

Higher Education Politics & Economics

ISSN: 2577-7270 (Print) 2577-7289 (Online) Journal homepage: http://jhepe.org

Building institutional capacity for college access and success: Implications for enrollment management

Nicole Pulliam & Pietro Sasso

To cite this article: Nicole Pulliam & Pietro Sasso (2016): Building Institutional Capacity for College Access and Success: Implications for Enrollment Management, *Higher Education Politics & Economics.* 2(1)

Published online: 06 April 2016.
Submit your article to this journal 🗷
View related articles

Building institutional capacity for college access and success: Implications for enrollment management

Nicole Pulliam^a and Pietro Sasso^b

^{a & b} School of Education, Monmouth University, 400 Cedar Ave, West Long Branch, NJ 07764 USA

Postsecondary educational institutions are most recently aware of large demographic shifts in the traditional age population of college-bound students as it flat lines by 2025. However, this prestige traditional age student market is drastically diminishing in number, which has necessitated in college and universities looking to other traditional-age populations across the marketplace of students to maintain enrollments as private universities or to serve the public workforce needs as a state-supported institution. Emerging populations that have been heavily recruited include historically underrepresented populations of low-income, first-generation, and additional minority groups. Colleges and universities have struggled to not only connect with these students in admissions efforts, but to retain them as they persist towards graduation. This paper will address how colleges and universities can address the enrollment management challenges with historically underrepresented student populations through a campus-wide capacity building approach. Implications from the cultural, economic, and academic achievement gaps will be addressed to inform strategies and initiatives for college student access and success.

Keywords: enrollment management, college access, underrepresented students

The role of the traditional American four-year institution has historically been to create and disseminate new knowledge and serve as a repository for existing and historical knowledge (Thelin & Gasman, 2011). However, that historical role has evolved as the result of cultural demands, demographics diversity, and institutions' attempts to serve multiple stakeholders while at the same time facing financial pressures caused by decreased appropriations, difficulty in creating additional revenue streams, and limits to increasing revenue from tuition and fees to satisfy budgetary needs. To understand this challenge institution decision-makers face in producing highly-qualified graduates, it is important to understand the existing higher education heuristic and its guiding paradigm, according to Kerr (2001). That paradigm assumes students arrive on campus with rather

refined skills sets which support independent functioning rather than the actual specific precollege characteristics (Tinto, 2007).

The winds of change affecting higher education as federal and state-level governments, accrediting bodies, and the general public issue demands for transformation at an ever-increasing rate has called for increased access to postsecondary education among the student body in terms of socioeconomic status, diversity, and first-generation status (DeVitis, 2013). Accomplishing these goals and maintaining graduation rates while building a diverse learning community of traditional undergraduate students poses a significant challenge to any higher education institution. This paper will address how institutions can effectively implement strategies and programs that will facilitate increased access and success for historically underrepresented college student populations through enrollment management strategies.

College Population Data

Enrollment in post-secondary degree granting institutions has increased significantly over the past forty years, from an undergraduate enrollment rate of 7.4 million to 17.8 million by the fall of 2012 (The Pell Institute, 2015). According to the *National Center for Education Statistics* projections (2013), enrollment is expected to increase to 24 million by 2021. Most significant are the projected enrollment trends for racial and ethnic minority students. By 2021, enrollment for Hispanic students is projected to increase by 42%, African American/Black students by 25%, and 20% for Asian/Pacific Islanders (NCES, 2013). Such trends support the need for post-secondary institutions to take a closer look at their enrollment management practices to support a more diverse student population.

Additionally, other cultural characteristics should be taken into account when addressing college access and success, that is, students coming from low-income backgrounds and first- generation college students. Multiple minority identities add to the already existing socioemotional and college adjustments for students (Consolacion, Russell, & Sue, 2004). There still remains a gap in college access and student persistence as it relates to low-income, first- generation college students. The most updated data shows that there are approximately 4.5 million low-income, first-generation college students enrolled in post-secondary institutions, making up about 24% of total enrollment. As the number of racial and ethnic minority college- bound students increase, this number is also expected to rise (Engle, Tinto, & The Pell Institute for the Study of Opportunity in Higher Education, 2008). Historically, this population has been more likely to leave college within the first year as compared to their counterparts. Moreover, time to graduation often extends well beyond the traditional four-year plan, with only

about 43% of low income, first generation college students earning their undergraduate degrees within a six year time span (Engle et al., 2008; Titus, 2006).

