An Examination of Student Retention and Student Success In High School, College, and University

James M. Mbuva National University

The purpose of this study was to examine student retention and student success in high school, college, and university. Areas studied include: definition of student retention and student success, college success and student success, variables impacting student success, factors affecting graduation rates from underrepresented populations, ways of helping students stay in school, how Ohio State University and Clark School of Engineering retained students. The study found that supportive staffs, focusing on students' individual and academic needs, and positive modeling, enhance student retention. The learning processes must be alive from the first day of class and must be taught by caring faculty.

INTRODUCTION

In the recent years, administrators in high schools, colleges, and universities have been concerned about the retention of students in their programs (Stuart, 2010; Fowler & Luna, 2009; Powell, 2009; Supiano, 2009; Farvardin, 2007; Kitto, 2006). Powell (2009) citing Tinto (2006-2007) indicated, "Student retention is one of the most widely studied areas in higher education" (Powell, 2009, para.8). The term "retention" sounds negative, but it is important policy makers, educators, and parents spend a great deal of money in education demanding very little if nothing from our students; hence, studies have been organized to measure student success and learning effectiveness (Kim, Newton, Downey, & Benton, 2010).

Hall (2010) discussed leading change through innovation by providing "examples of successful partnerships between community colleges and public high schools, approaches to developing and maintaining a strategic plan that is inclusive of all stakeholders (especially adjunct faculty members), and strategies to engage alienated students through technology, just to name a few" (para. 1). Fowler and Luna (2009) suggested that high school and college partnership credit-based- programs might enhance student retention and success by showing benefits including the following: (a) cost effectiveness by saving time and money; (b) retention by building bridge programs and increasing options for potential college bound students; (c) increased graduation rates, because of connecting high school students with academically learning and challenging environments; and, (d) providing starting points for educational leaders by helping students make successful transitions from high to college (para.29-40).

RESEARCH METHOD

The Rationale of the Study

As an educator, I have noticed the plummeting graduation rates of high school, college, and university students. I decided to do this study in order to provide school staff, teachers, and administrators with pertinent information about student retention and student success in high school, college, and university. This study uses an interpretive/constructivist method (Baviskar, Hartle, & Whitney, 2009; Gall, Borg, & Gall, 1996; Mertens, 2005). The purpose of the study was not to test students, staff, faculty, or school administrator, but rather to examine the quantitative and qualitative studies in search of answers to these questions: (1) What is the definition of student retention and student success? (2) What is the relationship between college success and student success? (3) What are the specific variables that affect student success? (4) What are the factors affecting university students' graduation rates from underrepresented populations? (5) What are the ways of helping students stay in high school? (6) How has Ohio State University increased the retention rate of African American males? (7) How is the Clark School of Engineering retention process a sample of success?

Systematic Search of Data

I did a systematic Internet search of data addressing student retention and student success in high school, college, and university and identified common themes. Following the advice of previous researchers, I broke the data into manageable units, and searched for patterns, discovering what is important and what is to be learned. Then I interpreted and analyzed the collected data and decided what to tell students (Bogdan, & Biklen, 1992, p.153; Combs, Bustamante, & Onwuegbuzie, 2010; Krajcik, 2011; Mertens, 2005).

The Target Audience

I will present the findings of this study to school staff, teachers, and administrators. I plan to share with the staff because they are the first people students face during enrollment. As the first doorkeepers of new students entering school, they need to be positive in the process of enrollment. Second, I will pass this study faculty because they need to meet individual and academic needs of all students. Third, I will the findings of this study with administrators because they need to provide leadership, which focuses on students' retention and success. I hope that this study will benefit educators and administrators at all levels. In addition, I expect this study to add to educational research. I will organize a PowerPoint presentation based on the findings of this study and articulate the major findings related student retention and student success. I have two expectations of this presentation: (1) staff will want to provide positive enrollment experience to new students; and, (2) faculty, and school administrators will want to focus on individual and academic needs because it is the right thing to do, and their involvement will undoubtedly boost student retention and success.

