A Qualitative Study of the OASIS Summer Bridge Program at UC, San Diego:
The Successful Transition of Underrepresented Students in a Challenging Institutional Environment

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INTRODUCTION

This study utilized qualitative research strategies to examine the experiences of students who utilized the services of the Office of Academic Support and Instructional Services (OASIS), the learning center at UC, San Diego. By examining those institutional experiences, the report seeks to identify and explain the contribution of OASIS to important developmental outcomes among these students. At a broader level, it seeks to identify trends in the strategies underrepresented students utilize to successfully negotiate the university environment. In so doing, it also seeks to clarify factors that facilitate or hinder students’ learning at UCSD and similar institutions.

The assessment of student learning and development continues to be one of the primary aspects of research in higher education (Angelo, 2000; Pascarella and Terenzini, 1991). The degree to which students learn critical skills and proficiencies beyond content knowledge (and course grades) is a vital concern of both public education and private industry (Major and Eck, 2000). In his comprehensive, seminal assessment of outcomes in higher education, Astin (1993) described the problems faced by selective research institutions in facilitating student learning. Astin’s analysis makes clear that the frequent preoccupation of such institutions on research and resource acquisition generally undermines sound instructional conditions and learning. As a result, the role of the learning center becomes more critical at selective research institutions as they supplement the instruction, mentoring, and other support provided by faculty.

These issues become yet more crucial when considering the institutional experiences of underrepresented students of color at predominantly white institutions like UC, San Diego. Numerous studies (Tinto, 1993; Smith and Associates, 1997; Hurtado and Carter, 1997; Hurtado, et al., 1999) attest to the complex sociocultural and academic dimensions of the adjustment of such students. While virtually all college students face some period of adjustment, the institutional racism faced by underrepresented students of color often results in their experiences being qualitatively and quantitatively different from those of white students (Tinto, 1993). Thus, it is little surprise that underrepresented students of color at UC, San Diego tend to achieve (as an aggregate) lower than
white students in key outcomes such as persistence, graduation, grade point average, and time-to-degree (UCSD Office of Research and Information, 2002).

While such quantifiable outcomes are important indicators, they merely reflect the presence or absence of meaningful learning and development among such students. As Tinto described, persistence and graduation should not be pursued as ends to themselves but rather as indications of students’ learning and intellectual development (Tinto, 1993).

In his provocative study of student persistence in higher education, Attinasi (1992) advocated the extensive use of qualitative methodology in the measurement of student outcomes in higher education. He warned against assessment that depends heavily on the prior conceptualization of outcomes to inform the development of measurement instruments (questionnaires, surveys, etc.) as well as the subsequent statistical techniques employed. Attinasi described the shortcomings of such quantitative research:

Researchers who use these (quantitative) methods of data collection and analysis either assume they already understand the meanings that things have for the individuals they are studying or they ignore such meanings under the assumption that they are not important for understanding outcomes.... But even the most well done studies in this genre of outcomes research are limited in their ability to capture more than superficially the perspectives of the individuals whose outcomes are of concern (Attinasi, 1992, p. 61-62).

Attinasi further emphasized that the lack of clarity of meaning in assessing student experiences causes such quantitative measures to remain at the mere level of statistical probability. His analysis was implicitly reinforced by Tinto, who argues that students’ perceptions of their institutional experiences are more important than those of outside observers. Attinasi argued for a form of qualitative research grounded in phenomenological interviewing (Merriam, 1998) that seeks to understand the essence of students’ experiences through their descriptions of reality. Likewise, Rendon et al., (2000) suggested that qualitative research might be necessary to identify the specific “forms of engagement” (p. 149) that contribute to the persistence of underrepresented students of color. Therefore, this assessment of the effects of OASIS services used qualitative methods to identify and analyze the perceptions of students who utilized those
services, including the institutional conditions (e.g., campus climate) that shape students’ academic and sociocultural experiences.

REVIEW OF LITERATURE

Merriam (1998) described the role of theory in shaping qualitative (as opposed to quantitative) inquiry. Whereas quantitative research generally is utilized to test theory, such is not the case with qualitative research. Instead, theory is often extracted, developed, and/or refined from qualitative data. While this assessment study does not attempt to test existing theory in student development, such theory was utilized to identify its general framework of inquiry (including outcomes and critical periods of institutional experiences for students). While the research and theory on student development on higher education is extensive and ever growing, several contributions from the literature informed the development of this study and are described below.

The Seminal Contributors

In their often-cited review of literature on student development, Pascarella and Terenzini (1991) described and synthesized over 2,500 empirical studies completed over a twenty-five year period (including the concurrent development of theory on student development). A number of their conclusions are important to the identification of variables that facilitate developmental outcomes:

- Student development connotes a progressive, orderly process generally driven by challenge (even crisis) and support.

- The development of student identity is perhaps the key outcome in most “psychosocial” theories of student development.

- When development occurs, students generally assert more control over their own values, ideas, philosophies, etc. (i.e., a progression from dualism to relativism to commitment).
- While increased autonomy is important, an increased sense of interdependence with others, respect for diverse perspectives, and interpersonal skills are critical outcomes that both facilitate and reflect learning.

- The influence of the environment (i.e., institutional conditions) makes an important contribution to student development.

- Much of student learning and development has a “constructivist” nature as students’ existing knowledge and cognitive structure responds (in either functional or dysfunctional ways) to new information and stimuli.

- The accumulation of content knowledge (i.e., “facts” and information on specific subjects and fields of study) is a necessary foundation for the development of more general cognitive skills and intellectual growth.

- Such cognitive/intellectual outcomes have several dimensions such as communication skills, Piagetian formal operational reasoning, critical thinking, postformal reasoning, and cognitive complexity.

- A number of instructional practices contribute to students’ cognitive/intellectual growth. They include multidisciplinary approaches that integrate and synthesize knowledge, approaches that emphasize the development of speaking and writing skills, “inquiry or learning cycle” approaches (emphasizing inductive, concrete strategies), approaches that emphasize student discussion and problem-solving, approaches that create “cognitive conflict or dissonance” combined with supportive teaching, and approaches that facilitate a high level (quantity and quality) of interchange between student and teacher and between students.
The level of involvement and quality of effort by students has a significant effect on their development.

The myriad of theoretical and empirical findings described by Pascarella and Terenzini provide a valuable framework of student outcomes and the variables that potentially impact them. They also provide a strong complement to theories and research that place more emphasis on the environmental or sociological forces that affect student development.

One such theory is the seminal framework of student persistence in higher education developed by Tinto (2000, 1997, 1993). Tinto’s theory explained persistence as a complex process of interaction between students and their institutional environment. Among Tinto’s conclusions:

- While students’ precollege characteristics (including goals and commitments) are important, their institutional experiences once in college make a greater contribution to persistence.

- **Isolation**, the absence of sufficient interactions between a student and other members of the institutional community, is an especially strong contributor to student withdrawal in higher education. Indeed, according to Tinto, isolation “proves to be the single most important predictor of eventual departure even after taking account of the independent effects of background, personality, and academic performance... the absence of contact with others proves to matter most” (1993, p. 56, emphasis added).

- While “subcommunities,” i.e., small niches in which underrepresented students find comfort and support, can facilitate persistence, their potential impact is affected by the degree to which those students perceive that their institution values and supports their subcommunity. When underrepresented students perceive that their
organizations and support services are outside the core institutional priorities, those students are more likely to feel marginalized, isolated, and subsequently, to withdraw from the university. Likewise, the lack of a “critical mass” of underrepresented students weakens the supportive role of such subcommunities.

- There is a clear link between students’ involvement and learning and their persistence. Students who are more involved in intellectual pursuits and who are learning meaningful knowledge and skills are more likely to persist, even when faced by external constraints such as finances or personal issues.

Tinto’s contribution to the understanding of persistence in higher education is reflected in his emphasis on the responsibility of institutions to construct meaningful learning opportunities that make all students feel a part of the university community.

Astin (1993) also made a seminal contribution to student development theory and research. In his most comprehensive study, Astin identified the impact of several institutional variables on students’ involvement and learning. Utilizing data on over 400,000 students from over 1,300 institutions, Astin identified peers as the most significant contributor to students’ learning and development. He also emphasized the positive impact of faculty (both active instruction and pedagogy), cooperative learning experiences, and multicultural or diversity curriculum on student outcomes. Astin’s study reinforced his long-standing principle of involvement as a critical element in student development.

Other Research Findings

In addition to the comprehensive frameworks of student development by Tinto, Pascarella and Terenzini, and Astin, respectively, a number of researchers have completed studies that expand and/or refine our understanding of student development in higher education, particularly the experiences of...
underrepresented students of color at predominantly white institutions. Several key examples will be described.

In her seminal study of the experiences of African American students in higher education, Fleming (1984) found that African American students frequently encountered problems with faculty and staff, other students, and the curriculum that contributed to a lower sense of belonging on predominantly white campuses. She also found that African American students generally experience greater gains in learning and intellectual growth at Historically Black Institutions.

Attinasi (1992, 1989) used qualitative methods to study the early transition of Chicanos to a predominantly white university. Attinasi used the concept of “scaling down” to describe the process through which students learned to negotiate and exploit the resources of three institutional geographies: physical, social, and academic-cognitive. Attinasi’s findings emphasized the key role played by both peers (other first-year students) and older student mentors in facilitating the successful transition of Chicano students.

In a study of “at risk” Latino undergraduate students at a highly selective university and the concept of “academic invulnerability,” Arrellano and Padilla (1996) found a high incidence of “at risk” factors (limited English proficiency, low SES, institutional racism, low teacher expectations, and inferior instruction) among Latino students. However, the interaction between sociocultural, personal, and environmental variables among some Latino students results in their “resilience” or “academic invulnerability.” Arrellano and Padilla found that the successful Latino students they studied (two-thirds of whom were from low SES families and 83% of whom were second-generation U.S. residents whose parents were born in Mexico) manifested four critical characteristics: (1) supportive families, (2) belief in their ability, (3) perseverance and a drive to succeed, and (4) strong affiliation with their Latino identity (i.e., biculturalism—“the ability to access and function in mainstream society without relinquishing cultural heritage and ethnic identity,” p. 499). They also found that role models and mentors were crucial to Latino students’ success.

In their study of the differential impacts (by ethnicity and gender) of academic and social experiences on developmental outcomes among 2,666
students at four-year universities, Nora, Cabrera, Hagedorn, and Pascarella (1995) found that underrepresented students had low levels of social integration, largely because of family responsibilities and off-campus employment. Those students’ precollege experiences (e.g., academic preparation) did not contribute significantly to their persistence. The study also found that cooperative learning experiences, academic achievement, and perceived gains in their development also contributed significantly to the persistence of underrepresented students. Based on their findings, the researchers recommended that universities provide tutoring, study groups, and academic counseling:

Institutions should make every effort to encourage students to join different student organizations and to get all students involved in different activities. Moreover, institutions should create an atmosphere on campus where group study and interaction are invited (p. 445).

Malaney and Shively’s (1995) study of the academic and social experiences of first-year students of color found that institutional racism is a serious barrier for such students. Asian students were found to have low levels of social integration and sense of belonging, African-American students had low levels of academic expectations and integration, and Latinos experienced low academic integration, low levels of satisfaction with their institution, and high levels of racial harassment. Malaney and Shively recommended that campus officials “work harder to teach acceptance of different cultures in an effort to decrease racist environments” and that institutions should implement first-year orientation programs that utilize upper-class students as advisors for those in their first year (p.14).

Hurtado, Carter, and Spuler (1996) assessed the variables that support or hinder Latino students’ transition to college. They utilized the framework of Smedley, Myers, and Harrell (1993; cited in Hurtado et al., 1996) that assessed student transition through the resolution of various sources of stress (academic, social, and personal) experienced by students. The authors found that the campus demographic composition and social climate can be more debilitating than overt interracial conflicts and discrimination. Latino students reported that their most significant sources of support during the freshman year were peers
(including upper-class student and other freshmen) followed by family. The authors concluded:

Even the most talented Latinos are likely to have difficulty adjusting if they perceive a climate where majority students think all minorities are special admits, Hispanics feel like they do not “fit in,” groups lack good communication, there is group conflict, and there is a lack of trust between minority students and the administration. Students may internalize these climate observations... (emphasis added; p. 152).