Overall, first generation college students are said to lack the preparation and knowledge needed to thrive in a college environment, are often less academically prepared, and require intentional guidance and advisement to help shape their academic and career aspirations (Engle et al., 2008; Hertel, 2002; Titus, 2006; Winograd & Shick Tryon, 2009). Low-income, first-generation college students are far more likely to come from racial and ethnic minority groups and enter college academically underprepared for the rigors of college course work in the content areas of reading, writing, math and science (Engle et al., 2008; Titus, 2006; Winograd & Shick Tryon, 2009). These students tend to have greater obligations outside of school, including part- time or full-time employment and family responsibilities. In addition, students who have been historically underrepresented in higher education (e.g., low income, racial/ethnic minorities, first generation college students) are often faced with unique challenges that may impact their career choices including: (1) meager high school preparation; (2) low grades within specific subject areas that may be required for specific academic majors and occupations; (3) false realities about occupations; and (5) uninformed parents or guardians (Burton, 2006; Gordon & Steele, 2003; Lepre, 2007; Ringer & Dodd, 1999).

Recent 6-year outcome data from The Pell Institute for the Study of Opportunity in Higher Education revealed critical differences in graduation rates for low-income, firstgeneration college students as compared to their non low-income, first generation peers (Engle et al., 2008). The most glaring data were the comparisons between the lowincome, first- generation population who attained bachelor's degrees (11%) versus the non low-income, first-generation population who earned bachelor's degrees (55%). The comparative breakdown for public four-year universities showed that 5% of the lowincome, first-generation student population earned bachelor's degrees versus 24% of the non low-income first-generation population; private four-year breakdown was 43% lowincome, first generation versus 80% of the non low-income, first-generation population (Becker, Kroder, & Tucker, 2010; Engle et al., 2008). Such data should be considered when creating a framework for college access and success for historically underrepresented college student populations.

Institutional Framework

College students are not a homogenous group. They arrive on campus from different social, economic, educational, family and cultural backgrounds, which impacts many factors related to their success in college (Gordon & Steele, 2003; Luzzo, 1999; Luzzo & McWhirter, 2001; McWhirter, 1997). Ninety-two percent of the U.S. population's growth has occurred within racial and ethnic minority populations within the last decade. By the year 2050, this population is projected to no longer be in the minority (Espinosa, Gaertner, & Orfield, 2015; Taylor & Cohn, 2012). Despite the ever-increasing diverse population in the United States, higher education is not a fair representation of such changes. Since we know that the number of historically underrepresented students is expected to increase, colleges and universities need to be prepared for this. Intentional enrollment practices are necessary in order to create equity (Espinosa et al., 2015). When considering a framework that would promote and support diversity-based enrollment management practices, it is important to include practices relative to both recruitment and retention processes. Several strategies can be employed to help support fair and equitable access for all student populations. Some examples will be discussed in the following sections.

Admissions Practices

The role of enrollment management units within higher education settings range from recruitment and admissions, to persistence and graduation practices. Therefore, intentional efforts that consider race and class are integral to an equitable college access framework (Becker et al., 2010; Espinosa et al., 2015).

Recruitment.

Recruitment practices are one of the most critical to ensuring a fair and equitable framework. "Recruitment is not one-size-fits-all and the engagement is important to both build and maintain relationships to have any hope of achieving your admission and enrollment goals" (Espinosa et al., 2015, p.19). Perhaps the most important aspect of recruitment for historically underrepresented students is the connection to and relationship with the recruiting officer. Face-to-face interactions with individuals to whom they could relate, including current students and graduates help to validate feelings, while bringing credibility to the recruitment process (Becker et al., 2010). Lastly, targeted recruitment efforts for racial and ethnic minority students and low-income, first-generation college students could be considered. Many universities have dedicated admissions officers assigned to school districts where the majority of students come from historically underrepresented backgrounds (Becker et al., 2010; Espinosa et al., 2015).

Another important factor to consider when creating an infrastructure for intentional recruiting practices for underrepresented student groups is the promotional materials used to attract students to the university (Johnson & Castrellon, 2014). Often, linguistics and presumptions about prior knowledge regarding the college admissions process, financial aid, and academic majors, for example, act as deterrents for historically underrepresented applicants, as they often lack the social capital necessary to decipher the presented information (Barratt, 2013; Johnson & Brandt, 2009; Johnson & Castrellon, © 2018 Higher Education Politics & Economics

Holistic application review process.