THE DEFINITION OF STUDENT RETENTION AND STUDENT SUCCESS

The definition of retention in educational settings "refers to students' continued study until successful completion" (Fowler & Luna, 2009, para. 37). As found in a study by Burr, Burr, and Novak (1999), retention can be defined "as efforts and strategies to anticipate and identify student needs prior to high school enrollment" (Fowler & Luna, 2009, para. 37). Woodard, Mallory, and De Luca (2001) showed that retention was an act where "some students persist and graduate, and others do not" (Fowler & Luna, 2009, Para.37; Powell, 2009). By contrast, student success occurs when students enter into high school, college, and university, and are able to complete the programs through either personal intrinsic motivation, school organized advising interventions, tutoring programs, or counseling (Kim, et al., 2010).

RELATIONSHIP BETWEEN COLLEGE SUCCESS AND STUDENT SUCCESS

Kim points out that "college success is important to students because it demonstrates that they are meeting the expectation to achieve desired learning goals and, thereby, improve their chances of meeting long-term personal and career goals" (Kim, et al., 2010, para. 2). On the other hand, "Students' academic success is important to the institution because it demonstrates the accomplishment of its mission to educate and prepare *students* for life beyond college" (Kim, et al., 2010, para.2). on the other hand, whereas, "drop-outs may indicate an institution's lack of responsiveness to meeting student needs, a failure to prepare and support student progress, and, in a practical sense, create a financial debit to the institution by losing a paying consumer" (Kim, et al., 2010, para. 2). Retention efforts, therefore, must incorporate many strategies, which include a "special preparation courses, first-year adjustment seminars, academic success centers, advising interventions, tutorial programs, and counseling. These are all investments by the institution to improve student opportunities for success" (Kim, et al., 2010, para. 2). Kim added, "In order to choose the most productive individual or collective intervention methods, it is crucial for institutions to accurately assess those factors that help students succeed or cause students to drop out" (Kim, et al., 2010, para. 2).

SPECIFIC VARIABLES THAT IMPACT STUDENT SUCCESS

To determine variables that influence student success, one starts with an early assessment of student needs, followed by a plan for action (Seidman, 2005; Kim, et al., 2010, para. 3). In addition, one operates from a research-based theory to identify personal factors that create interference with academic success (Tinto, 2005; Kim, et al., 2010, para.3). Specific variables that affect student success can include the following: academic achievement and aptitude-based assessments on high school grade point average and achievement tests, and generalized academic achievement, such as SAT and ACT scores (Kim, et al., 2010, para.4). Second, it involves circumstantial variables, such as being the first generation to go to college, socioeconomic statuses, ethnicity, geographic and other factors relating to student persistence and academic performance (Kim, et al., 2010, para.5). There are also personal variables, and these are factors directly attributed to individual differences, "mainly within the power of the person to influence, direct, or enhance in some way" (Kim, et al., 2010, para.5). Studies have shown that personal variables, which "may include attitudes (e.g., motivation, work ethics), self-perceptions (e.g., confidence, self-efficacy), behaviors (e.g., work organization, study habits), problem-solving (e.g., critical thinking, decision making), and values (e.g., personal preferences, beliefs)" significantly influence college outcomes (Kim, et al., 2010, para.5).

FACTORS AFFECTING THE GRADUATION RATES OF UNIVERSITY STUDENTS FROM UNDERREPRESENTED POPULATIONS

African American Students

For African American students, Creighton (2007b) pointed out that "regarding focuse on four factors: (a) pre-entry attributes, (b) goals and commitments, (c) institutional experiences, and (d) personal and normative integration" (para.3). Creighton showed that pre-entry attributes are significant factors of determining African American student retention in school. The first factor affecting African American student retention is pre-entry attributes. A study of 229 African American freshmen by Schwartz and Washington (2002) "examined the extent to which pre-college factors and college experiences impacted students' academic performance and retention" (Creighton, 2010). The research showed that students' high school rank and perceptions of their social adjustment on campus were strong predictors of retention. It also showed that the students whose high school ranks were higher and students who felt they were part of the social fabric of the institution were more likely to return the next semester (Creighton, 2010, para.4). Further, Creighton shows that "a longitudinal study, Hagedorn, Maxwell, and Hampton (2002) found that African American male students' high school grades predicted retention" (Para. 4). Another

study by Good, Halpin, and Halpin (2002) found that a pre-college program for engineering students resulted in significantly higher retention rates compared to students who did not participate in the pre-college program (para.4). On the other hand, Pike and Killian (2001) studied 89 African American students, found African American students' expectations were unrealistic regarding college academic achievement, and this could negatively affect African American retention (Para. 4).

