successful diversity programs/initiatives, involvement of the entire campus was necessary. Several examples were given:

Table 3: Effective Programs

• Indiana State got the co-sponsorship of influential people such as college president to create "Multicultural Mania" week

EXTRA CELL HERE

- University of Illinois challenged student leaders about defeating the "isms." The student leaders created TEAM (Together Encouraging Appreciation for Multiculturalism) to foster peer-to-peer cultural understanding.
- Ohio State has "Asian Awareness Month." Both international students and domestic Asian-American students help each other to display foods, fashions, and dance to the larger university. This dispels myths of the "Model Minority" that Asian American students are only into academics.
- Indiana State created a "United Nations" day. Domestic students can get involved in the model United Nations and BRIDGES- (Building Relations International/Domestic Groups Enrichment Series) program. This university coordinates their multicultural and international programming.
- Oregon State University interweaves their diversity into classroom curriculum. They also get
 faculty of color involvement in helping with suggestions to hire and retain minority professors.
 At a North Idaho college the president contacted the faculty personally to let their classes attend a
 campus rally on diversity.
- **Ohio State** brings in community members who can share their multicultural perspectives and experiences with students

(Source: Sandora, 1998)

What are the programs that aim to eliminate prejudice and discrimination on diverse college campuses? Are they effective? The previous part of this literature review answered

many facets of this question. Again, many studies make *assertions* about the benefits of their anti-discrimination programs, but do not present enough qualitative and quantitative data to show that these programs are successful. The authors believe there needs to be more robust research on this issue. There are a few studies that point in the right direction. Nadia L. Ward's (2006) article described and evaluated different long-standing federal educational initiatives designed to improve educational equity and access on the part of low income and underrepresented minorities as they enter into and progress through institutions of higher learning. Ward noted that there have been noteworthy improvements by African American and Latino students in all areas of education. According to Ward, this is attributable to the federal initiatives to help low income youth (Ward, 2006). She cites three exemplar programs aimed to eliminate inequality that have shown positive results.

Table 4: Federal Programs

<u>Title 1</u>: This gives money to low income rural and urban schools <u>TRIO</u> initiatives (Upward Bound, Educational Talent Search (ETS), and Student Support Services) have all shown tremendous gains in heightened educational aspirations of the students.

<u>GEAR-UP:</u> This was a plan under Clinton's administration that targets cohorts of seventh graders and follows them through to high school and into college. They require that the secondary and post-secondary educational partners are matched in setting high standards.

The authors urge more longitudal follow-up of these federal programs to really access their effectiveness. For example, the Sylvia Hurtado and Luis Ponjuan study showed the importance of an academic support program which creates a higher sense of belonging among Latinos in college, which combats feelings of discrimination. Latino students who took diversity courses tended to report an increased sense of belonging (Hurtado and Ponjuan, 2005). There are many aspects of positive college programs, courses, and pedagogical techniques that aim to eliminate prejudice and discrimination. Many universities now have a larger portion of female enrollments than male. Although there are more women, there are still gender disparities in the non-traditional hard sciences (Salter and Persaud, 2003). There is older literature that noted the role of the University President in eliminating prejudice (Borkowski, 1990), while other articles talked about specific teaching methods to combat discrimination (Salter and Persuad, 2003; MacClintic and Nelson, 1996; Williams, 2004). Some studies recommended that the university facilitate multiracial contacts which are regular, on-going, and where everyone is of equal status (Hurtado, Milem, Clayton-Pedersen, Allen, 1998). Hurtado, et. al., study also recommended the promotion of cooperative learning activities inside and outside the classroom.

Lisa E. Wolf-Windel located successful undergraduate universities that graduated women who went on to obtain doctorate degrees. She looked at the 1991-1992 editions of Who's Who books, such as Who's Who African Americans, and Who's Who Hispanic to identify women who obtained doctorates. She found five Colleges: Bennett, Bryn Mawr, Tougaloo, Pomona, and Incarnate Word that were successful in graduating female students who went on to earn a doctorate. A Bennett college student was repeatedly told that she "could do it" no matter what background. Incarnate Word College tells their female students how the school was founded by French nuns who were dedicated to helping the needy. Pomona and Bryn Mar have *campus space* designed for women. At Pomona College there is a Dean of Women who pushes females into leadership roles. The historically Black and Hispanic universities indicated the "critical mass" that was needed for the women. Bennett, Tougaloo, and Incarnate Word emphasized the role of community service in facilitating female success. "They get firsthand knowledge of racism, sexism and disempowerment of the people that they help." (Wolf-Windel, 2000). All five institutions mentioned the importance of role models: alumnae, current students, campus students, campus visitors and lecturers. The female administrators and staff are also very important. The five institutions noted the benefit of including gender and/or racial issues in the formal and informal curriculum.

