The Nora Student Engagement Model
Nora’s (2002, 2003, 2006) Model of Student Engagement is a theoretical framework for college student retention. Student persistence to graduation or an advanced degree is a central issue not only to Hispanic success in higher education but to broadening the participation of Hispanics in computing, the sciences, technology, engineering and mathematics (STEM). Persistence to degree completion is one of the three primary thrusts of the Computing Alliance of Hispanic-Serving Institutions (CAHSI) and a key concern to the Hispanic Association of Colleges and Universities (HACU), as well as the focus of many college policies, practices and interventions. Retention is of critical importance to Hispanic access, participation and success. On the opposite side of the same coin in this issue is the reality that attrition from higher education denies access to graduate and professional schools and future participation in society. What factors do we know that impact student retention and could culture and ethnicity influence or change those factors for different student groups?

The Student Engagement Model proposes six major components: (1) precollege/pull factors, (2) sense of purpose and institutional allegiance, (3) academic and social experiences, (4) cognitive and non-cognitive outcomes, (5) goal determination/institutional allegiance, and (6) persistence. The figure which follows indicates the path diagram of the relationships among the major components as well as the more specific sub-components involved. Highlighting one of the aspects that have shown to impact retention is the issue of financial assistance. Not only is a financial award important in retaining students, but the more intangible aspects associated with financial aid are indirectly influential through the perception that the institution cares enough to invest in the student. As important is the encouragement and support that the student receives from the family, difficult for families to provide that are unfamiliar with the processes, costs, time commitments and benefits associated with going to college. Familial ties remain important all throughout the time that Hispanic students are enrolled in college. Educational aspirations and commitment to enroll and graduate from a specific institution provides the student with a sense of purpose to attaining a degree at that institution. Equally important are the academic and social experiences of students, the formal and informal interactions students have with faculty, a collaborative or competitive learning environment with peers, a sense of tolerance and acceptance associated with the campus, positive mentoring experiences accompanied by a sense of acceptance of their intellectual contributions and, finally, validation as an individual in the classroom. Grades that are good enough for credit and graduation but not to the expectation of the student have a much more severe impact on Hispanic students than on non-Hispanic white students who may be able to “brush-off” a poor grade or semester or a “B” when they expect A’s. These factors affect a student’s academic experiences, perceived and actual intellectual gains and appreciation of art and intellectual endeavors, and an overall sense of self-esteem and efficacy, which ultimately will impact student retention or Hispanic student success.

Amaury Nora and colleagues have been studying this complex issue for numerous years. His work is often cited by other researchers, evaluators and policy makers, particularly in studies regarding Hispanics and other minorities. A much more complete list of his and related work, and its relationship to other models of retention, such as Tinto’s Student Integration Model, can be found in the references below. Nora’s work has shown the intervening significance of culture and ethnicity to the retention process and its theoretical formulation.

The model has direct relevance to understanding the impact of or the limits to the interventions of CAHSI, CS-0, Peer-Lead-Team-Learning (PLTL) and undergraduate Affinity Research Groups (ARG) (see http://wwwcahsi.fiu.edu for descriptions) on Hispanic student retention and advancement. It may be useful in refining these initiatives, revealing the need to strengthen corollary activities, or developing new and innovative interventions for the retention of Hispanics in computing.

References

Nora, A. (2003). Access to higher education for Hispanic students: Real or illusory? In J. Castellanos & L. Jones (Eds.), The Majority in the Minority: Expanding the representation of Latin@ faculty, administrators and students in higher education. Sterling, VA: Stylus Publishing, LLC.

Nora, A. (2006) Student Engagement Model
Theoretical Framework

Precollege Factors & Pull-Factors
- Precollege Ability
- Psychosocial Factors
  - High School
  - Home Environment
- Financial Assist./Need
  - Tangible
  - Intangible
- Encouragement & Support from Family
- Environmental Pull Factors
  - Family Responsibilities
  - Work Responsibilities
  - Commuting to College

Sense of Purpose & Institutional Allegiance
- Educational Aspirations
- Commitment to Attending a Specific Institution

Academic & Social Experiences
- Formal/Informal Acad. Interactions with Faculty
- Involvement in Learning Communities
  - In-Class Experiences
  - Outside of Class
  - Collaborative Learning
- Social Experiences
  - Peer Group Interactions
  - Involvement in Organizations
- Campus Climates
  - Perceptions of Prejudice/Discrimination
  - Tolerance versus Acceptance
- Validating Experiences
  - Encouragement & Support from Faculty/Staff
- Mentoring Experiences
  - Faculty
  - Peers
  - Counseling/Advising Staff

Cognitive & Non-Cognitive Outcomes
- Academic Perf.
  - Grade Point Average
- Academic & Intell. Development
  - Perceived Cognitive Gains
  - Actual Gains
- Non-Cognitive Gains
  - Appreciation of Fine Arts
  - Valuing Diversity
  - Acceptance of Others
  - Member of Global Society
  - Self-esteem
  - Self-efficacy

Goal Determination/Institutional Allegiance
- Educational Goal
  - Degree Attainment
  - Graduate/Professional School
- Institutional Commitment
  - Sense of Belonging
  - Worthwhile Experience

Persistence
- Re-enrollment in Higher Education Institution