Hurtado et al., also emphasized their finding that an institution’s structural diversity was more important to Latino students’ academic adjustment than were precollege indicators.

A study by Elmers and Pike (1997) on adjustment to college found that among students of color, perceptions of institutional racism had a significant negative effect on their academic integration and achievement. The effect of such racism on grades was greater than that of entering academic ability. The students’ (of color) intent to persist was affected more by their perceptions of satisfaction with their institutional experiences than their academic achievement.

Elkins, Braxton, and James (1998) utilized Tinto’s theory to study the first-year persistence of over four hundred students at a public, four-year university. They found that whites and higher SES students, respectively, received more support from their community (family, peers, high school, etc.) than students of color and lower SES students. Thus, students of color and lower SES students perceive a greater need to reject the values of their precollege academic preparation. The researchers recommended extended freshmen orientation programs, counseling, and peer support groups that validate students, especially those who are “straddling two cultures” (p.254).

In their examination of Tinto’s theory, Braxton, Sullivan, and Johnson (1997) identified thirteen propositions embedded in the theory. They assessed the empirical support for each proposition and concluded that one of the most powerful (in terms of empirical support) was that social integration positively influences students’ commitment to their institution and subsequently to persistence.
Building on Tinto’s theoretical work on student persistence, Hurtado and Carter (1997) developed a model to explain the adjustment of Latino students in higher education. They argued that such successful adjustment is better described as membership in developmental niches rather than integration throughout the institution as a whole. Their model, tested through an empirical study, emphasized the importance of students’ early transition to college and their subsequent perceptions of the campus climate as critical determinants of a key outcome: sense of belonging, which reflects students’ own feelings about their degree of connection to their campus. Hurtado and Carter also emphasized that the assessment of student experiences should not rely on measures of behavior but rather on students’ perspectives of the quality of their experiences.

Stanton-Salazar (1997) utilized a network-analytic approach to explain the barriers to a successful education faced by students of color and working class students in general. He analyzed sociological frameworks of education to describe the critical role of institutional agents who transmit (selectively) important information and encouragement (“funds of knowledge”) that facilitate educational adjustment and success. He recommended that institutions help students of color develop a bicultural network orientation that enables them to form instrumental relationships with faculty, staff, and students (often of the dominant culture) while retaining their own ethnic group affiliations and developing their ethnic identity.

Smith and Associates (1997) reviewed the emerging literature on the relationship between diversity and positive student outcomes in higher education. Among their findings:

- Diversity initiatives (particularly in the curriculum and in the classroom) have a positive effect on both “minority and majority” students, including institutional satisfaction, involvement, academic growth, and campus climate.

- Programs that facilitate the early transition to college (e.g., summer bridge programs) are especially important to the persistence and achievement of underrepresented students.
- **Mentoring** programs utilizing student peers and/or faculty generate consistent, positive success for student participants.
- “Specialized” programs geared to address the needs of underrepresented students contribute to their educational success without stigmatizing their participants or eroding campus community.
- When students of color perceive a strong institutional commitment to diversity and equity, their likelihood of persistence and development is increased.

A similar study by Milem and Hakuta (cited in Wilds, 2000) confirmed such significant, positive effects from both diversity initiatives and specialized programs for underrepresented students. Milem and Hakuta applied a framework that identified three types of such positive institutional diversity: structural diversity (a representative student body, faculty, and staff), diversity-related initiatives (including curriculum), and diverse interactions among students. These three dimensions of diversity were found to contribute significantly to student outcomes such as retention, critical thinking, motivation, identity, cognitive development, interpersonal skills, commitments, and postgraduate degree aspirations.

Hurtado, Milem, Clayton-Pederson, and Allen (1999) conducted a comprehensive examination of the specific effects of diversity on **campus climate** and their subsequent impact on student development outcomes. They found that a significant number of outcomes described above are affected by students’ **perceptions** of their campus climate. They also noted:

An important principle underlining this conceptualization of the climate for diversity is that different racial/ethnic groups often view the campus differently, a fact that has been confirmed in numerous studies. Further, each conception is valid because it has real consequences for the individual (Astin, 1968; Tierney, 1987; cited in Hurtado et al., 1999, p. IV).

Hurtado et al., emphasized that a positive campus climate is critical to facilitate the vast learning experiences that occur within peer groups, including complex thinking, problem solving, and collaboration. In addition, their thought-provoking review of literature on how college **classroom environments**
impact the campus climate and learning suggested that intensive academic competition is detrimental to students in general and particularly for students of color and women (Gelenky et al., 1986; Palmer, 1987; Sandler, 1987; Sandler and Hall, 1982; cited in Hurtado et al., 1999). Their findings advocated a more extensive use of cooperative learning in college classrooms, a conclusion also reached by Tinto (1996).

Revisions to Tinto’s Theory and New Theoretical Directions

In 2000, Braxton edited a number of empirical and theoretical articles designed to critique Tinto’s seminal model and/or provide different directions toward a greater understanding of persistence in higher education. In Reworking the Student Departure Puzzle (2000), Braxton noted that empirical studies showed much more robust support for the validity of Tinto’s social integration variable as a predictor of persistence than academic integration. Braxton recommended that, “Tinto’s theory should be seriously revised” (p.258) with social integration as one of its elements that retains considerable merit.

A number of other authors in Braxton’s book contributed insights into student persistence based primarily on their analysis of Tinto’s theory and the subsequent need for additional directions. For example, in their effort to develop a more specific persistence theory for students of color, Rendon, Jalomo, and Nora (2000) strongly suggested that two concepts, biculturalism and its antecedent dual socialization, often impact the persistence process for students of color. They described biculturalism as “the ability of minority individuals to learn and function simultaneously in both the predominantly white culture and in the culture of their racial/ethnic group (p.262).”

Rendon, Jalomo, and Nora argued against persistence models that suggest that students of color must separate from their communities and adapt to a college or university with no urgency for the institution to change to accommodate such students. They recommended that institutions ensure that students of color find representations of their culture in academic courses and student programming as well as among role models (“cultural translators”) who can “model behaviors that are amenable with the norms, values, and beliefs of the majority and minority cultures” (p. 138). Rendon, Jalomo, and Nora
described “the real challenge of today’s institutions: the total transformation of colleges and universities from monocultural institutions” (p.138).

They also noted that traditional models of student involvement should become more culture-specific and that programs to facilitate student involvement must include intensive outreach to recruit students of color. Such outreach constitutes a form of validation, a concept through which institutional agents express a clear interest in students both inside and outside of the classroom.

Kuh and Love (2000) provided a “cultural perspective on student departure “ (p. 196). They noted that some students (e.g., students of color) must often traverse a lengthy “cultural distance” between their culture of origin and that of their college. Therefore, such students must have access to institutional mechanisms (e.g. summer bridge programs) that acclimate them to the college culture. Kuh and Love also underscored the importance of “cultural enclaves” (a concept similar to Tinto’s subcommunities) in facilitating social integration among certain students. Their cultural perspective also emphasized the “responsibility of institutions to modify their policies and practices to respond to the changing needs and characteristics of students” (p.98). Likewise, it suggested that persistence is better viewed as a sociocultural process rather than an individual, psychological experience. Kuh and Love concluded:

Virtually all colleges and universities espouse a commitment to diversifying their student bodies, faculty, and curricula. Yet an underlying assumption persists that those from cultural backgrounds different from that of the institution’s dominant culture need to adapt to the institution. To enhance the quality of the undergraduate experience and increase persistence rates, more institutions must challenge this assumption and the institutional policies that flow from it (p. 209).

Tierney (2000) suggested that analyses of persistence should move beyond individual considerations (i.e., a system of winners and losers) to considerations of groups, power, and oppression. Such analyses should include issues such as “the hidden curriculum, the social organization of classrooms, and inherent pedagogical practices” (p. 217). Tierney also asserted that institutions of higher education should follow a framework that enables underrepresented students of
color to maintain their embedded identities while enjoying access to educational success. According to Tierney:

The challenge is to develop ways in which an individual’s identity is affirmed, honored, and incorporated into the organization’s culture . . . The challenge in programs that seek to prevent dropouts is not to develop ways for people to integrate into the system, but instead to change that system by way of programs, activities, events, and curricula that affirm and honor individual identities . . . Successful programs cannot be developed unless we acknowledge the particular backgrounds of those who we seek to educate . . . Low-income minority youth, be they Native American students from an Indian reservation, inner-city black adolescents who grow up in a housing project, Mexican immigrants who live in a barrio, or any number of other individuals who see themselves as part of a group that considers postsecondary campuses as alien territory, need to have teachers, tasks, and pedagogies that affirm who they are (p. 219-221).

Tierney emphasized that students who are often labeled “at risk” must be challenged; this is a critical means through which institutions demonstrate respect for such students. Likewise, institutions should incorporate parents and families into intervention models that seek to increase persistence. Finally, Tierney noted that institutions’ persistence programs must provide role models and a safe, comfortable environment that constantly validates students’ strengths; further, that in working with students of color, racism must be acknowledged while emphasizing effective ways to resist racism.

Baird (2000) analyzed the relationship between Tinto’s theoretical framework and issues of college campus climate. Baird reinforced the elements in Tinto’s theory (as well as other theory and research) that emphasize the critical impact of student perceptions of the campus environment on persistence. According to Baird, students’ perceptions of opportunities and constraints of both academic and social systems lead to behaviors that affect integration. In turn, the interpretations of individual students and their important reference groups (e.g., peers) affect their perceptions of the campus climate.

Baird noted that most campus climate studies document significant effects for underrepresented students of color, i.e., negative perceptions of the campus climate contribute to the students’ alienation (the opposite of integration), poor academic performance, and low levels of emotional adjustment (Nora and
Cabrera, 1996; cited in Baird, 2000). Baird further described the research by Pace (1984; cited in Baird, 2000) that stated:

> In all types of colleges, the single most important contributor to students’ satisfaction was an environment described as friendly, supportive, helpful, etc.—most commonly the supportive relations among students, but also in some cases the helpful, encouraging relationships with faculty members, or the flexible, considerate style of the college’s operations (p. 72-73).

Baird concluded that there is considerable research evidence that campus climate can indeed be changed.

Berger’s (2000) contribution to the revision of Tinto’s theory focused on the role of cultural capital in the persistence process. Berger’s analysis indicated that both individuals and institutions pursue the accumulation of cultural capital, which he described as:

> Cultural capital is a symbolic, rather than material, resource. It has no intrinsic value, other than the ways in which it can be converted, manipulated, and invested in order to secure other highly valued and scarce resources, including economic capital. Moreover, it is a type of knowledge that members of the upper class value but is not taught in schools (McDonald, 1997; cited by Berger, 2000, p. 99).

Berger utilized Bourdieu’s (1973, 1977; cited in Berger, 2000) theory of the role of education in social reproduction, noting that educational institutions legitimate class differences by transforming them into distinctions based on merit. Accordingly, students with less cultural capital may feel less entitled to earn a college degree, particularly from a selective institution. On the other hand, such selective institutions (with high levels of cultural capital) seek to protect their elite positions by recruiting and retaining students with compatible levels of cultural capital.

This dynamic creates urgency for low-income and working class students to acquire sufficient cultural capital to achieve social integration at the university. According to Berger, such students’ perceptions of their campus’ organizational functioning (e.g., institutional priorities and decision-making processes) have significant effects on their persistence, especially at selective institutions (Bean, 1980, 1983; Berger and Braxton, 1998; both cited in Berger, 2000). Finally, Berger emphasized that selective institutions with high levels of cultural capital often
fail to recognize the positive attributes of underrepresented students, which is sometimes called “border knowledge” (Rhoads and Valadez, 1996; cited in Berger, 2000).