What are the learning styles related to different racialethnic, gender, class (first generation), religious and other identities? How effective are the practices that aim to accommodate these distinctive learning styles within classrooms and the broader campus community?

Although there is a vast literature on learning styles, the ERIC (1996-2006) search engine returned very few recent studies. There was literature found that conflicted with other data. There is older research that indicates that different students have different learning styles such as African American students performed better using movement and visuals (Allen & Butler, 1996, Dunn, 1990, Gardener, 1986, James & Blank, 1991). Even with the strong literature that indicates that students have different learning styles; teachers still overwhelmingly use print and oral methods to teach (Haggart, 2003). Alarmingly Geneva Gay (2002) reports that students of color are disportanatiately put in special education classes because instructors are not using culturally aware learning style teaching and education. There were few studies that actually tested if these learning style accommodations worked. In Matching Teaching Strategies to Learning Style Preferences, Charles R. Beck gave an overview of learning style research. This article looked at the most widely used learning styles inventories (4MAT, McCarthy, 1987, Dunn's LSI, 1992a and 1992b and Renzulli and Smith's LSI, 1998). In this article, there are tables that show the left/right brain hemispheric learners and assist teachers in selecting the most appropriate teaching strategies. An example of lessons is one where teachers may encourage bilateral learning by using appropriate teaching strategies (Beck, 2001). Marilee B. Sprenger (2008) in Differentiation Through Learning Styles and *Memory* has research that indicates teachers can change their pedagogy by considering the student learning style preference which is more beneficial. This book analyzes children's learning styles and brain processes and how teachers can best address their preferences.

There are a few studies that talked about learning styles that were related to certain ethnic groups. East Asian student learning styles were viewed as a result of the relationship between socio-cultural factors and interpersonal interactions (Schneider and Lee, 1990). African American students' achievements appear to be positively related to oral experiences and interpersonal relationships (Palma-Riveras, p. 78; quoted from Szelenyi, 2001). Hispanic and Native American students, in comparison with white students, exhibited a high propensity for participation in active, concrete learning experiences, cooperative situations, and elaborative processing (Irene M. Sanchez Motivating and Maximizing Learning in Minority Classroom; quoted from Szelenyi, 2001).

There is some literature indicating that some women preferred more cooperative learning (Salter and Persaud, 2003). Mary Hoyte Sizemore and Pamela N. Schultz found in their study of Hispanic nurses that there are gender and ethnic differences in learning styles. Their study found that the most common learning style is visual for the nursing students. They found that male students are more homogenous in their learning styles

than females; and that there is no statistical difference in learning styles between Hispanics and whites (Sizemore and Schultz, 2005). Their study showed no statistical difference in learning styles between genders, but non-Hispanic white students had a higher visual score than Hispanic white students. Hispanic students had significantly higher kinesthetic scores than non-Hispanic students (Sizemore and Schultz, 2005). The authors of this review article note that the major weakness of this study was that the sample size was small and predominately female.

Heather Thomas, Robin Cox, and Takahiro Kojima in *Relating Preferred Learning Style to Student Achievement* examined Japanese exchange students in New Zealand. They found that there are learning style differences between Japanese exchange students and other students. The Japanese students preferred learning styles that were kinesthetic, auditory, tactile, and hands-on. The Japanese students least preferred the group learning style and were more concrete-sequential than intuitive. They also tended to be more global rather than analytical thinkers (Thomas, Cox, Kojima, 2000). These authors also found that if you have multiple learning style pedagogy, then more students will learn despite their learning style preference (2000). Again, these studies were not conclusive because the sample size was too small.

Table 5.0 Learning Styles of Different Ethnic and Gender groups
This table summarizes studies on preferences in pedagogy that
different racial and gender groups prefer. [Caution: these are <u>assertions</u> and
there needs to be more correlating data to substantiate these claims.]