The holistic application review process grew out of two U.S. supreme court cases—*Gratz* and *Grutter*—which both examined race-conscious admissions at the University of Michigan (Espinosa et al., 2015). Both cases called for a holistic application review, a process that entails a thorough review of all applicant materials, not only academic credentials, but personal accomplishments such as community involvement, leadership and work experience, and perseverance in the midst of adversity. The type of review process is paramount for the historically underrepresented student population, as they tend to be academically underprepared, thus, exhibiting lower test scores and grades in core courses (Dennis et al., 2005; Gordon & Steele, 2003). The college admissions essay, for example, can serve as a reflective, creative tool by which students could highlight their interests and qualifications in a holistic manner. Because we know that many historically underrepresented students struggle with writing, assistance with the writing process is necessary in order to combat this disadvantage (Early, DeCosta-Smith, & Valdespino, 2010; Warren, 2013).

Test-optional admissions practices.

Although the least widely-used practice to date, more universities are considering a test-optional admissions process, allowing students to avoid standardized testing, such as the S.A.T and A.C.T. Data showing the disadvantages of standardized testing, especially for the historically underrepresented college student population has been consistent (Becker et al., 2010; Espinosa et al., 2015; McCarron & Inkelas, 2006; Roderick, Coca, & Nagaoka, 2011). For example, opponents of standardized testing have argued that such tests are racially biased and do not accurately predict performance for minority students (Syverson, 2007; Walpole et al., 2005). Despite the supportive data, test-optional admissions practices remain an ongoing debate (Wightman, 2000). Based on data from the National Center for Fair and Open Testing, more than 850 institutions of higher education no longer require SAT or ACT score submissions, as they recognize the unfair and biased perceptions related to historically underrepresented populations. This number is expected to increase to meet the demographic shift in higher education (www.fairtest.org.).

Student Engagement Practices

Despite the significant changes in higher education, the core of student engagement practices remains the same (Astin, 1993). Student engagement fosters a necessary connection to the campus environment and encourages peer-to-peer

relationships that are integral to student success and persistence (Becker et al., 2010; Engle et al., 2008; Hall, Cabrera, Milem, 2010). Because historically underrepresented students struggle the most with acclimating to the campus environment, intentional student engagement practices are key (Dennis, Phinney, & Chuateco, 2005; Kuh, 2005). *Intrusive advising*.

Early and intrusive academic and career advising practices are especially important for the historically underrepresented college student population, as they often exhibit anxiety related to academic and career choices (McWhirter, 1997; Tinto, 2006). Key factors that can impact anxiety regarding academic and career choices include: (1) meager high school preparation; (2) low grades within specific subject areas that may be required for specific academic majors and occupations; (3) false realities about occupations; and (4) uninformed parents or guardians (Burton, 2006; Gordon & Steele, 2003; Lepre, 2007; Ringer & Dodd, 1999). Gardner (as cited in Burton, 2006) noted that advising should be more connected to an early, intrusive academic and career planning process to increase the chances of a more informed major selection earlier in their college tenure. Keene (as cited in Lepre, 2007) reported that students who struggle with making initial academic and career decisions often exhibit lower grade point averages, and are less motivated to get involved in campus activities.

Advising strategies focused on providing social support, mentorship opportunities, and student involvement in the advising process is key to the success of historically underrepresented students in particular (Roscoe, 2015). In a study investigating the impact of self-esteem and social support on a historically underrepresented student's ability to get acclimated to the academic and social college environments (Grant-Vallone, Reid, Umali, & Pohlert, 2003-2004), it was evident that those with higher levels of self-esteem and higher perceived levels of social support were more likely to connect with their campus environments. This is particularly important to note, as historically underrepresented students tend to lack the social support needed, especially at the beginning of their college tenure (Astin, 1993, Roscoe, 2015).

Engaging communities.

Early engagement in the campus community has been shown to matter more for the historically underrepresented student than any other college student population (Becker et al., 2010; Terenzini et al., 1994; Titus, 2006). In addition to involvement with clubs and organizations, two engagement environments have been noted as particularly important for this student population; namely, learning communities and service learning (Astin, 1993; Hall et al., 2011. Participation in learning activities provides social support for students using a cohort-based model of learning. This type of engagement early in a student's college career can foster support and encouragement amongst peers both © 2018 Higher Education Politics & Economics

academically and socially. Often, learning communities produce a community of learners who share a common vernacular related to common courses, assignments, and course-related activities (Becker et al., 2010; Winograd & Shick-Tryon, 2009). Similarly, engagement in service learning opportunities has been cited as beneficial to this student population, in particular. Because service-learning combines academic content with engagement in civic activities, it often promotes leadership development and helps to shape a civically-engaged individual beyond the college years. Participation in such an activity could provide a sense of meaning and purpose, both important for persistence to graduation (Becker et al., 2010).