Goals and commitment are the second factor concerning African American student retention. According to Creighton (2010), students who are committed to their institutions are more likely to persist and graduate (para. 5; Tinto, 1999). Students' perceptions of social support also may facilitate an increased commitment to the institution and serve to help African American students feel that their goals and interests are congruent with the university's academic mission (Flowers & Pascarella, 2003). Gruenwald (2003) states that institutions committed to African American student retention should do the following: (a) examine the institution's philosophy and mission, (b) assess the institution's ability to work with African American students, (c) analyze African American students' academic and social readiness, (d) schedule early visits to institutions, (e) establish rapport with African American students, (f) help African American students learn to work within the organizational structure, (g) develop an on-going mentoring program, (h) assist African American students in career exploration, and (i) help African American students prepare for the work world (para.5).

The third factor regarding African American student retention is institutional experience. Gladwell (2000) studied the "perceptions of 60 African American students who attended a predominantly White institution regarding the factors needed to enhance retention at his university." He found that the following elements were important: "(a) the development of special support programs for African American students, (b) diversity training for all faculty and staff, (c) hiring additional African American faculty and staff, (d) increased faculty-student interaction, (e) the initiation of a counseling program specifically for African American students, and (f) opportunities to assist in planning campus programs" (Creighton, 2010, para. 6). Additionally, Creighton (2010) shows that "Rowley (2000) found that African American students reported that discrimination, isolation, and a lack of support services did not contribute in positive ways to African American students and served as a distraction to learning" (para.6).

The fourth factor affecting African American student retention pertains to personal and normative integration. Creighton (2010) showed that "the extent to which a student is involved on campus, acclimated to the academic culture of the institution, and connected socially to various components of the university community (i.e., faculty, administrators, student affairs professionals, and peer groups) has shown to be a reasonably strong predictor of student retention (Pascarella & Terenzini, 2005; Tinto, 1999)" (para.7). Finally, Flowers (2004) study "found that student development counselors play a central role in supporting and increasing African American student retention" (para. 7).

The Hispanic/Latino Students

The growing population of Hispanic college-going students has posed challenges to college and university personnel (Creighton, 2010). Studies show that "there are significant differences in educational attainment within the Hispanic community. Four factors contribute to these differences: (a) personal factors, (b) environmental factors, (c) involvement factors, and (d) socio-cultural factors" (para.8). The first factor deals with personal factors. Creighton (2010) showed that "personal factors are what are referred to in the literature as background characteristics or pre-college variables [and] these personal factors are useful in understanding how students adjust to college (Hurtado, 2000)" (para.9). Creighton continued to show that these "personal factors include high grade point average and test scores, academic self-concept, family support, and finances" (para.9). Colleges and universities have continued to admit students based on high school GPA. However, according to Creighton (2010), studies show that "there is evidence that indicates test scores may not predict early college grades for Hispanic students as well as it does for white students," and that " test scores (i.e., SAT scores) did not predict college GPAs, time to completion of degree, or likelihood of applying to graduate school" (Creighton, 2010, para.10).

Self-concept is another factor that determines the success of Hispanic students. Studies show that self-concept is "related to GPA ... Mexican American students with the same academic background were

more likely to achieve higher grades if they had greater confidence in their academic abilities. Hernandez (2000) reported that successful Hispanic students, who demonstrated a positive mental outlook, attributed this as the single most important factor that influenced their retention in college" (Creighton, 2010, para.10). Family is another important fact that enhances retention of Hispanic students. Creighton reports that "the family was described as a source of support and encouragement; however, the family also placed pressure on their students by letting them know that dropping out was not an option" (Creighton, 2010, para. 11). Nora's (2001) study also reported that financial assistance enhances enrollment and retention of students coming from low-income settings in higher education (Creighton, 2010). As shown in the study of Tinto (1994), it is evident that "financial aid does impact student persistence, especially among the economically disadvantaged" (Creighton, 2010, para.12).