Ethnic/Gender	Learning Style Preference	Source
Group	*study assertions [not the opinion of the author]	
African American Students	African American students achievements appears to be positively related to oral experiences and interpersonal relationships (Palma-Riveras, p. 78)	Nilda Palma-Rivas. Using technology to Facilitate Learning for Minority Students (pp 73-83) Quoted from ERIC ED452859 Minority Student Retention and Academic Achievement in Community Colleges.
Hispanic & Native American Students	In comparison with white students, Hispanic college students exhibited a high propensity for participation in active, concrete learning experiences, cooperative situations, and elaborative processing (p.42).	Irene M. Sanchez Motivating and Maximizing Learning in Minority Classroom (pg 35-44). Quoted from ERIC ED452859 Minority Student Retention and Academic Achievement in Community Colleges.
Japanese International Exchange Students	 The Japanese students preferred learning styles of kinesthetic, auditory and tactile and hands on. Students least preferred group work. More Japanese students were <i>concrete-sequential</i> than <i>intuitive</i>. They also tended to be more <i>global</i> rather than <i>analytical</i>. The Japanese student numbers were balanced between extroverted and introverted individuals and closure/ open modalities. 	Relating Preferred Learning Style to Student Achievement Journal/Year: 10p. Mar 2000 ERIC 445 513, Authors: Heather Thomas, Robin Cox, & Takahiro Kojima

Female Students	Encourage Classroom Participation: Extroverted classrooms seem to be better fitting settings for both introverted and extroverted women.	Women's Views of the Factors That Encourage and Discourage Classroom Participation: Journal of Higher Education, 2003 Daniel W. Salter & Anita Persaud
Hispanic Nursing Students	The most common learning style is VISUAL. 3# What do these numbers mean? Males are more homogenous in their learning styles (mostly visual). 4# Females are more diverse in their learning styles. 5# There is no statistical difference in learning styles between Hispanics and whites 6# There is no statistical difference in learning styles between genders.	Ethnicity and Gender Influences on Learning Styles in Nursing Students From an Hispanic-Serving Institution Journal of Hispanic Higher Education

Conclusion

We end this article where we initially started; with the predictions that by 2030 more than one half of the United States populations will be of "minority" background. This is slowly being reflected in higher education enrollment in California and across the nation. Thus, this literature review was undertaken to find "best practices" and answer specific questions related to diversity and student learning outcomes that would have benefits for a university like UC Riverside, where promoting learning in a diverse environment is a core value of the institution. The literature review shows at a global level the overall effects of racial-ethnic, gender, social class, and religious diversity on student learning are positive. This can be seen in improved citizenship, democratic outcomes, and critical thinking skills (Astin, 1993). In addition, there are national studies that show that high diversity classrooms show increased learning in problem solving and group skill areas (Terenzini, Calbera, Colbeck; Bjorklund, Parente, 2001).

The effects of diversity on inter-group relations are that students have a greater indirect satisfaction with college (Chang, 1996). Students also create more diverse circles of friends in diverse environments. This enables the student to discuss racial issues more critically inside and outside of class (Antonio, 1998). Programs that build on diversity as a campus resource are varied and show great promise. Federal programs such as Title 1, TRIO, and GEAR-UP have shown some positive results (Ward, 2006). Academic support programs in the form of mentoring, tutoring, ethnic study courses, and intercultural activities have also shown evidence of helping student obtain positive learning outcomes (Ward, 2006, Hurtado et al 2005). However, there needs to be a longitudinal study to test for these programs long-term efficacy. The same can be said for programs that aim to eliminate prejudice and discrimination on diverse college campuses.

The recent literature on learning styles in the ERIC search engine is quite limited and not conclusive. Some studies said that African Americans prefer an "oral" learning experience as opposed to Hispanic and Native American students, who prefer a "participatory" learning experience. Some other studies indicated that Japanese students

preferred learning styles that were kinesthetic, auditory, and hands-on (Thomas et al, 2000). The literature on female learning styles stated that they prefer more cooperative, extroverted classrooms that related to real life situations (Salter & Persaud, 2003).