Finally, Braxton’s book provided Tinto (2000) an opportunity to update his theory. He did so though an emphasis on the relationship between “learning and leaving,” i.e., an underscoring of the importance of **classroom experience** to persistence. Tinto recommended that whenever possible, classrooms be constructed as learning communities, which provide linkages to communities outside the classroom.

Tinto critiqued the college classroom as a space that too often features passive learning, didactic communication, disconnected learning, and minimal student involvement. He suggested that learning communities provide a means to connect academic courses through block registration, interdisciplinary structures, team teaching, etc. Tinto also described the features of learning communities as shared knowledge (students take common courses), shared knowing (students get to know each other), and shared responsibility (students work and gain knowledge collaboratively).

According to Tinto, research (Tinto, Goodsell, and Russo, 1993; cited in Tinto, 2000) documents that learning communities for first-year students can contribute to their academic and social involvement and subsequent persistence. Specifically, such research indicates that students who participate in learning communities gain supportive peer networks, shared learning experiences that bridge the academic and social divide, and increased involvement, effort, learning, and persistence. He also cited research (Braxton, Milem, and Sullivan, forthcoming; Fassinger, 1995; Nunn, 1996; all cited in Tinto, 2000) showing that effective **pedagogy** (e.g., active learning and a supportive classroom atmosphere for student learning) is as important as faculty or student characteristics to the learning and persistence process.

**Summary**

The theory and research from the literature on college students provide an extensive set of principles for practitioners interested in maximizing the
persistence and development of students. A number of those principles identified in this literature review warrant additional emphasis:

- **Students’ perceptions** (of their own strengths and weaknesses, their institutions’ commitments, their own experiences, etc.) are extremely important to their subsequent behaviors and thereby affect virtually all student outcomes.

- Students’ **sense of belonging** is an important variable that affects persistence and involvement (and subsequent outcomes), especially for underrepresented students of color.

- The **early transition** of students to college is a critical period for student adjustment and subsequent persistence, development, etc.

- The **institutional environment** (e.g., campus climate) has a significant impact on students’ perception and behaviors. Although often entrenched, the institutional environment is malleable and can be changed through deliberate, sustained strategies. The literature is consistent in documenting the impact of the institutional environment on the perceptions among underrepresented students of color that they are marginalized.

- An institutional environment that features a strong, visible **commitment to diversity** has positive effects on virtually all students’ learning. This includes structural diversity, diversity initiatives, and diverse student interaction. Likewise, underrepresented students create significant, positive changes on college campuses.

- In order to maximize students’ learning and development, an institutional environment should feature strong elements of both **challenge and support**. It should also actively facilitate students’
involvement, interaction among students in both academic and social life, and interaction between students and faculty and staff.

- Institutional environments should provide role models, mentors, and other institutional agents. Their work is particularly important for underrepresented students of color.

- Institutions should provide structures and mechanisms (both academic and social) that facilitate the identity development of underrepresented students of color. They should facilitate experiences that validate the presence of those students and contribute to their biculturalism.

- Students who are actively learning meaningful knowledge are much more likely to persist and achieve at high levels.

While not exhaustive, this literature review provides directions for the areas of inquiry in this study. It also helps to explain the myriad of experiences among college students that affect important developmental outcomes.

METHODS

This study utilized qualitative methodology to obtain ten underrepresented students’ perceptions of their first-year experiences and to assess the contribution of OASIS (and other variables) to important student outcomes. Qualitative research provides an opportunity to gather in depth information directly from students (Attinasi, 1992; Merriam, 1998).

Qualitative methods are useful for examining institutional factors and capturing student interactional characteristics. Such institutional factors as culture or climate, norms, beliefs, and mission can be codified using qualitative methods (Whitt and Kuh, 1991). They are highly appropriate for studying factors within colleges (Lincoln and Guba, 1985; Patton, 1990), especially those within student affairs (Kuh and Andreas, 1991), because it improves administrators’ understanding of individuals and groups
of students. Unlike quantitative research, which yields numbers that categorize student behaviors, qualitative research yields words as data that capture students’ experiences (Kuh and Andreas, 1991). Grounded in the daily experiences of college students, qualitative research is particularly powerful because it represents an active interface between the investigator(s) and the participants (students) (Watson et al., 2002, p. 26).

The study also focused on the perceptions of these ten subjects as they live the experience of underrepresented students of color at a predominantly white institution. Thus, their membership in an ethnic group historically excluded from higher education forms part of the study’s core. In so doing, the study borrows from both critical race theory and Latino critical theory.

Critical race theory and Latino critical theory identify storytelling, giving voice, or naming one’s own reality as key elements of legal scholarship and important tools for achieving racial emancipation (Crenshaw, Gotanda, Peller, & Thomas, 1995; Delgado, 1995; Montoya, 1995; cited in Fernandez, 2002). Epistemologically, critical race theory and Latino critical theory privilege the experiential knowledge of people of color as critical ways of knowing and naming racism and other forms of oppression. Moreover, critical race theory and Latino critical theory offer an important analytical intervention—they place race and other socially constructed categories at the center of analysis (Fernandez, 2002, p. 48).

Specifically, the study sought to provide directions regarding several research questions:

1. How were certain pre-college characteristics (parents’ education, socioeconomic background, and pre-college academic preparation) manifested among these students?
2. What were the students’ general perceptions of their first year experience at the university, both academic and social?
3. What were the students’ perceptions of their own development (both cognitive and non cognitive) during their first year at the university?
4. To what extent (and in what ways) did OASIS and other variables contribute to critical outcomes among the students during their first year at the university?
5. What were the students’ perceptions regarding the campus climate?
6. What were the students’ perceptions of their sense of belonging at the university?

In order to ensure the opportunity to assess the contribution of OASIS to student outcomes, ten students were selected as a nonrandom sample of the 150 students who attended the OASIS Summer Bridge Program at UCSD in 1998. Only students who used OASIS services frequently throughout their freshmen year and whose first-year grade point averages were at least 2.75 were selected for the study. A research focus on Summer Bridge students who did not utilize OASIS services during their freshmen year (and/or who experienced low first-year grade point averages) would be of interest. However, this study chose to look at successful Summer Bridge participants who also followed the prescription to use OASIS services during their freshmen year. In so doing, the study sought to assess the role of OASIS (and other variables) in student success.

The initial sample of ten students was made up of three males and seven females, including three African Americans, three Chicanos, three Pilipinos, and one Asian. The students’ mean first year grade point average was 3.31 (on a scale up to 4.0).

The ten students were contacted by mail and then by a follow-up telephone call from one of the study’s research assistants. Both of the research assistants were also participants in the 1998 Summer Bridge Program and had often interacted with the study’s subjects (an element of ethnographic methodology; Watson et al., 2002). The students were asked to submit to a rather lengthy interview regarding their first year experiences at UCSD. All ten students agreed to do so. Within a period of approximately eight weeks during the winter of the students’ sophomore year, the research assistants interviewed all ten students. Each student attended at least two sessions to complete the
interview. The entire interview lasted an average of slightly over two hours. The interviews were recorded and transcribed verbatim by the research assistants.

The interview itself followed a semi-structured format (Merriam, 1998). Its design incorporated elements of both phenomenological and ethnographic methods to gather responses to the research questions. Phenomenology “describes the meaning of multicultural students’ lived experiences within their particular college setting” (Creswell, 1998, p. 51; cited in Watson et al., 2002, p. 30). Ethnography “seeks to describe and interpret the experiences of a cultural group or social system” (Watson et al., 2002, p. 30) A number of general sections of the interview featured somewhat broad, open-ended questions. Those general sections included:

1. Demographic background (parents’ origin and socioeconomic status)
2. Pre-college academic preparation
3. The Summer Bridge experience
4. The fall quarter (freshmen year) experiences (academic and social)
5. The winter and spring quarter experiences (academic and social)
6. Perceptions of the campus climate
7. Perceptions of the student’s sense of belonging
8. Closing, summary observations

Within most of these general areas of inquiry, more specific follow-up questions were utilized to probe more fully into the students’ perceptions of their experiences (Watson et al., 2002). Many of those follow-up questions were driven by literature on college students’ adjustment, persistence, and development (Tinto, 1993, 2000; Attinasi, 1992; Hurtado and Carter, 1997; Hurtado et al, 1999; Pascarella and Terenzini, 1991). The interview questions were constructed to avoid leading the students to any particular response (Terenzini et al., 1994).
The full transcriptions of the interviews were read and discussed by the principal researcher and both researcher assistants. General (and in some cases specific) categories among the students’ responses were identified in these readings and discussions and tentative hypotheses were identified to check against eventual findings. Strauss and Corbin (1990; cited in Watson et al., 2002) defined such data categories as “a unit of information comprised of events, happenings, and occurrences” (p. 40). The principal researcher then assigned codes to the emerging themes or “clusters of meaning” (Watson et al., 2002, p. 41) within each category. The most prominent, unequivocal themes among the students’ responses were identified and reported as findings (Tinto, 1997; Watson et al., 2002).

RESULTS

The analysis of qualitative data yielded results in a number of conceptual areas related to student persistence and development.

Parents’ Education and Family Income

Tinto’s theoretical model (1993) incorporated the level of parents’ education as a "precollege" characteristic that often contributes to student persistence in higher education. At UCSD, both parent education and family income affect graduation rates (UCSD Student Research and Information, 2002).

Collectively, the parental education of the ten students was relatively modest. Only two had both parents who were college graduates. One of the students had a parent who graduated from college in Africa. Three other students had one parent with a college degree; two of them earned those degrees outside of the U.S. (Mexico and the Philippines, respectively). Three students had both parents with high school diplomas as their highest educational level (one's parents earned their high school diplomas in the Philippines). One student had only one parent with as much as a high school diploma and one student had both parents with only an elementary school education (in Mexico). These
educational levels reflect the fact that six of the ten students had at least one parent who had immigrated from Africa, Mexico, or the Philippines.

Only one student had a parent that achieved professional status (a pharmacist). Four of the students described their family as middle-class. Two described their family as lower middle-class, one as working class, and three as low-income.

**Academic Preparation**

The students were asked to describe the quality of their precollege education, another precollege variable in Tinto’s theory and other studies that attempt to identify factors that impact college persistence (Pascarella and Terenzini, 1991). The students also commented on the degree to which their prior schooling prepared them for the academic rigors of UCSD.

Numerous researchers (Persell, 1977; Darder, 1991; Cummins, 1986) have described the relationship between schools’ ethnic composition and their quality of education. In San Diego County, data (San Diego County Latino Advisory Council, 2001) indicates that schools with a predominantly nonwhite composition generally offer fewer Advanced Placement courses and achieve lower levels on standardized tests. Thus, schools’ ethnic composition can be a significant predictor of academic emphasis and quality. Three of the ten students reported that their school was predominantly white. Three others described their schools’ ethnic composition as mixed (roughly equal parts white and students of color). The other four students said their schools were largely segregated and composed mainly of African Americans, Chicanos, and Pilipinos.

In terms of the availability of Advanced Placement courses, seven students reported a good number of such courses at their high school. One student reported only a “fair” amount of AP courses (they also commented that those few courses were poorly taught).

When asked to summarize how well their high school had prepared them for UCSD, six students said they felt positive about their preparation. Two students had mixed feelings about their preparation while two others had unequivocally negative feelings about their academic preparation for college.
Summer Bridge Program

All ten students participated in the OASIS Summer Bridge Program prior to the beginning of their first (fall) quarter at UCSD. The program attempts to facilitate an effective transition between high school and college (in both academic and sociocultural dimensions) for its students. The students’ perceptions of the degree to which (and in what ways) Summer Bridge facilitated their transition reflected four areas--- academic, social, identity, and campus resources.