The second factor affecting Hispanic/Latino student retention in college includes environmental factors. Creighton (2010) advances that "environmental theory provides the basis from which to understand the relationship between students and the campus environment" (para.12). Hence, environmental factors, such as the racial climate, presence of an ethnic community, and working on or off campus influence student behavior and consequently their retention in college (Creighton, 2010). The third factor influencing Hispanic/Latino student retention in college is involvement factors (Suarez-Orozco & Paez, 2002). As put by Creighton (2010), "Involvement factors are those variables that occur within the college environment and focus on specific ways Hispanic students get involved. Some involvement factors are: (a) student-faculty interaction, (b) the role of the mentorship, and (c) participation in student organizations" (Creighton, para.13-16; Pancer, Hunsberger, Pratt, & Alisat, 2000; Hernandez, 2000; Hernandez and Lopez, 2004; Pascarella & Terenzini, 2005). The fourth factor affecting Hispanic/Latino student retention in college is social-cultural factors, such as immigrant statuses, and, ethnic identity development in terms of "(a) their generational status within the United States, (b) the environment where they grew up, and (c) their self-perception," gender roles, community orientation, and the role of religion (Creighton, 2010, para.17-22; & Hernandez & Lopez, 2004; Nora, 2001; Tinto, 1999; Kuh, 2003; Witham, 2003).

College Persistence and Asian Pacific Students

According to Creighton (2010), "Most of the research conducted on Asian Pacific American [APA] students focuses on those of East Asian descent (Chinese, Japanese, and Korean) because of their significant numbers and longer history in the United States (McEwen, Kodama, Alvarez, Lee, & Liang, 2002 as cited in Creighton, 2010, para. 23)." Evidently Filipino Americans "comprise a large percentage of the APA population" and "they are often left out of the picture; [however], several studies were discovered that identify the educational obstacles (i.e., individual and institutional factors college students face" (Creighton, 2010, para. 23).

First, individual factors that affect APA students include (1) academic under-preparedness prior to coming to the USA (Yeh, 2002); (2) first generation APA students do not receive academic support from their families (Makuakane-Drechsel & Hagedorn, 2000; Rendon, Jalomo, & Nora,2000); (3) language/ESL issues (Suzuki, 2002; Kerr, 2001); (4) low-income backgrounds (Olenchak & Hebert, 2002; Yeh, 2004); (5) other family demands (Kuh & Love, 2000); and, (6) cultural adjustment (Tierney, 2000). Second, several studies show that institutional factors that affect APA student retention in college involve (1) marginalization on campus by the host students and wealthy Asian Americans (Kim & Yeh, 2002; Rendon, Jalomo, & Nora, 2000); and, (2) racial discrimination on campus by students and faculty (Suzuki, 2002; Kim & Yeh, 2002; Nora, 2001).

Native American Students

Studies show that "American Indian students comprise 1% of the total student population in the United States (Shield, 2004). Approximately 85% of Native American students attend public schools, with the Bureau of Indian Affairs Schools and tribal schools enrolling significant numbers. Yet Native American students have the highest dropout rate of any racial or ethnic group in the United States, exceeding 65% nationally (Creighton, 2010, para. 24; Shield, 2004). The most amazing fact according to

Creighton (2010), the dropout rate of Native American students "is almost twice that of white students. Of those Native American students who do graduate and enroll in college, between 75% and 93% will leave college before graduation" (Pewewardy, 2001 as cited in Creighton, 2010, para. 24). The Native Americans are "heavily regulated" and they face "complex and confusing pattern of laws" executed by the federal government (Creighton, 2010, para.25; Lutz, 1988). Studies show that "as a result of political and economic factors, the socioeconomic conditions Native Americans face today are devastating. These conditions have a direct and powerful impact on the higher education experience of Native American students as it pervades all facets of their lives (Shield, 2004)" (Creighton, 2010, para.25). Besides economic barriers, "the leaders of the American Indian Education Policy assert that the major reason for the lack of Native American presence in higher education and low degree attainment is the socioeconomic condition resulting from historical federal policy regarding Native Americans" (American Indian Higher Education Consortium & Institute for Higher Education Policy, 1999 as cited in Creighton, 2010, para.26).