Implications for Practice

Students come to campus with notable academic, social, and cultural pre-college characteristics that affect their persistence on campus (United States Department of Education, 2001a). These students interact with a campus system designed for second, third, and fourth generation students and not one structured for access to students from diverse backgrounds (Barrat, 2011). When considering institutional capacities to increase access it is essential to consider several factors and trends with regards to ensure student retention and so that the student has the opportunity to persist to graduation with the proper programs and supports.

Renick (2006) identifies some of the factors contributing to this phenomenon, which include: (1) insufficient academic development at the high school level predetermines students from being admitted to and succeeding at any postsecondary institution; (2) a shortage of concise information about financial aid and college choice; and (3) the inability of families to have sufficient financial resources, especially for those from economically disadvantaged backgrounds.

Numerous studies have identified predictors of college success, persistence, and ultimate graduation such as those of Wolfe & Johnson (1995), Pritchard & Wilson (2003), Perkhounkova, Noble, & McLaughlin (2006), Ishitani (2006), and Strauss & Volkwein (2002), and all suggest that persistence is connected to non-cognitive factors such as social and academic integration and transition to college. Despite what could clearly be considered an unevenly distributed forum of opportunity that favors the lived experiences of privileged students, first-generation and students from diverse backgrounds are college students who persist and demonstrate that they can achieve the same educational and learning outcomes as their privileged counterparts (Pascarella, et al, 2004; Pike & Kuh, 2005). Reeves & Lowe (2009) cautioned against the development of one-size fits-all approaches as decision-makers might well be led astray by over-relying on traditional models that are not accurate predictors of student success. Attracting,

recruiting, and retaining diversity to promote college access to college and campus requires capacity building across the institution.

The recommendations that follow in this paper will address those by Renick (2006) and call for providing more access to college preparatory course work; increased academic support and tutoring; increased financial aid information, counseling, and access; and more developmental math and language courses in the curriculum (Davis, 2010; Sacks, 2007). However, it should be noted that to truly enhance institutional capacity for access, the moral recommendation would be for all students to participate in structured coursework to enhance their academic success.

College and Career Connections

For historically underrepresented college students in particular, college represents a foreign experience, adding to their personal, academic, social, and career development. Chickering and Reisser (1993) described this experience as a time for growth and development, involving seven vectors in a model of college student development. Two of those vectors, purpose and identity, include career development because persisting in college and deciding on an academic major contribute to students' future career paths (i.e., purpose) and occupational self-concept (i.e., identity) (Chickering & Reisser, 1993; Super, 1990). Thus, it is essential to help students connect their college major to job and career interests. Therefore, activities such as career interest inventories, career day programs and speakers, job shadowing experiences, and internship programs help students explore their career interests and options (Sasso & Maldonado, 2015).

Financial Literacy

Federal, state, and institutional level efforts have served to reduce the inevitable lag in economic and academic capital experienced by first-generation students. The Federal Pell Grant program provides "need-based grants to low-income undergraduate and certain post baccalaureate students to promote access to postsecondary education" (U.S. Dept. of Education, 2012). Numerous states have initiated need-based as well as merit-based forms of college financial assistance. Many colleges and universities offer their own forms of need-based financial aid that are connected to college preparation, transition support, and developmental education programs (National Center for Educational Statistics, 2013).

Reducing the barriers to college is essentially important and one of the greatest is based on perceptions of affordability, especially for first-generation students. The ability to pay for college continually appears as a key factor influencing the likelihood to apply, enroll, and persist in college (Boulard, 2004; King, 1996; Long & Riley, 2007). Therefore, establishing financial literacy for students is very important and informing the student as © 2018 *Higher Education Politics & Economics*

a consumer will help the student better conceptualize the direct costs (tuition, room, board) and tertiary costs (textbooks, travel) of postsecondary education.