Summer Bridge--Academic

The students' assessment of the academic dimensions of their Summer Bridge experience converged in a number of areas. Their most unequivocal perception was that the program's academic demands were extremely challenging (the students completed two, four-unit courses that sought to further develop students' skills in reading, writing, speaking, critical thinking, collaboration, analysis, etc.). The students stated that both the volume of academic work and its complexity provided a great challenge. One student commented:

I didn't expect it to be as harsh as it was... It was really hard... We had so many things to do, but it was good.

Another stated:

I was expecting a lot of work and it was. We had to write papers, we had to do daily homework, and we had a month-long project. It really prepared me for college.

Although the structure of Summer Bridge was fairly regimented, most of the students expressed a perception that their time management skills were improved significantly by having to complete multiple academic assignments. One student stated:

It made me realize that I can establish a balance (of social and academic demands) when school started. It taught me a lot about balance and how it's important. Also, how discipline is important.
The students emphasized how much appreciation they developed for the use of academic services and support. In particular, they described learning to utilize office hours with professors and teaching assistants, respectively, who they described as consistently accessible and approachable. Reflecting on how that experience shaped her expectations for the academic year, one student commented on OASIS:

I learned that there was a place for me to get support. That I had a place to go where I could get help for not only my academic work but also with my own personal life, with emotional and social support.

Another student stated:

I think that talking to the professors at Summer Bridge helped me a lot because I wasn’t too intimidated to talk to professors during the actual school year. And it’s funny, like, up to this day, every Summer Bridge student sits in the front row of classrooms.

Another area of consensus was expressed through the students' perceptions of learning to utilize peer networks and complete academic assignments collaboratively. Among the student's comments:

I learned that group study pays off a lot... I remember that during Summer Bridge, we'd go into our suites and take up the chalk boards and start writing. That helped a lot because I remembered everything during the final.

A final academic theme that emerged from the students' perceptions described the degree to which Summer Bridge classes improved their critical thinking skills.

Before I entered college, I was never introduced to the issues that were brought up in Contemporary Issues... I never learned about hegemony, ethnic issues, diversity, or affirmative action. None of my previous teachers taught us about these issues and how to deal with them. So Summer Bridge was a good eye opener.

I think one of the best aspects that Summer Bridge offered is the writing component because it really teaches students to think critically and analyze their essays.

I think the good thing about the program was the level of creativity that it made you pull out of yourself. In high school we were able
to do some creative stuff but I really learned that creativity is good through Summer Bridge.

To me, living in the world as a Black man... in high school, I knew things were kind of twisted and not engineered for me the way they are for mainstream society. But being in Summer Bridge and the Contemporary Issues course and just seeing facts and having them explicitly explained to me, in theories, it was real food for the intellect... It was definitely a learning experience I will never forget.

I would say it helped me think critically. The material that was presented... you had to think about it. Especially at discussion sections, our teaching assistant really challenged us... Question everything and if you have questions, you should ask them.

The students' overall assessments of the Summer Bridge Program's academic components were unanimously positive. Some students summarized their perceptions:

I think if I didn't go to Summer Bridge, I wouldn't have known about OASIS and all the tutoring that's available, especially workshops... Also, I don't think I would've been as comfortable coming into college if I didn't go to Summer Bridge because office hours, meeting with the professor, was introduced to me in Summer Bridge.

I'm in love with Summer Bridge because I don't think I would have survived or stayed in college or stayed at UCSD (without it)... The Summer Bridge Program gave me so much... they gave me networks, they gave me confidence, they gave me all this support... I felt so positive throughout the whole experience that if I didn't go through it, I would've been lost my first year.

Summer Bridge--Sociocultural

The most striking finding among the students' perceptions of the sociocultural dimension of Summer Bridge was their unanimous, enthusiastic assessment of the peer networks they developed. Although they described their network of Summer Bridge peers as very extensive, the students were particularly effusive in describing the closeness of the peer network developed in the residential hall's suite (a group of eight-ten students of the same gender). One student stated:
My suite mates and I got really close... After the third week, no one wanted to leave (the program). We formed such close bonds... We knew so much about each other and we helped each other through so much... We took care of each other.

The students were also unanimous in acknowledging the value of the diversity among the peer networks they developed during Summer Bridge:

It was great. I actually met my first Chicano, Chicana, and African American friends at Summer Bridge. I was going into college looking for diversity and that’s exactly what I got in Summer Bridge.

Socially, I got to meet a lot of people from totally different backgrounds... We lived together, ate together, went to class together, and did extracurricular activities together... Socially, I felt very connected there.

It was evident that that the development of peer networks was facilitated by several elements, including the program’s residential structure, it’s schedule of required social activities, and the program’s residential staff. Several students commented that the residential staff (most of whom were upper-division undergraduates) were positive role models.

It was nice to see another Pilipino who you could relate to but was not too much older and had experienced everything you’re going through in college.

I think it’s essential, especially to people of color, that need to see their people succeeding and that they can also succeed.

It was clear that the sociocultural components of Summer Bridge had facilitated a strong degree of social comfort and confidence for the students as they entered their first year of college.

I felt that I was coming into school as a second-year student just because I had so much experience during Summer Bridge... And since I was already comfortable (socially) with where I was, I could focus more on my academics. Summer Bridge and the people there really helped me because of the networking.

Summer Bridge--Ethnic Identity

The construct of identity is one of the most prominent outcomes in student development theories and research (Erikson, 1968; Chickering and
Reisser, 1993; Pascarella and Terenzini, 1991). Additional studies (Tatum, 1997; Phinney, 1989; Velasquez, 1995) document the saliency of ethnicity as a dimension of the identity development of students of color at postsecondary institutions. The students provided several convergent comments on the contribution of Summer Bridge to their ethnic identity development.

Virtually all of the students reported having no prior experience with academic curriculum that addressed ethnicity and related issues. As a result, they reported significant increases in their awareness of their own ethnic group's culture, historical experiences, and present conditions. The also stated that their awareness of other ethnic groups increased as well.

In (student's home town), the majority of people are Asian... I didn’t really know the Chicano/Chicana culture and I just became a lot more aware of that. And especially after I did some of the readings for the Contemporary Issues course, I thought, 'Wow! I've lived in a one-sided view of everything'... There was just so much more.

All of the students commented positively on how their knowledge of societal and educational issues related to diversity and equity increased through their Summer Bridge courses. Again, most were struck by the failure of their previous educational experiences to engage such important issues. They also perceived a connection between their increased ethnic identity and their developing critical thinking skills.

Coming to Summer Bridge and taking Contemporary Issues, it really opened my view about different perspectives... it also made me realize that society is often oppressive and if we just let it guide us and we don’t think for ourselves, then we're just perpetuating a system where people everyday are being blamed for not succeeding... because of that class, I'm more interested in wanting to help, community-wise.

Actually, before college, I had no awareness about ethnic identity or social awareness, but Summer Bridge provided that foundation... For example, I thought about how the diversity of the campus affects one's sense of belonging to the university. So currently, I'm still studying--- I'm reading some books that deal with issues I was exposed to in Summer Bridge.

Several students commented poignantly that the academic study of their ethnic group within a context of diversity and equity issues made them feel
validated. Some stated that their exposure to those issues facilitated a desire to become more involved personally on campus and/or in their community.

I think that it (the Summer Bridge courses) makes people, especially people of color, feel more valued and more significant. Like their history is important and they themselves are important... they learn why their people are treated this way or why the dominant culture is this way... with those classes, it empowers others like it empowered me... I feel like a stronger person and I feel like I can do more.

After coming from Summer Bridge and reading Contemporary Issues, I really wanted to be involved. I saw myself in the future getting involved and really letting my voice be heard... I wanted to make a change.

When I came to Summer Bridge, I realized that I'm still Black and I'm still a part of the circle of problems that society faces among different racial groups and ethnicities... actually, it was really impacting for me... I cried in lecture sometimes, like when I was listening to some of the statistics (about educational achievement among ethnic groups)... My eyes were opening up to things I'd never seen before... I felt very comfortable with that.

Clearly there was a consensus among students that their increased ethnic identity development was personally rewarding and that it opened them to the development of both academic and sociocultural outcomes.

Summer Bridge--Campus Resources

Because many theoretical frameworks of postsecondary persistence and performance emphasize students’ integration (Tinto, 1993), membership (Hurtado and Carter, 1997), and similar constructs, students’ knowledge of campus resources that facilitate such outcomes is important. These students’ responses indicated a strong pattern of knowledge acquisition about such critical resources.

The students were most impressed by the information they learned about OASIS, the campus’ learning center. Due in part to the contracts signed by Summer Bridge students to utilize OASIS’ academic year services, the students gained considerable information about each specific OASIS program and how they contribute to students' achievement and development.
Summer Bridge helped me in a lot of ways to take advantage of campus resources. For example, it taught me about OASIS... And actually, following Summer Bridge in my first year, I took advantage of these programs by utilizing the tutors and the mentors... So it helped me take advantage of a lot of the resources.

Most of the students stated that they also benefited instrumentally from the knowledge they acquired about campus student organizations (particularly ethnic-specific organizations). They also identified a number of specific campus resources of which they learned during Summer Bridge, including the Cross Cultural Center, the Student Health Center, the Career Services Center, Student Financial Services, Academic Advising, UCSD’s five colleges, and other academic support services.

Although the students spoke enthusiastically about such specific resources, their responses were more emphatic regarding the general message they absorbed about the importance of utilizing campus resources. All of the students remarked that their awareness of the critical role played by such resources in their success at the university was significantly increased.

So I made all these connections (with campus resources)... they allowed me to network with all these people that I probably wouldn't have met if I didn't go to Summer Bridge. So I think it was these connections that were really valuable to my success from freshman year through my entire years at UCSD.

Ease of Transition- Academic

Virtually all theories of postsecondary persistence and performance (Tinto, 1993; Hurtado and Carter, 1997; Pascarella and Terenzini, 1991) emphasize the importance of students' academic transition to college. A number of trends emerged from these students' responses regarding the academic dimension of their first year at UCSD.

Fall Quarter

As reflects their selection for this study, all of the students felt that their academic achievement during their first quarter was high. Virtually all felt that
their courses were manageable without much stress (most had followed the advice of the Summer Bridge Program’s staff to take only three courses during their fall quarter).

The students’ descriptions of their fall quarter consistently showed a high level of engagement with their academic courses. They reported having studied a great deal, including a clear pattern of group study with peers.

I was always studying with people... we always had group discussions or whatever... I think that was really helpful... And a lot of these were people I met during Summer Bridge. And we initiated study groups.

Most of the students reported making relatively frequent use of both their professors' and teaching assistants' office hours. However, the academic resource utilized most often by the students were the course-specific workshops (in math, science, and writing, respectively) provided by OASIS. All of the students reported frequent use of those workshops and all commented (often effusively) on how helpful the workshops were.

I think it (the OASIS workshops) helped a lot, just because they helped us clarify anything we didn't understand... through the workshops we formed our own study groups and started doing our own thing... We wouldn't have done that on our own.

They (the OASIS workshops) aided a lot. You come to class and you know stuff that students who don’t go to workshop don’t know. It gives you an edge on the material. I mean, workshops are better than discussion sections for me.

It (the OASIS workshops) was a really comfortable environment. The overall atmosphere is really friendly and really accepting. Everyone is just there to help each other out.

I learned more from my workshop than I did from my teaching assistants. They’d put more effort into the class than my TA’s did. Another good thing about workshops was that you met different people in the workshops so you could do work together outside of workshops. I think that if I didn't have the workshops, my grades would have really suffered.

Some students specifically described their feeling that OASIS provided a more positive, effective environment compared to the campus' general academic ethos of competition and individualism. Others described how OASIS helped to
deal with the intersecting academic and personal stressors they encountered during their initial quarter.