Recurring critiques of some of the studies were that their sample sizes were too small and not varied enough. The gender and "race" ratios were not equal in almost all of the studies, and a cross-institutional analysis was needed. In addition there tended to be a "lumping" of some groups, such as Asian, Latino, African American, and Anglo students. A disaggregation of each group would provide a clearer picture of the diversity within each of those large groups. The effectiveness of the practices that aim to accommodate these ethnic groups and learning styles has not been robustly proven. Further research is needed in several areas:

Call for Further Research

- 1. Test to see if there are learning style differences within different ethnic, class, and gender groups. Another learning style dimension that should be investigated is that of differences between professed religious groups (e.g., Buddhist, Jewish, Christian, Muslim, Hindu).
- 2. Redo all the various climate studies on racial, ethnic, class, and gender groups. In subsequent research, do climate studies on little studied populations such as: commuter, non-traditional, graduate, disabled, and international students.
- 3. Do a directed research on Gay, Lesbian, Bisexual, and Transgender (GLBT) students. Ask how they are doing and how they are treated. Test to see if they prefer a certain learning style and pedagogy.
- 4. Conduct a faculty diversity survey to see how the faculty feels about diversity and if they have changed their pedagogy to accommodate these diverse student groups.
- 5. Conduct a large quantitative study to see if students feel that the ethnic studies courses and activities are effective in educating them and retaining them in college.
- 6. Conduct a large multi-campus study to find the reasons why students are leaving colleges. Also, investigate where they go after they leave current institution. Conduct a follow-up study on this group two years later to ask where these students have gone.
- 7. Conduct a surrounding community survey to see what the local commercial, industrial, technological and agricultural communities need and want in terms of engagement with University students.
- 8. Find "Good Practice" examples by faculty to see how the classes are being linked to the global/local connection. Test to see if these practices are successful.
- 9. Test the enrollment effects of a negative systemic or state policy such as Post Proposition 209 in California (explain what this is in a few words) on the entire University of California system. Test to see if there is a gender and ethnic change in UC systemic enrollment, for example.
- 10. Design and conduct a study "on 'minorities' within minorities" to test for increased stress levels or depression rates among student who are: Asian American English/Humanities majors, African American physics majors, Female Science (non biology/nursing) majors, and Latino math majors, for example.

- 11. Disaggregate the monolith "female" groups. Ask each female individual ethnic, class, disabled, religious, and sexual orientation group questions on diversity.
- 12. Disaggregate different Asian groups (Korean vs. Vietnamese vs. Chinese vs. Thai vs. Pilipino vs. Hmong vs. Middle Eastern vs. International student), Latino groups (Chicano vs. Honduran vs. Cuban vs. Puerto Rican), African American groups (West Indian vs. African vs. African American), Anglo-groups (Jewish vs. Italian vs. Irish vs. German), Native American groups (1% Native American vs. "full blooded Native American groups) and Exchange Students (East Asian vs. African vs. European/Canadian vs. Latin American international students).

Bibliography

- Allen.B. A. & Butler, L. (1996). The effects of music and movement opportunity on African American and White school children: A preliminary Study. *Journal of Black Psychology*. 26(3), 316-328.
- AAUP & American Council on Education, (2000). Academe. October/September.
- Alger, J. R. (1997,). The Educational Value of Diversity. *Academe*, January/ Feburary...
- Anaya, G. (1999). College Impact on Student Learning: Comparing the Use of Self-Reported Gains, Standardized Test Scores, and College Grades. *Research in Higher Education*. 40(5), 499-526.
- Antonio, A. L. (1998). Friendship Groups in a Multicultural University. *Unpublished Dissertation. University of California, Los Angeles*.
- Appel, M. (CGU), Cartwright, D. (CGU), Smith, D.G. (CGU), Wolf, L. (U. of Kansas). (1996). The Impact of Diversity on Students (Literature Review). Claremont: Claremont Graduate University.
- Baez, B. (2001). Diversity and its Contradictions: How Support for diversity in higher education can undermine social justice. *Academe*. Vol 86 (5). 43-47.
- Beck, C. R. (2001). Matching Teaching Strategies to Learning Style Preferences. *The Teacher Educator* 37(1).1-15.
- Black Women in Academe: Issues and Strategies. (1998). *Project on the Status and Education of Women*. 1-28.
- Bradley, K. (2000). The Incorporation of Women into Higher Education: Paradoxical Outcomes. *Sociology of Education*. 73(1). 1-18.
- Brown, R.D., Clarke, B., Gortmaker, V., & Robinson-Keilig, R. (2004). Assessing the Campus Climate for Gay, Lesbian, Bisexual, and Transgender (GLBT) Students