The cost of college is a necessary reality for all students and financial literacy and an understanding of affordability is very important. Often in the cases of first-generation students, getting information about financial aid can be especially daunting and imtimidating (Xiao, Shim, Barber, & Lyons, 2008). These students are often completely unaware of the forms and sources of financial aid available as well as how to apply for them. The costs associated with college often make students from first-generation and diverse backgrounds perceive college a distant future, rather than an immediate possible reality (Xiao, Newman, Prochaska, Leon., Bassett, & Johnson, 2004). Without guidance and consistent assistance in applying for aid, the financial barriers to college can reduce aspirations of college attendance. Therefore, activities such as financial aid workshops during college, on-campuses can raise students' aspirations about whether they can attend college, but also can potentially expand perspective on what colleges are affordable.

Other strategies such as during the summer bridge program, the family should be incorporated if possible, especially with regard to helping students manage the financial aspects of college. Students by necessity of the Free Application for Student Aid (FAFSA) need their parent's tax information (Fosnacht, 2013).. So, ensuring that students are well-prepared by pre- college and counseling staff to apply for financial aid is critical. Many times, students often ask pre-college staff for help with reapplying for aid as well as with navigating the financial aid office even after going to college (Grable, Law, & Kaus, 2012). With regard to financial literary it should be essential to reduce the barriers for students' participation in support programs particularly related to inability to pay, and/or inconvenient hours due to students' work schedules. Flexible services with extended nontraditional office hours should be offered to accommodate student characteristic and demographic needs into consideration.

Additional need-based financial aid, especially grants and work-study, as well as counseling about how to manage unmet need should complement one another to offer amalgamation of services. For example, students need more guidance on how many hours to work to balance how much debt burden to assume during college in order to prioritize and promote persistence. Providing students with meaningful on-campus work in their field of study can help them meet both their financial and academic goals. While money is certainly necessary to help those without money for education, especially in terms of addressing issues of access, money is not sufficient to help all students succeed in college (Engle & Tinto, 2008).

Federal, state, and institutional level efforts have served to reduce the inevitable lag in economic and academic capital experienced by first-generation students. The Federal Pell Grant program provides "need-based grants to low-income undergraduate

and certain post- baccalaureate students to promote access to postsecondary education" (U.S. Dept. of Education, 2012). Numerous states have initiated need-based as well as merit-based forms of college financial assistance. Many colleges and universities offer their own forms of need-based financial aid as well as college preparation, transition support, and developmental education programs (National Center for Educational Statistics, 2013).

Pre-College Outreach Programs

Little research exists for efforts to understand the individual experience of students regarding pre-college characteristics, transition to college, and progress toward degree completion, beyond the aggregate. (Pascarella, Pierson, Wolniak, & Terenzini, 2004). What is known is that students often are transitioning from a bifurcated system in which K-12 funding gaps have distributed significant academic inequalities and lack of equity across college-bound populations (Barratt, 2013; Marx, 2006). This is especially true for low-income, first-generation, or students from urban environment (Barratt, 2011). As children of non-college educated parents, given the structure of the current socioeconomic stratification within the United States, the large majority of first-generation students find themselves in the classification of lower, working, or lower-middle class on the socio-economic scale (Davis, 2011).

Therefore, transition programs coupled with developmental education are a significant benefit to increasing access and building the capacity at the institutional level to increase diversity (Pitre & Pitre, 2009; Sasso & Maldonado, 2015). The overall goal should be to challenge the student to perceive themselves as college-capable and assume this personal identity. Therefore, addressing gaps in preparation through tutoring and counseling can help students improve their academic standing (Roderick et al., 2011; Sasso & Maldonado, 2015).

Institutions can offer Advanced Placement or dual enrollment courses and establish connections with local K-12 feeder schools, providing opportunities for learning beyond the scope of the high school curriculum (Marx, 2006). This allows high-achieving students to achieve at levels previously perceived as impossible, such as placing into the top ten percent of their high school class.

Furthermore, these K-12 connections with feeder schools are also very important to building capacity as they can begin to socialize college-bound students into the culture of postsecondary education. This helps students begin to understand that college is possible. Some students perceive it is not possible for them to attend college and graduate because of the lack of college experience in their families and communities (Baratt, 2011). Therefore, individual academic success may reinforce a college-bound identity. Additionally, for these students who have the lack of social capital engaging with dual © 2018 Higher Education Politics & Economics

enrollment or advanced placement, faculty establish role models and demonstrate to them that it is possible to succeed and model the potential for improving their lives and the lives of others in their families and communities by getting a college degree (Somers, Cofer, & Vander Putten, 2002).