Another devastating factor that affects Native American students is cultural discontinuity. Cultural discontinuity "is a concept that asserts that Native Americans experience reality in a completely different way than the dominant culture, and consequently, the magnitude of the incongruence of realities Native Americans often experience within the dominant culture can be devastating to Native Americans' sense of self and experience of being in the world (Agboo, 2001 as cited in Creighton, 2010, para.27). Agboo (2001) continues to show that "that high dropout rates and low levels of academic achievement of Native American students are not due to the inability to adjust, to genetic inferiority, cultural impoverishment, or cultural differences but lie in cultural discontinuity," and that "the cultural discontinuity experienced by Native American students within most educational environments often lies in the dominant culture's school settings' concept of time and space, discrepancies and distortions in the curriculum that combine to cause the low achievement of Native American students" (Agboo, 200 as cited in Creighton, 2010, para.27). Finally, besides the historical issues, cultural discontinuity, socio-economic hardships, and political challenges that American Indians face, "some Native Americans persist in higher education and complete degrees. Huffman (2001) described one perspective that serves to provide a foundational context to explain this: The Resistance Theory and Transcultural Hypothesis. This perspective is grounded in Native American traditional values of strength, resilience, and Indigenous identity intrinsic to Native American culture" (Huffman, 2001 as cited in Creighton, 2010, para.28).

WAYS OF HELPING STUDENTS STAY IN HIGH SCHOOL

Certainly, there must be more than one way to help students stay in school. Doban, who is a licensed specialist in school psychology, provides very specific ways of helping students stay in school:

- 1. To help students stay in school, help them to graduate on time. This requires avoiding holding them back. There are times when a student should fail. For example, in high school, they will have to retake a specific course if they fail it. However, retaining students for immaturity or for not having the skills at a young age should be avoided. Research shows that, after just a few years, the students who were held back are no further ahead than similar students who were promoted. There are too many alternatives, like extra classroom support and individual tutoring to justify holding someone back. The lower the grade level when a student turns 18, the better the odds that they will not stick it out.
- 2. Make sure that school is a positive experience for students. It should not be all negative, with failures or redirection. Monitor students closely, and, if they are struggling with behavior or academics, intervene early. Make sure there is frequent communication between the parents and the school and ensure that students receive extra support. Also, make sure that they are set up for positive experiences and that those positives are highlighted. The positives of school should outweigh the negatives.
- **3.** Focus on early intervention. If a student starts to struggle, make sure that they get support right away, because early intervention is crucial to successful intervention. Explore a variety of

support, including extra tutoring after school. Perhaps a different teacher can explain things differently, or supplementary aids, such as graphic organizers could help.

- 4. Make sure students have goals they are working toward. From a young age, they should expect that they are going to go to college after high school. They should have similar goals that involve a career that they can help train for in high school. They need to see staying in school and graduating as essential to their future.
- 5. Use sports and other activities as motivators for students. Often, students are putting forth that extra effort because they are required to pass classes in order to participate in some of their preferred activities. Pulling a struggling learner out of those activities in order to have more time to concentrate on studies (something that is a negative experience for them) takes away the little motivation they have. Make sure to keep things in place that will continue to motivate students. (Doban, 2010, para.2-6)

High School students should remain highly motivated. We should help them graduate on time, create positive learning environments, focus on early intervention, provide the needed support for success, make sure that students have developed goals and work towards them, and use sports and other relevant activities to motivate students. For us to have a continued student retention and success, competitive efforts should be applied at the college and university levels. Therefore, we need to examine factors affecting graduation rates of university student from the underrepresented populations such as African American students, Hispanic/Latino students, and Asian Pacific American Students.

HOW OHIO STATE UNIVERSITY HELPED THE RETENTION OF THE AFRICAN AMERICAN MALES RISE

A success story of an African American male student named Aaron Hatchett, arriving at the Ohio State University in 2006, affirms that the staff was supportive in guiding and motivating him to find academic success. Todd Anthony, from the BeQ National Resource Center for the African American Male at OSU, was anxious about being a student, but people were there to talk when he needed further support (Feituch, 2010). Hence, in the case of retaining African American males at Ohio State University (OSU), the African American Resource Center, which was founded in 2004, provided support to the African American male student by (1) removing the burdens of being a student and focusing on (2) student individual needs, (3) academic needs, (4) positive role modeling, and (5) acquisition of leadership skills (Feituch, 2010, para. 1-6). Regarding positive retention growth, Feituch (2010) study demonstrated that since the inception of the center for the African American male students, students have grown. In 2003, the retention of African American male students at OSU was 80.7%; in 2008, the retention rate rose to 89.3%, which was on par with the school's student population of 92.8%. Ways Clark School of Engineering will continue to provide us with ways of retaining students in colleges and universities.