It (the campus' general climate) was definitely competitive… In chemistry and in math, people were freaking out, like, 'Oh my gosh, this one grade is going to determine my whole history for medical school… this is going to determine the rest of my life'… It really was a competitive environment… in our (OASIS) workshops, it was like, 'let's make sure you understand it, let's work as a team to get to this answer.' There was not any competition within the workshops… it really helped learning.

I used OASIS a lot during the first quarter because I found it (math) extremely difficult… and I found that my TA was not helpful at all and the professor was very cold and distant.

I probably would not have done as well without OASIS because OASIS not only provided me with academic help, it also provided me with psychological help because I was very stressed and depressed about my classes. And I didn't know if I was going to succeed and they pushed me and reassured me. If it wasn't for OASIS, I don't know where I would be now.

Winter and Spring Quarters

The students also described their academic experiences in the second (winter) and third (spring) quarters of their freshman year. Most of their descriptions were similar to those of their first (fall) quarter experiences. Overall, the students reported having achieved well academically during their second and third quarters and were satisfied with their performance. Their responses indicated that the students continued to form and utilize their own study groups.

They (study groups) basically increased my knowledge of the material. It made me more confident, just the fact that I could talk about it to other people without sounding dumb. I knew what I was talking about… it also gave me support. I knew that when we walked into that test, we all walked in together.

All the students reported their continued utilization of OASIS workshops. Likewise, their assessment of those workshops’ contribution to their achievement was very positive.

The workshops were the most helpful because they (the OASIS tutors) were students who had taken the classes before… They'd
push us to do problems over problems and we’d complain about it but it helped in the end.

I liked that students were teaching you and it was a different setting. Even though you have grad students as TA’s, these (OASIS tutors) were other undergraduates who knew the material, they were your peers... you could be more up front with them, like, 'I really didn't get this.' It already felt comfortable because you didn't feel like someone was above you. It's so structured when you are in a classroom where there's a hierarchy already set up... It (OASIS workshops) felt pretty supportive.

It (OASIS workshops) was the most significant factor in my academic achievement outside of that fact that I studied a lot. Sometimes it was even number one over that. It contributed a lot because in the workshop setting or in the (tutoring) conference setting, I always knew I could ask questions... it made me sure that I understood the material.

The students' responses were relatively mixed regarding their use of professors' and/or teaching assistants' office hours during these two quarters. Most students did report making significant use of those office hours. However, several students specifically maintained that they seldom utilized office hours.

In discussing the factors that provided tangible and emotional support for their academic efforts, the students mentioned most often peers, their families, and OASIS (not just workshops).

They (OASIS services) were extremely helpful... the grades that I did get throughout my freshman year, I think it had a lot to do with me going to OASIS and being able to use those resources daily... It contributed ninety percent of my academic success.

Freshman year, all the support I got from friends, from some teachers, from OASIS staff, I just felt very supported. I felt like a lot of people wanted me to do well. I felt like whatever I did, people were rooting for me.

Overall, the students demonstrated a clear pattern of active engagement of their academic life throughout their freshman year. This intensive level of involvement appeared to pay substantial dividends in terms of the students' academic achievement and their sense of satisfaction.
Ease of Transition - Social

Tinto's (1993) theory of persistence provides as much emphasis on students' social transition as their academic transition. Likewise, empirical tests of Tinto's theory often find more support for social integration as a variable that impacts persistence (Braxton, 2000). For underrepresented students in particular, constructs such as Sense of Belonging (Hurtado and Carter, 1997) appear to have a strong sociocultural dimension. The students' descriptions of their social transition to the university shared several features.

Fall Quarter

The most common feature of the students' social experiences was their social networks. Without exception, all of the students reported having a strong, close, supportive, and diverse network of peers they had met during their mutual participation in the OASIS Summer Bridge Program. Those networks helped the students to achieve a considerable degree of social comfort during their initial quarter at UCSD.

The social transition to college was made easier just because I knew everyone from Summer Bridge and I hung out with those people. Without Summer Bridge, I don't think the social transition would have been as easy.

With the people in Summer Bridge you knew that you had a lot in common. You got to know people well so you didn't have to go through all the preliminaries of getting to know people... We are very close... You still keep those networks... Those networks are the ones that last forever.

I lived with two people from Summer Bridge (during freshman year). I think we were really close. We knew each other really well because we spent so much time together in Summer Bridge and it was easy to tell each other things... It just made it a lot easier... Even though I might want to leave (UCSD), I looked at all the people I had already met and all the friendships I had made and I would be losing all that.

I mean we were really close. We knew that we were all going through similar things as far as being a first-year (student), being a minority. We're close. We can depend on each other.
In addition to their common experience with positive peer networks, all of the students reported having been involved as members of ethnic student organizations during their fall quarter. Their descriptions of their involvement showed these student organizations’ positive contribution to the students’ social comfort at UCSD, their satisfaction, and their sense of "membership" (Hurtado and Carter, 1997). The students’ sense of membership in ethnic student organizations and the organizational processes themselves provided empathy, validation, and positive learning experiences for the students.

One of the main reasons I joined MEChA (a Chicano student organization) was because it was like a support group. I felt a little isolated, like not fitting into the university. But when I went there, they were with open arms, very inviting and accepting.

I’m still involved in APSA (an Asian and Pacific Island student organization) and I’ve really enjoyed that from the beginning. The people there are really friendly and a lot of them have the same background as I do. It’s easier to relate to each other and just form bonds from there.

The students’ responses were mixed regarding their involvement in UCSD’s five-college system (which is charged with the major responsibility for UCSD students’ social life). Three students stated that they benefited from their involvement in their college while two specifically stated that they felt no urge to get involved in their college.

A somewhat similar divergence in responses was found in the perception of closeness and comfort in the students’ on-campus residence. Six of the students expressed strong, negative perceptions of their relationships with the other students in their residential setting. Some of those felt a sense of alienation and invalidation from being the only underrepresented student in their residential suite.

I didn’t really feel like I belonged in my suite. It was just people I was living with. Even my own roommate was just some guy that I lived with. I didn’t really feel any connection.
All my roommates were white or Asian and upper class... It was difficult... I didn't feel comfortable there.

On the other hand, two students reported close, positive relationships with others in their residence hall.

Winter and Spring Quarters

The students’ described their social transition during winter and spring quarters in largely positive terms. They continued to benefit from the support and comfort provided by the peer networks they had formed during Summer Bridge. The students also reported that their peer networks both strengthened and expanded during these two quarters. Likewise, all of the students reported that they continued (and often strengthened) their involvement in ethnic student organizations during the winter and spring quarters.

Most of the students reported an increased sense of comfort with the campus as their freshman year progressed. However, that comfort sometimes reflected a sense of resignation about what they perceived as a negative campus climate.

On one hand I was more comfortable but on the other hand I was less comfortable, because the naivete kind of wore off from first quarter.

Several students reported that their social transition contributed to an increase in their ethnic identity development. They identified peer networks, role models, and ethnic student organizations as contributing factors. In turn, they described a greater sense of social comfort as a result of their ethnic identity.

It (ethnic identity) helped me a lot. I didn’t expect to see a Pilipina administrator... It surprised me to see a Pilipina lecturer and graduate student. It made me realize that I could do it too. It made me feel very comfortable with who I am... instead of seeing myself as just another Asian, I see myself as a Pilipina, as someone who can contribute to that community.

In summarizing their first-year social transition, all of the students emphasized the positive role played by OASIS. The students perceived OASIS as
a site that provided social comfort, empathy, validation, networks, involvement, and encouragement.

Every time I would step into OASIS, it would be like stepping into home. Everyone there knows each other and they’re extra friendly… it’s like a sense of security that you don’t have with a campus this size.

It (OASIS) helps a lot mainly because OASIS has a staff that’s very diverse… by learning about new cultures, just talking to the staff about their families and where they came from, helps me feel comfortable. And you get used to that atmosphere and so it's nice to be there.

I can’t even start to say how much I appreciated (OASIS). Right when I walked in, you see people that look like you and there’s people that want to help… It was a really nice environment and you can relax there.

OASIS contributed a lot to the cultural comfort. OASIS is mainly where I found out about activities on campus. As far as social comfort, it also helped a lot… it was a source of social networks. It made me aware of more issues going on, like sweatshops, things relating to affirmative action and diversity on campus. It really broadened my horizons and taught me to look at things differently.

OASIS has always been there for me. It's been a stable part of my educational career at UCSD. It prompted me to look inside myself culturally. OASIS has been a second home for me and it helped me feel comfortable. OASIS - the students and the staff - they know what I'm going through. OASIS has been there for me and I’m so glad. I don’t even want to graduate because when I go on (to professional school) there might not be this type of community. And that's what I'll miss.

The students' overall social transition throughout their first year appeared quite smooth, largely due to their involvement with peer groups, ethnic student organizations, and OASIS.

Campus Resources

The students described their awareness and utilization of campus resources (other than OASIS) designed to facilitate their academic and social
transition. All of the students except one described the use of several such resources throughout their first year at UCSD.

The resource mentioned most often by students was the office hours provided by their course professors and teaching assistants. Although most of the students stated that they made use of such office hours, all who did so had generally negative perceptions of their helpfulness.

If you went to office hours, maybe there's another student who's asking questions but you don't interact with that student, even if you're in the same class... your TA is there to help you but they don't seem like it at times. And in terms of professors, that's just so intimidating.

I felt awkward about asking for help (from teaching assistants). I don't want them to think, "Oh, she doesn't belong in this class. She doesn't know this information"... it's different because they give you your grade too.

It was so bad because the TA would just go over the homework so people would just sit there and copy the homework problems, then hand them in. They didn't have any increased understanding of it... The TA's focused on a narrow goal. They were not looking at the bigger picture. I think that's mainly the difference between OASIS and going to office hours or sections. The people (teaching assistants) in the section or office hours just care about you in the sense of this class where people at OASIS care about you in the long run.

Most of the students reported having utilized Student Financial services and/or the Career Services center. Their comments regarding the helpfulness of those services were generally positive. Other services utilized by a smaller number of students included the Cross-Cultural Center, Honors Achievement Workshops (an academic support service), the Student Health Center, academic advising and resident advisors. With the exception of academic advising (which some students said treated them like a number), they described the services as generally useful. Only one student described a close, supportive relationship with her UCSD College.
Campus Climate

The academic and socio-cultural climate at UCSD was a clear concern for all of the students. Such campus climate issues have been found to have a significant impact on the adjustment and learning of underrepresented students (Hurtado, et al. 1999; Baird, 2000). The students’ perceptions of UCSD's campus climate were quite strong and convergent.

Many of those convergent responses focused on issues related to the representation of people of color among students, faculty, and staff (Hurtado, et al., 1999, refer to such issues as structural diversity). All of the students were clearly struck and disappointed by the lack of a critical mass of underrepresented students they observed at UCSD.

The first quarter, I wanted to drop out of school. I didn't like it at all... I didn’t feel welcome here... There wasn’t a lot of Mexicanos except for the people that worked in the cafeterias. It made me feel kind of alone.

When I decided to come here, I thought, ‘Oh, San Diego, that's totally diverse. There's going to be a lot of people of color.’ Then I was really shocked when it wasn’t. It was nothing like I imagined. I felt pretty alone. I ended up getting over it but it took some time.

Five of the students stated that they became struck by UCSD's lack of student diversity as early as their college orientation before Summer Bridge. They described a sense of disillusionment and demoralization in response to that realization.

Most of the students also expressed disappointment at the lack of faculty and staff of color at UCSD. They described their perceptions of being misunderstood, unsupported, and invalidated by the ethnic composition of staff and faculty.

It (UCSD) is not very diverse at all. The whole campus is basically just Asian and White. The professors and the faculty members are all white.

The only faculty of color I knew are from Summer Bridge... other than that, all my professors were White.
In addition, most of the students remarked on their perception of a distinct lack of diversity in the curriculum they experienced in their freshmen year courses. Besides such negative perceptions of UCSD’s structural diversity, each student expressed negative comments about the degree of ethnic tension on campus (referred to by Hurtado, et al., 1999, as psychological climate).