- Using a Multiple Perspective Approach. *Journal of College Student Development*. *45(1)*. 8-26.
- Ceja, M.(2004). Chicana College Aspirations and the Role of Parents: Developing Educational Resiliency. *Journal of Hispanic Higher Education*. *3(4)*. 338-362.
- Chang, J. M. (1996). Racial Diversity in Higher Education: Does a Racially Mixed Student population affect Student educational outcomes? *Unpublished Doctoral Dissertation in Education. University of California, Los Angeles*.
- Cress, C. M., & Ikeda, E. (2003). Distress under Duress: The Relationship between Campus Climate and Depression in Asian American College Students. *NASPA Journal*. 40(2) 74-97.
- Dunn, R. (1990).Rita Dunn answers questions on Learning Styles. *Educational Leadership*. October Vol. 88 (2) 15-19.
- Folger, W. A, Carter, J.A., & Chase, P.B. (2004). Supporting First Generation College Freshmen With Small Group Intervention. *College Student Journal* 38(3). 472-476.
- Gay, G. (2002) Cultural Responsive Teaching in Special Education Classes: Setting the Stage. Qualitative Studies in Education. Vol. 15 (6) 613-628.
- Goodman, D. J. (2001). Promoting Diversity and Social Justice: Educating People from Privileged Backgrounds. Thousand Oaks, CA: Sage Publications.
- Gurin, P., Dey, E.L., Hurtado, S., & Gurin, G. (2002). Diversity and Higher Education: Theory and Impact on Educational Outcomes. *Harvard Educational Review*. 72(3, 330-366.
- Haggart, W. (2004) Discipline and learning styles: an educator's guide. Nevada City, CA: Performance Learning Systems.
- Halualani, Tamiko, R., Chitgopekar, A)nu, S., Morrison, J., & Dodge, P. (2004) Diverse in Name Only? Intercultural Interactions at a Multicultural University. *Journal of Communication*. Vol. 54 (2) 270 286.
- Hu-DeHart, E. (2001). The Diversity Project: Institutionalizing Multiculturalism or Managing Differences? *Academe*. 86 (5) 38-42.

- Hall, J., & Tinklin, T. (1998) Students first: The experiences of disabled students in higher education. (SCRE Research Report 85). Scottish Council for Research in Education.
- Hoover, E. (2003). Closing the Gates: A Student Under Suspicion. *The Chronicle of Higher Education*. Vol 49, (31). A12
- Hurtado, S. (1992). The Campus Racial Climate: Contexts of Conflict. *The Journal of Higher Education*. 63(5). 539-569.
- Hurtado, S., Milem, J.F., Alma, Clayton-Pedersen, R. & Allen, W.R. (1998). Enhancing Campus Climate for Racial/ Ethnic Diversity: Educational Policy and Practice. *The Review of Higher Education.* 21(3). 279-302.
- Hurtado, S., & Ponjuan, L. (2005). Latino Educational Outcomes and the Campus Climate. *Journal of Hispanic Higher Education*. *4*(3). 235-251.
- James, W B. (1991). A Comparison of Perceptual Learning Styles of Adult High School Graduates and Nongraduates. Adult Basic Education, 1(2), 98-106.
- James, W B. (1991). A Comparison of Adults' Perceptual Learning Style and Their Educational Level. Journal of adult education, 19(2), 11-22.
- Kezar, A.J. (1999), Higher Education Trends (1997-1999): Finance, ERIC-HE Trends, ERIC No. ED435343, Washington DC.
- Kotori, C., & Malaney, G.D. (2003). Asian American Students' Perception of Racism, Reporting Behaviors, and Awareness of Legal Rights and Procedures. *NASPA Journal*. 40(3), 56-76.
- Lee, B. S. & Yongsook. (1990). A Model for Academic Success: The school and home environment of East Asian Students. *Anthropology and Education*. 21(4), 358-377.
- Lin, R.L., LaCounte, D., & Eder, J. (1988). A Study of Native American Students in a Predominantly White College. *Journal of American Indian Education*. 27(3). 8-15..