THE CLARK SCHOOL OF ENGINEERING RETENTION PROCESS: A SAMPLE OF SUCCESS

The Clark School of Engineering has employed ways of retaining students in their engineering programs by seeing to it that they recruit students more likely to thrive in the challenging engineering school environment. They also make engineering come alive from the first day of class with high quality, innovative courses in state-of-the-art facilities, taught by faculty members who care. The also create a complete academic experience that offers students exciting opportunities, useful guidance and a sense of community (Farvardin, 2007, para.4).

In order to retain students, this engineering institution has made sure that they collaborate with near and distant feeder high schools, using Clark School student ambassadors to promote engineering as an academic path and career. They communicate the idea that engineering is a way to improve the world, which is very powerful to prospective students (and their parents and other advisers), helping students commit to facing the challenges ahead. They also back student recruitment with scholarship and support students who might not have engineering as their fit by redirecting student to another area in which he or she can struggle and succeed (Farvardin, 2007, para.6-9).

Concerning faculty and student retention, Farvardin (2007) has suggested that the Clark School of Engineering should create incentives for their most gifted and passionate teachers to present their most fundamental courses, and provide first-rate assistants to help run lab activities and manage the classes. The also should renovate their workshops and computer classrooms, so that students will feel their hard work is significant to the school, and parents will feel that their children are in good hands. They should have their dean and department chairs participate in the educational process. They should consider an introductory course taught by the dean - ours is called "Dialogue with the Dean," a class that instills the "world-changing" mission and presents exciting technologies and career opportunities (Farvardin, 2007, para.10-12).

REFERENCES

Agboo, S. A. (2001). Enhancing success in American Indian students: Participatory research at Akwanese as part of the development of a culturally relevant curriculum. *Journal of American Indian Educator*, 40(1), 31-55.

Baviska, S. N., Hartle, R. T., & Whitney, T. (2009). Essential Criteria to Characterize Constructivist Teaching: Derived from a review of the literature and applied to five constructivist-teaching method articles. *International Journal of Science Education*, 31(4), 541 - 550.

Bogdan, R., Biklen, S. K. (1992). *Qualitative research for education: An introduction to theory and methods (2nd ed.).* Needham Heights, MA: Allyn and Bacon.

Burr, P., Burr, R., & Novak, L. (1 999). Student retention is more complicated than merely keeping the students you have today: Toward a seamless retention theory. *Journal of College Student Retention*, *1*(3), 239-253.

Combs, J. P., Bustamante, R. M., & Onwuegbuzie, A. J. (2010). An interactive model for facilitating development of literature reviews. *International Journal of Multiple Research Approaches, 4,* 159-182.

Creighton, L. (2007b). Factors affecting graduation rates of university students from underrepresented populations. *International Electronic Journal for Leadership and Learning*, 11(7), 1–15. Retrieved from from http://www.ucalgary.ca/~iejll/volume11/Creighton.htm

Doban, eHow (2010). *How to help students stay in school*. Retrieved from <u>http://www.ehow.com/how_5688120_students-stay-school.html</u>.

Farvardin, N. (2007). Retaining Students-and Their Hopes and Dreams. *ASEE Prism*, 16(7), 64-65. Doi: 1240976331

Feintuch, H. (2010). Black male rising. *Diverse Issues in Higher Education*, 27(2), 18-19. doi: 1980857481

Flowers, L., & Pascarella, E. T. (2003). Cognitive effects of college: Differences between African American and Caucasian students. *Research in Higher Education*, 44(1), 21-49.

Fowler, M., & Luna, G. (2009). High school and college partnerships: Credit-based transition programs. *American Secondary Education*, *38*(1), 62-76. doi: 1898877321

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction* (6th ed.). White Plains, NY: Longman Publishers USA.