While several students stated that they did not personally experience any overt acts of discrimination, all of the students described their perception of an undertone of ethnic tension on campus. They described such tensions as manifested in the campus media, in comments made in residential settings, and in what the students described as a strong level of ignorance of diversity among white students.

I don’t think they (ethnic relations) are very good… I think that people of color on campus try to stick together… but I don’t see much interaction between people of color and Caucasian students.

They (white students in the resident halls) said things about Mexicans. They were very racial… That definitely had an effect because I didn’t feel like I belonged in that place (the residence hall) and secondly at UCSD.

There was a lot of ignorance. One time I was walking down the hall while speaking Spanish. This girl stopped me and said, ‘Oh, you speak Spanish?’ And I said yes. And she said, ‘What are you?’ And I said, ‘I’m Mexican.’ And she said, ‘You look more pretty and exotic than that.’… Just coming across people that are so ignorant, it was hard. I would describe ethnic relations by saying there weren’t any, basically…It seemed like there were a lot of people who were just ignorant about the whole race problem… A lot of people were very distant and I don’t think there were very good ethnic relations.

Each of the students made clear statements expressing their perception of UCSD’s lack of institutional commitment to diversity. The students believed there was a strong connection between the university’s lack of structural diversity, its dysfunctional ethnic relations, and what the students perceived as an institutional unwillingness to commit sufficient resources toward greater diversity.

I don’t think the institution deals with diversity. I think they hand the job to a lot of students to do and a lot of students of color promote the school… like the high school conferences that each of
the (ethnic) student organizations put on. It’s horrendous because all the students do the work and their grades suffer for it, and you can see this... And someone else should be doing it, not students.

I feel as though this institution mirrors how society feels and how it deals with issues of color and creed and such. I feel this institution ignores the problems and puts them on the back seat for someone else to take care of rather than face them on its own... It just ignores the problems and waits for a solution... I don’t think this institution is doing a very good job in promoting diversity.

An example is OASIS never receives permanent funding and most of the individuals here on campus know that OASIS focuses on the minority aspect of UCSD and helps them (minorities) have a sense of belonging here. By Chancellor Dynes not allowing OASIS to have permanent funding, it’s kind of a slap in the face for OASIS and the minorities themselves.

It (UCSD) doesn’t deal with diversity very well. If you’re an African American and you come here, I don’t know how you could ever feel a part of UCSD... I don’t think it does very well incorporating diversity or even wanting to diversify UCSD.

I saw a lot more things going on with campus... I realized over time that the campus climate was not friendly... I just saw all these artificial attempts of the university to make themselves seem like they were really open and supportive. Like when Chancellor Dynes came up with those ‘Principles of Community’ but everything was for show.

The fact that OASIS wasn’t guaranteed funding also plays into my resentment toward the university... The fact that the university funds something like the KOALA (a student newsletter) and not fund something that will help students while they claim that students are their first priority. It really makes me upset and angry at the university. That is why I don’t think it’s the best climate, because they say one thing and do another.

In addition to the students’ considerable awareness and analyses of the ethnic dimensions of UCSD’s campus climate, they also described an overall campus ethos they perceived as problematic. Eight students described the campus climate as extremely individualistic and competitive, which they in turn perceived as uncomfortable and unsupportive.
I found the campus climate very individualistic. I think everyone’s just into their own thing. Just do things to get ahead of everyone else. Just do things for their own benefit.

In our classes it was extremely individualistic. Everyone’s pretty much on their own, doing their own thing.

I think UCSD is very competitive with grades. They (the professors) don’t even care if you retain the information. It’s just learn it, spit it out, pass the test, get a good grade, and move on.

The cumulative responses of the students indicated a high degree of awareness of the campus climate at UCSD. Clearly, their perceptions of that climate were largely negative, particularly in terms of the degree of diversity at UCSD.

**Sense of Belonging**

Hurtado and Carter (1997) utilized the construct Sense of Belonging to describe an outcome that often contributes to decisions by students of color to either remain at or withdraw from their college or university. The students described the degree to which they perceived a sense of belonging for themselves as well as the specific variables that contributed to their sense of belonging.

As would be expected given their perceptions of the UCSD campus climate, the students overwhelmingly described their sense of belonging in terms of their “membership” in specific niches within the university rather than in more general institutional terms. There was a clear consensus among the students that their sense of belonging was most closely linked with OASIS. All of the students identified the peer network established through their participation in the Summer Bridge Program and their interaction with the staff of OASIS throughout their first academic year as significant contributors to their sense of belonging.

The students described their network of Summer Bridge peers as a source of strong support, encouragement, and social comfort.

Basically it would have to be peers (that contributed most to Sense of Belonging). The primary factor was the friends that I made in Summer Bridge. That was the primary factor in me feeling welcome here.
My Summer Bridge (peer) networks have totally contributed to my sense of belonging. If I didn’t have a social base, I wouldn’t have been successful. It really makes a difference who you hang out with and how much support they give you... It really makes a difference in how you do academically and how you perceive the atmosphere you’re in.

The students described a similar structure of support and encouragement (as well as tangible information) they received from the staff of OASIS during both Summer Bridge and the academic year. They identified critical support received from OASIS professional staff and their undergraduate peer counselors (called Academic Transition Counselors) at OASIS. They described these staff as positive role models to emulate and as manifestations of OASIS’ commitment to diversity.

I think OASIS acted as a catalyst for my sense of belonging, especially since it provides a comfortable atmosphere. Other than my own room and my own bed, I don’t feel at home anywhere else other than OASIS and the people there really helped me out a lot.

They (the OASIS professional staff) made me feel comfortable. Every time I went to OASIS, I felt like, ‘This is my place.’ Like I can do whatever I want there... lay on the couch, use a computer, use the phone. I guess it’s like my house and that’s cool.

Everyone in OASIS was pretty much like me in a way, so I felt very comfortable there. So I went there a lot just to feel comfortable. And I saw most of the diversity on campus through that (OASIS) because there’s not much here at UCSD. It just gave me a place to feel at home, to be more comfortable than I would be anywhere else.

OASIS contributed a lot (to my sense of belonging). Trying to do it on my own, I would have been lost. They say that students are their number one priority, but the university is not student-friendly. OASIS really helped my sense of belonging. I worked there and I was there a lot of the time. I was able to interact with people and relate to them.

The fact that I went to Summer Bridge and I made networks contributed most to my sense of belonging... Summer Bridge gave me the confidence to attempt things... I own this place now is how I feel... I want to give OASIS a good name... I want to show everybody that I can succeed.
The other variable described by almost all the students as a significant contributor to their sense of belonging was their participation in ethnic student organizations. They described the benefits of their participation as a positive source of support and validation. They also described the benefits of working collaboratively on projects through these organizations and the enhancement of their ethnic identity.

It’s a feeling of being at home. Everyone knows you and you know everyone. It’s a sort of familiarity you don’t get outside the organization... It promotes a lot of great things like getting to know other cultures as well as your own... and it shows you how to work together with different people.

(Ethnic student organizations) helped me immensely because if I didn’t belong to anything, it’s very easy here to just go to school and not connect yourself with anything on the outside. I just don’t think this campus is really geared toward making people feel at home... There’s no school spirit really. There’s no large population of African Americans... I think just joining these organizations made me feel more comfortable and feel like I increased my circle of friends.

Half of the students described a somewhat more intangible factor that contributed to their sense of belonging: a feeling that they were developing both intellectually and in noncognitive areas such as their identity.

I remember coming back (to school) after going home last summer and just feeling really different. I just looked at things in a different perspective... I was just more conscious and aware and I saw things in a different light.

I felt more confident in my abilities (during the winter and spring quarters) and I was more aware of who I am in comparison to everyone else. I do feel my sense of belonging increased.

The students generally did not perceive their residential experience as a contribution to their sense of belonging. Half of the students stated specifically that their on-campus residential experience had a negative effect on their sense of belonging. The reasons for their negative perceptions ranged from racial comments in the residential setting to a general sense of incompatibility with roommates/suitemates.
CONCLUSIONS AND POLICY IMPLICATIONS

A number of significant conclusions can be drawn from this study’s results. Many conclusions reflect the theoretical and empirical literature on student transition and development in higher education. Several of the study’s results have important implications for institutional policy and practice.

Pre-College Characteristics

Tinto’s (1993) theory of student persistence places “pre-college attributes” as the model’s first variable. Such attributes feature parental education levels and students’ prior schooling experiences, both of which are inextricably connected to the socioeconomic status of students and their families (Darder, 1991).

For the students in this study, parental education levels and family income were quite modest. That such student still enjoyed considerable academic success and overall development at a selective research university demonstrates Tinto’s assertion that such pre-college attributes are less significant than subsequent institutional experiences in determining students’ persistence.

The same conclusion might be drawn from the students’ perceptions of the quality of their prior academic preparation. Their perceptions were mixed, including their assessment of the availability of Advanced Placement courses (which are generally assumed to be superior in providing preparation for college). Only three of these students attended predominantly white schools, which are associated with higher quality academic preparation (Darder, 1991; Persell, 1977; Kozol, 1991).

Indeed, these students’ pre-college characteristics represent “at risk” factors (Arellano and Padilla, 1996) that might predict academic failure. Instead, the students manifested a high degree of “resiliency” (Stanton-Salazar & Spina, 2000) that enabled them to enjoy success in spite of less than favorable pre-college characteristics. This finding should be considered strongly by institutional leaders who develop and implement undergraduate admission policies often based on “predictive variables” such as pre-college attributes.
Again, the students’ institutional experiences at UCSD made a much greater contribution to their success than did pre-college characteristics.

The Student Transition

Hurtado and Carter (1997) developed a theoretical model of student persistence to explain that process more specifically for students of color in higher education. One of the most critical variables in their model (found to contribute directly to students’ persistence) is “ease of transition” to college. Likewise, Tinto (1993) stated that prolonged periods of adjustment are likely to undermine students’ persistence.

For these students, participation in the OASIS Summer Bridge Program marked the beginning of their transition to UC, San Diego. The students unequivocally found the program’s academic demands very formidable. Those demands seemed to facilitate the students’ use of the academic support offered during Summer Bridge, including tutoring and instructors’ office hours. These results confirm the effectiveness of an academic approach that emphasizes both challenge and support (Pascarella and Terenzini, 1991). The students described a high degree of engagement and learning through their Summer Bridge courses. They clearly developed academic skills more fully and learned about academic resources that help students to “decode” the university (Stanton-Salazar, 1997).

The students also absorbed guidance on how to work and study collaboratively during Summer Bridge. The students perceived such skill development as very valuable. Their enthusiastic descriptions of the efficacy of collaborative study reflects literature that documents the positive effects of peers on learning (Astin, 1993; Hurtado et al., 1999; Hurtado, 1999) and various instrumental outcomes (Stanton-Salazaar, 1997). Institutions might strongly consider their efforts to ensure that students learn such collaborative skills through curriculum structures that facilitate their development.

The students’ perceptions of their growth in critical thinking skills facilitated by the Summer Bridge curriculum have similar policy implications. Such critical thinking is related to a number of other important cognitive and intellectual outcomes (Pascarella and Terenzini, 1991). The degree to which
institutions’ general education curriculum facilitates collaborative learning and critical thinking should be an important consideration for policy that shapes adjustment and learning (Astin, 1993; Smith and Associates, 1997).

The perceptions of the students regarding the positive contribution of the academic dimensions of Summer Bridge were overwhelmingly favorable. The program provided early, positive institutional experiences in the academic domain that are associated with academic integration (Tinto, 1993; Cabrera et al. 1992). They also contributed to the students’ sense of competence, another important student outcome (Chickering, 1969; cited in Pascarella and Terenzini). When the students described the OASIS staff that provided instruction and other academic services, they frequently used words such as “approachable.” The staff clearly personalized services in a manner that was culturally compatible with underrepresented students (Darder, 1991; Wlodkowski & Ginsberg, 1995).