- Maruyama, G., Moreno, J.F., Gudeman, R.H., & Marin, P. (2000) Does Diversity Make a Difference? A Research Report. *Academe. Vol* 11 (1), 148-161.
- Moses, Y.T. (1990). The Challenge of Diversity: Anthropological perspective on university culture. *Education and Urban Society*. 22(4), 402-412.
- Nelson, S.t D., Clintic, M., & Genevieve, M. (1996) Gender and Group Dynamics: Workshop on Gender and Group Dynamics. (Charlotte, North Carolina).
- Nora, A. (2004). The Role of Habitus and Cultural Capital in Choosing a College, Transitioning from High School to Higher Education and Persisting in College Among Minority and Non-minority Students. *The Journal of Hispanic Higher Education*. *3*(2, 180-208.
- Pascarella, E.T., Wolniak, G.C., Pierson, C.T., & Terenzini, P.T. (2003). Experiences of First Generation Students in Community Colleges. *Journal of College Student Development*, 44(3).
- Paul, M. J. (2003). Double Loop Diversity: Applying Adult Learning Theory to the Cultivation of Diverse Education Climates in Higher Education. *Journal of Innovative Higher Education*. 28(1). 35-47.
- Read, B. (2003). Closing the Gates: An Advisor Bound in Red Tape. *The Chronicle of Higher* Education. 49(31), A12.
- Reid, L. D, & Radhakrishnan, P. (2003). Race Matters: The Relation Between Race and General Campus Climate. *Cultural Diversity & Ethnic Minority Psychology*. *9*(3). 263-275.
- Ross, K. A. (1999). Can Diversity and Community Coexist in Higher Education? *American Behavioral Scientist.* 42(6). 1024-1040.
- Sandora, C. (1998). Effective Diversity Programs Utilize Whole Community. *The Bulletin*.

- Schultz, M., Sizemore, H., & Pamela, N. (2005). Ethnicity and Gender Influences on Learning Styles in Nursing Students From an Hispanic-Serving Institution. *Journal of Hispanic Higher Education*. 4(4). 343-353.
- Solorzano, D., Ceja, M., & Yosso, T. (2000). Critical Race theory: Racial Microaggressions and Campus Racial Climate: The Experiences of African American College Students Knocking at Freedom's Door: Race, Equity, and Affirmative Action in U.S. Higher Education. *The Journal of Negro Education*. 69(1/2). 60-73.
- <u>Sprenger</u>, M. (2008). Differentiation Through Learning Styles and Memory. New York, Corwill Press; 2nd Edition.
- Szelenyi, K. (2001). Minority Student Retention and Academic Achievement in Community Colleges. *ED451859, ERIC Development Team 7.*
- Terenzini, P., Calbera, A.F., Colbeck, C.L., Bjorklund, S., & Parente, J. (2001). Racial and Ethnic Diversity in the Classroom: Does it promote Student Learning? *Journal of Higher Education.* 72(5). 509-531.
- Thomas, H., Cox, R. & Kojima, T. (2000). Relating Preferred Learning Style to Student Achievement. *Paper presented at the national conference of teachers of English to speakers of a different language. March 2000.* Vancover, BC [Canada].
- Tokarczyk, M. M. (2004). "Promises to Keep": Working Class Students and Higher Education. In *What's Class Got to Do with It: American Society in the 21st Century*. M. Zweig. (ed.). Ithaca, NY: Cornell University Press.
- Townsend, L. (1994). How Universities Successfully Retain and Graduate Black Students. *Journal of Blacks in Higher Education (4)*. 85-89.
- Troiano, P. F. (2003, May/June). College Student and Learning Disability: Elements of Self-Style. *Journal of College Student Development*. *44*(*3*). 404-419.
- Ward, N.L. (2006). Improving Equity and Access for Low-come and Minority Youth into Institutions of Higher Education. *Urban Education*. *41(1)*. 50-70.

- Wasburn, M. H. (1996). Is Your Classroom Women Friendly? *College Teaching*. 52(4). 156-159.
- West, M., Kregel, J., Getzel, E.E., Zhu, M., Ipsen, S.M., & Martin, E.D. (1993). Beyond Section 504: Satisfaction and empowerment of students with disabilities in higher education. *Exceptional Children*. 59(5) 456-457.
- White, J. W. (2004-2005). Sociolinguistic Challenges to Minority Collegiate Success: Entering the Discouse Community of the College. *Journal of College Student Retention*. 6 (4). 369-393.
- Wilkins, D. M., & Christie, K. (1997). Herstories: A Preliminary Look at Deaf Women in Higher Education. *American Annuals of the Deaf.* 142. 93-96.
- Williams, D. (2004). Improving Race Relations in Higher Education: The Jigsaw Classroom as a Missing Piece of the Puzzle. *Urban Education*. *39(3)*. 316-344.
- Woo, S. (September 15, 2006). In College Enrollment, Growth of Minorities Will Outpace Rate of Increase for Whites, Report Predicts. *The Chronicle of Higher Education*.