Hall, J. (2010). The creative community college: Leading change through innovation. *Community College Review*, *37*(3), 285-287. doi: 1942697681

Hernandez, J. C. (2000). Understanding the retention of Latino college students. *Journal of Student Development*, *41*, 575-588.

Hernandez, J. C., & Lopez, M. A. (2004). Leaking pipeline: Issues impacting Latino/a college student retention. *Journal of College Student Retention: Research, Theory, & Practice, 6*(1), 37-60.

Huffman, T. (2001). Resistance theory and the transculturation hypothesis of college attrition and persistence among culturally traditional American Indian students. *Journal of American Indian Education*, 40(3), 1-23.

Hurtado-Ortiz, M.T. (2000, June). *Mexican-American adolescents' academic achievement and college attendance: acculturation and the influence of parents and older siblings*. Poster session at the 12th Annual Convention of the American Psychological Society, Miami Beach, FL.

Kim, E., Newton, F., Downey, R., & Benton, S. (2010). Personal factors impacting college student success: Constructing college learning effectiveness inventory (CLEI). College Student Journal, 44(1), 112-125. doi: 1984269161

Kitto, K. (2006, November). Dropout prevention starts with strong commitment. *Education* Daily, 39(201), 6. doi: 1159197991

Krajcik, J. (2011). Helping young learners make sense of data: A 21st-century capability. Science and Children, 48(5), 8-9. doi: 2296533161

Kuh, G. D. (2003). What we're learning about student engagement from NSSE. Change, 35(2), 24-32.

Lutz, C. (1988). Persistence in college among Native Americans (Doctoral Dissertation, the University of Mississippi, 1988). *Dissertation Abstracts International*, 59, 3,753. (UMI No. 9908527)

Mertens, D. M. (2005). Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods. Thousand Oaks, CA: Sage.

Nora, A. (2001). How minority students finance their higher education. ERIC Clearinghouse on Urban Education, EDO UD-01-0.

Pancer, S., Hunsberger, B., Pratt, M., & Alisat, S. (2000). Cognitive complexity of expectations and adjustment to university in the first year. Journal of Adolescent Research, 15(1), 38-57.

Powell, P. (2009). Retention and writing Instruction: Implications for access and pedagogy. College Composition and Communication, 60(4), 664-682. doi: 1775753881

Pascarella, E., & Terenzini, P. (2005). How college affects students (Vol. 2): A third decade of research. San Francisco, CA: Jossey-Bass.

Seidman, A, (2005). College *Student Retention*, Westport, CT: American Council on Education and Praeger Publishers.

Shield, R. W. (2004). The retention of indigenous students in higher education: Historical issues, federal policy, and indigenous resilience. *Journal of College Student Retention: Research, Theory, & Practice,* 6(1), 111-127.

Stuart, R. (2010). Reform under review. *Diverse Issues in Higher Education*, 27(2), 24-25. doi: 1980857501

Suarez-Orozco, M. M., & Paez, M. M. (2002). Introduction: The research agenda. In M. M. Suarez-Orozco & M. M. Paez (Eds.), *Latinos: Remaking America* (pp. 1-37). Berkley, CA: University of California Press.

Supiano, B. (2009, November). Colleges Move to Organize Retention Efforts. *The Chronicle of Higher Education*, 56(2), 23. doi: 1952675041

Tinto, V. (2005). Epilogue: Moving from theory to action. In A. Seidman (Ed.), *College student retention: Formula for student success* (317-333). Westport, CT: Praeger Publishers.

Tinto, V. (2006-2007). Research and practice of student retention: What next? *Journal of College Student Retention 8* (1) 1-20.

Tinto, V. (1999). Taking retention seriously: Rethinking the first year of college. *NACADA Journal*, *19*(2), 5-9.

Tinto, V. (1993). *Leaving college: Rethinking the causes of student attrition,* (2nd ed.) Chicago: University of Chicago Press.

Witham, L. (2003). *Challenging Hispanics to do better at school, study finds*. Retrieved from http://www.washtimes.com/national/20030128-30457960.htm.

Woodard, D. B. Jr, Mallory, S. L. & De Luca, A. M. (2001). Retention and institutional effort: A self-study framework. *NASPA Journal*, 39(1), 53. doi: 125348401