Students’ comments on the effectiveness of Summer Bridge in facilitating a social transition were perhaps even more effusive. The students were overwhelming positive in describing the peer networks they formed during Summer Bridge. Such networks form the critical, informal dimension of social integration in Tinto’s theory (1993). The results demonstrated that such networks were facilitated by the program’s structured activities that maintained a high level of interaction among the students throughout its four weeks. It is evident that such programmatic structures are an institutional necessity as the development of peer networks is too critical to leave to chance. Likewise, the students’ descriptions showed how academic structures that maximize peer interactions can contribute to greater social integration (Tinto, 2000).

The results also indicate the program’s effectiveness in contributing to students’ ethnic identity. Identity development is described as a central, important variable in most comprehensive theories of student development (Pascarella and Terenzini, 1991). The ethnic dimension of students’ identity is an especially salient element in the institutional adjustment of underrepresented students of color (Darder, 1991; La Fromboise et al., 1993; Phinney and Alipuria, 1990; Velasquez, 1995, 2000). The structural aspect of Summer Bridge that contributed most to students’ ethnic identity was its curriculum, which included a focus on diversity associated with positive student outcomes (Hurtado, 1999;
Smith and Associates, 1997). Most postsecondary institutions have the capacity to implement such diverse curriculum at an early stage of the student transition and should do so.

The Freshman Year

Several important conclusions can be drawn from the students’ assessment of their academic transition throughout their freshman year. The students clearly engaged their academic coursework at a high level. They reported putting considerable energy into academic work, studying both individually and in groups while also utilizing OASIS support services frequently. Such significant involvement and “time on task” contribute to academic achievement and integration (Pascarella and Terenzini, 1991; Tinto, 1993, 2000; Pace, 1984). As Terenzini et al., (1993) reported in their study of diverse college students, “the amount of learning or development that occurs is directly proportional to the quality and quantity of involvement” (p. 57).

One important element of their academic engagement was the OASIS workshops in math, science, and writing, respectively, that they attended throughout their freshman year. The students described positively the cooperative nature of those workshops and their motivation from knowing that others cared about their achievement. Tapping into the collective nature of motivation that reflects many underrepresented students of color (Darder, 1991; Hurtado et al., 1999; Fordham, 1996) should be an important consideration for institutional policy.

The students’ positive perceptions of OASIS’ academic support reinforces the effectiveness of peer tutoring and counseling (Nora et al., 1996; Weinsheimer, 1997; Smith and associates, 1997; Tinto, 1996; Chaney et al., 1997), particularly for underrepresented students. It also validates the more general finding that peers are usually the greatest source of learning and development among college students (Hurtado, 1999; Astin, 1993). Postsecondary institutions (particularly research institutions such as UCSD where undergraduate teaching and learning are generally a lower priority than research and graduate students) should make
optimum use of the potential for peer contributions to student learning. Again, it should be purposefully structured and not be left to chance.

Finally, the students’ use of OASIS peer counseling and academic workshops shows a very instrumental approach to obtain what Stanton-Salazar (1997) referred to as “funds of knowledge”—those sources of critical information (as well as encouragement) that enable new students to “decode the university.” Their application of such strategies, while also engaging issues such as their own ethnic identity development, their campus climate, and broader social justice issues, indicates what Stanton-Salazar termed a “bicultural network orientation.” Such an approach to “scaling down” the university (Attinasi, 1989) clearly contributed to the students’ successful academic (and social) transition and offers important directions for institutional policy that seeks such outcomes.

Overall, the students’ academic transition to UCSD during their first year was marked by a number of positive outcomes: high degree of academic achievement and involvement (engagement with their studies), a high degree of satisfaction with their performance, and a greater sense of competence. It appeared that for most, the intensity with which they engaged the academic demands of Summer Bridge was largely sustained throughout their freshman year. In particular, they strongly continued the practices of collaboration with peers (and to a lesser degree with staff and faculty) and the use of academic support. The students described unequivocally that such practices were helpful in contributing to their positive academic outcomes. These results argue for summer programs that build constructive academic strategies among students.

Another positive finding was the generally low levels of academic stress experienced by the students during their freshman year. This occurred despite the students’ uneven self-assessment of their academic participation before college. The nature of this positive finding is borne out by the clear conclusion in educational psychology literature regarding the deleterious effects of stress on learning (Caine and Caine, 1991) as well as Tinto’s (1993) conclusion that extended periods of academic adjustment often lead to student attrition. It was clear that the students’ academic experiences during Summer Bridge and their academic year use of support services helped them to avoid such stress. However, another factor was that most heeded the advice of the Summer Bridge
staff to avoid an excessive course load during their first (fall) quarter. Although many public universities such as UCSD face pressure from state legislators (and sometimes from parents) to facilitate a speedy graduation, it appears prudent to ensure that a students’ initial course load is manageable (particularly if the student wants time to utilize academic support, is employed, is enrolled in a competitive “weeder” course, etc.)

A less favorable finding was the relatively uneven level at which the students utilized faculty office hours. Despite considerable urging during Summer Bridge to utilize this valuable resource (including mandatory use of office hours during the program itself), some of the students reported infrequent use of faculty office hours during their first year. Several expressed feelings of being intimidated by faculty while some students reported a negative experience from visiting a professor during office hours. While the students expressed a much greater willingness to attend teaching assistants’ office hours, the critical contribution of faculty to student development (Astin, 1993; Tinto, 1993, 2000; Pascarella and Terenzini, 1991) cannot be overlooked. More research is needed (particularly at selective research institutions) to account for such reluctance among otherwise assertive, involved students to make use of faculty office hours.

While the students did make relatively frequent use of teaching assistants’ office hours (as well as their discussion sections), their perceptions of such academic services were lukewarm at best. They described teacher assistants’ discussion sections as a reflection of the individualism, competition, and passive learning they perceived in large lecture settings (Tinto, 2000). Some of the students explicitly compared these negative perceptions with their more positive perceptions of OASIS academic workshops. Such results suggest that the elements of OASIS tutoring perceived as helpful by students (e.g., peer interaction and collaboration) be incorporated into the more formal structures of academic courses.

The students’ sociocultural adjustment throughout the first year also suggests a number of policy considerations. The most important, general finding was that the students’ responses strongly indicated high levels of both dimensions of social integration in Tinto’s theoretical framework: peer interactions (the informal dimension of social integration) and extracurricular
activities (the formal dimension). These high levels of social integration were clearly launched initially by the students’ participation in Summer Bridge. This finding argues for summer transition programs (and academic year follow-ups) that systematically contribute to students’ social integration.

The finding also suggests that underrepresented students can develop high levels of social integration even when they have generally negative perceptions of their campus climate (see section on campus climate results). As suggested by Tinto (1993) and Hurtado and Carter (1997), underrepresented students often construct social integration through membership in certain subcommunities on campus.

The specific contribution of social integration to the students’ persistence was evident in this study. The students described how their network of peers provided them a strong sense of connection and membership on campus. They also described the tangible expressions of support provided by their peers (particularly during times of stress or discomfort with the general campus climate) and the positive feelings such support evoked. Such insights provide further validation of the potential, positive impact of peers on persistence and learning.

Much as was reflected in the students’ first-year academic experiences, the students’ use of OASIS services demonstrated the potential of learning centers (and similar academic support services) to contribute to students’ social integration as well. The students’ description of OASIS’ culturally sensitive, validating service delivery (role models among professional and student staff, a familial atmosphere, cooperative and interactive pedagogy, etc.) showed it to be an essential element of effective support services (Tierney, 2000).

There are also clear policy implications in the unequivocal finding that all the students were involved in ethnic student organizations (most at a high level) throughout their first year. Ethnic student organizations represented the students’ most significant involvement in extracurricular activities (Tinto’s formal dimension of social integration) and they also contributed heavily to the expansion of students’ social networks. Much like their social networks of Summer Bridge students, ethnic student organizations provided both a sense of membership and tangible expressions of support for students.
This positive contribution by ethnic student organizations has been documented in other studies of underrepresented students (Smith and Associates, 1997; Treviño, 1994; Loo and Rolison, 1986). As such previous studies indicated, the participation of these students in ethnic student organizations did not contribute to their segregation or inhibit their ability to develop racially diverse peer groups. Ethnic student organizations also contributed to the development of students’ ethnic identity, an important outcome for underrepresented students (Phinney, 1993, 1990, 1989; Tatum, 1997; Velasquez, 1995, 2000).

Despite the obvious, positive contributions of such organizations, their role is often misunderstood and/or unappreciated on university campuses. Such institutional neglect places ethnic student organizations (and the students who construct membership in such organizations) in a marginalized space, which severely reduces their potential to contribute to underrepresented students’ persistence and learning. It appears far more prudent for institutions to recognize the value of ethnic student organizations and provide them with both philosophical validation and tangible resources that make them a visible institutional priority.

A less positive yet important finding was the generally low contribution by the students’ college (UCSD implements an Oxford-style college system), including residential life. Most of the students had either negative or minimal levels of engagement with their college. It appears that the UCSD college system would benefit by reflecting on its structural approach to engage (specifically) underrepresented students. Despite the considerable potential of residential life to contribute to students’ persistence and learning (Tinto, 1993; Pascarella and Terenzini, 1991), very few of the students described positive experiences in their campus residences. Identifying methods through which the college system can become a more positive source of membership for underrepresented students should be a major policy consideration.
Institutional Culture and Impact

The literature on student persistence and development in higher education places a critical emphasis on the importance of campus climate (Baird, 2000; Astin, 1993; Tinto, 1993; Pascarella and Terenzini, 1991). In particular, campus climate is a variable that deeply impacts the adjustment and success of underrepresented students (see Tinto’s 1993 discussion of issues such as critical mass and marginalization; Hurtado et al., 1999; Hurtado, 2002).

In this study, the students’ perceptions of UCSD’s campus climate were unequivocally negative. Most striking among such perceptions was the impact of UCSD’s lack of structural diversity (Hurtado et al., 1999), i.e., the underrepresentation of African American, Chicano, and Pilipino students, staff, and faculty, respectively. This lack of structural diversity was described explicitly by students as contributing to perceptions of their own marginalization and an invalidation of themselves and their ethnic community.

In addition, the students interpreted their campus’ lack of structural diversity (as well as what they perceived as a largely Eurocentric curriculum) as an extremely insufficient institutional commitment to equity and diversity (values which were of great salience to the students). The students also expressed perceptions of a connection between insufficient institutional support for programs and services they utilized (e.g., ethnic student organizations and OASIS) and their own marginalization (Berger, 2000; Tinto, 1993).

As described by Smith and Associates (1997), college students are very perceptive in reading indicators of institutional commitments to equity and diversity. In the long run, UCSD places such underrepresented students as those in this study at great risk for perceptions of marginalization and subsequent attrition. These students explicitly described contemplating leaving the university because of their negative perceptions of the campus climate. Nothing less than substantive increases in UCSD’s structural diversity will prevent such perceptions and their undermining of underrepresented students’ development (Berger, 2000).

In the short range, UCSD must increase efforts to assist underrepresented students to cope with its lack of structural diversity. Several of the students in
this study commented that their perceptions of UCSD’s insufficient structural diversity began when the students attended their orientation session prior to their initial quarter. Such early experiences and perceptions could easily lead to students’ isolation and/or perceptions of incongruence that contribute to attrition (Tinto, 1993). Thus, early interventions such as summer bridge programs that help underrepresented students form membership in subcommunities are very important to help students cope with such a negative campus climate. Likewise, institutional spaces such as UCSD’s Cross Cultural Center, where students can safely discuss their perceptions of the campus climate, are equally critical.

In addition to the lack of structural diversity and its contribution to the students’ perceptions of their marginalization, the students perceived elements of a hostile climate (Hurtado and Carter, 1997; Velasquez, 1995, 2000) at UCSD. Although few of the students reported that they experienced direct expressions of discrimination or racial/ethnic exclusion, their responses leaned toward a perception of underlying racial/ethnic tensions. The literature (Hurtado, 2001; Hurtado et al., 1999; Smith and Associates, 1997; Duster, 1993) clearly emphasizes the need for postsecondary institutions to be obtrusive and proactive in facilitating extensive, positive interactions among diverse groups of students (both in and outside of the classroom). Such institutional effects are necessary to not only avoid excessive, sustained tension but also to ensure the interethnic interactions that contribute significantly to learning among all students (Hurtado, 2000; Gurin, 1999; Smith and Associates, 1997; Milem and Hakuta, 2000, in Wilds, 2000).

Finally, institutions that seek truly substantive levels of diversity and equity need to enact processes that identify and implement supportive conditions for all students (as well as faculty and staff). Darder (1992) identified the dimensions of such supportive conditions in her framework of cultural democracy for higher education institutions. Her analysis went beyond issues of structural and psychological diversity to address hierarchies of power within institutions (see Berger, 2000, for a discussion of power hierarchies between institutions).
Aside from these ethnic dimensions of the campus climate, the students described other dysfunctional elements that reflected UCSD academic culture. Specifically, they described UCSD’s courses as excessively competitive. In turn, most of them perceived that such high levels of competition fostered a strong degree of individualism among the student body. The students’ descriptions of these elements clearly indicated a sense of cultural disconnect (and subsequent alienation) for them. Recent literature (Hurtado et al., 1999; Stanton-Salazar, 1997) describes the negative effects of such competition on learning among all students, but particularly for underrepresented students of color. Not only does students’ understanding of content knowledge suffer from excessive competition, but also the acquisition of important proficiencies (e.g., critical thinking, collaboration) that are outcomes of more cooperative pedagogy (Tinto, 2000; Hurtado, 1999; Pascarella and Terenzini, 1991).

While public research institutions clearly struggle to provide more effective pedagogy, Astin’s classic 1993 study indicates that a strong research focus and effective teaching are not mutually exclusive at either the individual instructor or institutional level. To paraphrase Astin (1993), nothing justifies the shortchanging of undergraduate education. Institutions such as UCSD should seriously consider policy that facilitates more collaborative pedagogy to avoid cultural disconnects with underrepresented students and to ensure more effective learning outcomes for all students.

Sense of Belonging

The study examined students’ perceptions regarding the degree to which they felt a Sense of Belonging, an outcome found by Hurtado and Carter (1997) to affect persistence decisions among Latino students more than Tinto’s (1993) concept of “integration.” Hurtado and Carter believed that sense of belonging is a variable that reflects students’ perceptions, a critical element in the theoretical work of both Spady (1971, 1970; cited in Hurtado and Carter, 1997) and Tinto. The study also identified factors that contributed to the students’ sense of belonging.
The students’ descriptions of their sense of belonging reflected unequivocally what Hurtado and Carter (as well as Tinto) referred to as “membership.” The students clearly felt comfortable and validated in a few specific spaces on campus (e.g., OASIS, the Cross Cultural Center, ethnic student organizations). However, their overall sense of belonging at UCSD reflected a perception of marginalization rather than the integration described by Tinto.

As noted by Tinto, such membership in “subcommunities” can indeed play a positive, substantive role in the persistence of underrepresented students. However, when those students perceive that their subcommunities are marginal to the institutional priorities (as was clearly the case in this study), the potential of those subcommunities to contribute to their students’ learning and development is undermined. It would appear that UCSD would enhance its institutional diversity by developing stronger, more visible means of supporting the subcommunities that provide a comfortable space for underrepresented students.

Such directions for increased institutional support were identified in the students’ responses regarding factors that contributed to their sense of belonging. They indicated that their peers made the greatest contribution to that critical outcome, another reflection of the importance of peers to both cognitive and non-cognitive outcomes (Hurtado, 1999; Astin, 1993). Their peer networks were developed for the most part through their participation in the OASIS Summer Bridge Program and in ethnic student organizations. One critical source of peer support identified by the students was the peer counselors (Academic Transition Counselors) and tutors employed by OASIS. Providing such paid student staff offers important dividends for institutions through the positive impact for both peer counselors and tutors themselves as well as the students whose successful adjustment they facilitate.

Another valuable source that contributed to the students’ sense of belonging was the professional staff of OASIS who worked with the students during both Summer Bridge and the academic year. The students described the OASIS professional staff in terms that reflect the concept of transformational mentors and transformational role models.
Transformational role models are visible members of one’s own racial/ethnic group who actively demonstrate a commitment to social justice, whereas transformational mentors use the aforementioned traits and their own experiences and expertise to help guide the development of others (Blackwell, 1988; Solorzano, 1998; both cited in Solorzano and Bernal, 2001, p. 322).

Such role models provide an important source of validation (Rendon et al., 2000) for underrepresented students of color that contributes to their persistence and development.

The students also reported that their sense of belonging was enhanced by the perception that their achievement was important to others in addition to themselves. Such a collective conceptualization of validation and motivation reflects the respective cultures of these underrepresented students, providing further evidence that they are disadvantaged by an excessively competitive, individualistic institutional culture (Hurtado et al., 1999; Stanton-Salazar, 1997).

The ethnic student organizations in which these students participated made another significant contribution to their sense of belonging. In addition to the peer support they provided, the ethnic student organizations provided a mechanism through which the students developed their ability to work collaboratively and that contributed to their ethnic identity development. Although such organizations are often accused of fostering segregation among students of color (Tatum, 1997; Duster, 1993), in this study they played a critical, positive role in the persistence, learning, and development of participating students (Smith and Associates, 1997). This important contribution makes ethnic student organizations a valuable resource that merits commensurate support from their institution.

One final variable the students identified as a significant contributor to their sense of belonging was more intangible than the others. Several students reported that as their freshman year progressed, they became more conscious of ways in which their development was occurring (Nora et al., 1996). Such development included their academic/cognitive areas (e.g., critical thinking, communication skills) as well as noncognitive/affective areas (e.g., identity). This development reflects what Chickering (1969; cited in Pascarella and Terenzini) described in his vectors of student development as “achieving
competence.” It also reflected what Terenzini et al., (1993) referred to as “real learning”:

When encouraged to define “learning” broadly, however, it was clear that for a substantial number (of students) “real learning” meant learning about oneself, discovering abilities or personal sources of strength, developing pride in one’s ability to survive, and becoming more independent and self-reliant (p. 68).

The connection of these concepts to sense of belonging should be examined in future research.

The OASIS Contribution

Although described thoroughly in the Results section, the specific contribution made by OASIS to the students in this study merits review. That these involved, successful students utilized the services of OASIS (starting with the Summer Bridge Program before their freshman year) established an association between OASIS services and positive student outcomes.

To enumerate, the students described unequivocally these contributions by OASIS to critical student development outcomes.

Summer Bridge

- Academic integration through challenging courses and systems of support (Tinto, 1993; Pascarella and Terenzini, 1991; Weinsheimer, 1997).
- Academic integration through the development of study skills and composition skills (Tinto, 1993; Pascarella and Terenzini, 1991).
- Academic integration through networks with “institutional agents” (faculty, professional staff and student staff—Tinto, 1993; Stanton-Salazar, 1997).
- Critical thinking skills from challenging, diverse curriculum (Hurtado, 2001; Pascarella and Terenzini, 1991).
• Learning through diverse peer networks (Hurtado, 1999; 2001; Gurin, 1999; Smith and Associates, 1997; Kuh, 1993).


• Sense of competence through academic achievement and sociocultural validation (Chickering, 1969; cited in Pascarella and Terenzini, 1991).

• Increased “commitments” (philosophical and career) through curriculum and institutional agents (Perry, 1970; cited in Pascarella and Terenzini, 1991; Stanton-Salazar, 1997).

• Social integration and membership through peer networks (Tinto, 1993; Hurtado and Carter, 1997; Astin, 1993).

• Social integration, membership, and sense of belonging through information and encouragement regarding ethnic student organizations (Tinto, 1993; Smith and Associates, 1997; Hurtado and Carter, 1997).

Additional Outcomes—Academic Year Services

• Academic integration through tutorial workshops (Tinto, 1993; Nora et al., 1996; Weinsheimer, 1997).

• Collaboration and interpersonal skills through tutorial workshops (Tinto, 1994; Hurtado, 2001; Kuh, 1993).

• Both academic and social integration (bridging both dimensions) through collaborative, tutorial workshops (Tinto, 1994, 2000) and peer counseling (Nora et al., 1996).

Students’ Contribution to UC, San Diego

The persistence, academic achievement, and learning experienced by the ten students in this study are indeed impressive. In addition to the students’ mean first-year grade point average of 3.31, their mean cumulative grade point average after four years was 3.12 (an achievement level that would indicate
potential for postgraduate study). Five of the students had graduated after four years while the other five were still enrolled and scheduled to graduate within five years. However, perhaps the most important measure of these students’ success is their contribution to their campus.

Each of the students was highly involved in coursework, academic support services, student organizations, and other areas. Such active involvement contributes to the learning of other students, particularly since these students represent backgrounds, cultures, and perspectives that are distinct from those of the mainstream at UCSD (Hurtado, 1999; Smith and Associates, 1997; Milem and Hakuta, 2000, in Wilds, 2000). In addition, the involvement of these students in ethnic student organizations that conduct educational programming, recruit other underrepresented students, and provide input to institutional policy represents a major, positive contribution to the campus climate at UCSD. Although the OASIS Summer Bridge Program serves only 150 of the over 4,000 freshmen who matriculate to UCSD, the contribution of the Summer Bridge students appears both positive and significant when viewed through the results of this study. Institutions that value such student contributions might seek ways through which to identify them during the admissions process and provide mechanisms that facilitate their contributions after enrollment.

A Final Note

The results of this qualitative study provide directions for policy geared to maximize the persistence, achievement, learning, and development of underrepresented students of color at selective, predominantly white institutions of higher education. While support mechanisms such as academic services, summer bridge programs, and ethnic student organizations can provide spaces for students to achieve a sense of belonging, development, and resistance to institutional racism, these students’ potential contribution to the learning environment for all students (through their diverse experiences and perspectives) is undermined when their institution’s campus climate is toxic. Students clearly perceive structural diversity (Hurtado et al., 1999) as a symptom of their marginalization. Institutions must address such critical campus climate
issues effectively in order to ensure equitable conditions for all students and a
diverse learning environment that is fundamental to institutional excellence.

REFERENCES

Angelo, T. 2000. A vision worth working toward: Assessment in support of
learning communities. Assessment Update. V. 12 (2).

Arrellano, A. and A. Padilla. 1996. Academic invulnerability among a select
group of Latino university students. Hispanic Journal of Behavioral Sciences. 18


of College Student Development. V. 33: 61-70.

Attinasi, L. 1989. Getting in: Mexican Americans' perceptions of university
attendance and the implications for freshman year persistence. Journal of Higher
Education. 60 (3): 247-277.

Reworking the student departure puzzle. Nashville: Vanderbilt University Press.

Berger, J. 2000. Optimizing capital, social reproduction, and undergraduate
persistence: A sociological perspective. In J. Braxton (Ed.). Reworking the student

Braxton, J. 2000. Reinvigorating theory and research on the departure puzzle. In
J. Braxton (Ed.). Reworking the student departure puzzle. Nashville: Vanderbilt
University Press.

Braxton, J., A. Sullivan, and R. Johnson. 1997. Appraising Tinto’s theory of
college student departure. In J. C. Smart (Ed.). Higher education: a handbook of

between two theories of college persistence. Journal of Higher Education. 63(2):
143-164.

brain. Virginia: Association for Supervision and Curriculum Development.

Student Support Services: Third-year longitudinal study results and program
implementation study update. U. S. Department of Education.


Tinto, V. 2000. What have we learned about the impact of learning communities on students? Assessment Update. V. 12 (2).


University of California, San Diego. 2002. Office of Information and Research web site (Student Affairs).