Other connections should be established within the community to ease transition to college such as through pre-college programs and events by partnering with existing state and local resources aimed at targeting specific populations to gain access to college. These can include youth community centers and organizations such as the Boys and Girls Clubs, religious organizations such as churches, or other non-profits, or even state support college access centers such as those often established through TRIO programs or community centers. These pre-college events and outreach efforts between diverse and first-generation populations and their families often establish first-contact and initially provides information about the college admissions process degree (Pitre & Pitre, 2009; Somers, Cofer, & Vander Putten, 2002).

Navigating the College Admissions Process

Beyond all the frills and pageantry with balloons, catered events, and free novelties associated with admissions, campus visits, and open houses, increasing institutional capacity for college access begins with a very personal individualized approached with the admissions staff. It is the opinion of the authors that this does not inherently carry the undertone of catering to consumerism. Instead, this means essentially getting *personal* and being persistent about college with potential students as applicants. Prospective students or "prospects" as often referred to in the functional area of admissions, often are not always initially receptive to outreach efforts from program staff about the importance of preparing for college attendance (Becker et al., 2010; Espinosa et al., 2015; Johnson & Castrellon, 2014; Sasso & Maldonado, 2015).

Admissions counselors can aid in the process by simply having a conversation during campus visits or by speaking with prospective students about how to engage their parents and other siblings to invest in their college-bound process. Efforts by admissions staff to reach out to and develop relationships with students' parents throughout the process made parents feel more comfortable with and supportive of students' collegegoing plans (Becker et al., 2010; Espinosa et al., 2015; Sasso & Maldonado, 2015).

Admissions counselors are frontline staff who also must understand that many of the students are domestic, originated, or were socialized in the United States, and therefore attended school in the United States. Unfortunately, these students often may not receive much support from overburdened high school counselors who could not speak with them about college until halfway through their senior year, which often too late (Roderick et al., 2011; Sasso & Maldonado, 2015). As a result, first-generation students

often heavily rely on admissions staff or what little cultural capital they attain to navigate through the complex college admissions process (Barrat, 2013; Sasso & Maldonado, 2015; Zwick, 2007). Often these students need support coupled with positive reinforcement through the process. Admissions counselors should conceptualize the process as a progression of steps which allows students to keep moving forward toward college.

Therefore, being intentional with establishing individual connections is important and being intrusive, i.e. *getting personal* and being consistent may serve more efficiently than simply waiting for students to seek help or merely directing or referring resources to students (Tinto, 2006). There can also be a sense of distrust or cultural communication gaps whereas the student is resisting actively engaging because of fear of additional empty promises or false hopes, this is especially true among students from a disadvantaged socioeconomic background (Barratt, 2011; Davis 2010; Sacks, 2007). Additionally, family members may be fundamentally unsupportive, often fearing the loss of a family member, preferring they stay close to home to support the family, but often it is because there is a lack of college knowledge (Sasso & Maldonado, 2015).

Evidence supports that the strongest predictor of student academic capital is parental education level and income (Sackett, Kuncel, Arneson, Cooper, & Waters, 2009; Strage, & Brandt, 1999). Thus, admissions offices should consider utilizing the diverse admissions staff to work with the families and also ensure that they are bilingual especially to recruit and retain Latino/a students whom are the largest, first-generation minority group in the United States (Shim, Barber, Card, Xiao, & Serido, 2009).. This same diverse staff of admissions counselors should foster connections with local feeder schools, especially those in rural and urban environments, which can establish a diversity pipeline for the institution. Additionally, for many first-generation students, admissions staff members are often cited as the most important sources of initial information and support, which they provided as early and as often as possible (Johnson & Castrellon, 2014; Sasso & Maldonado, 2015; Zwick, 2007). Given what is known about college and university environments, it is fair to say that regardless of the institution one is likely to encounter a culture unlike that which exists outside of the campus boundaries and admissions counselors are gatekeepers to college access (Boyer, 1987; Delbanco, 2012).

Developmental Education

On some campuses, students who are deemed underprepared are placed into precollege bridge programs, remedial classes, academic opportunity programs, and TRIO programs that may or may not help but which certainly lend to a higher likelihood of stigmatizing students (Watson et al., 2002). Despite such an education disparity, such individuals originating from this environment are expected to perform at the same level © 2018 Higher Education Politics & Economics

as their more affluent and better academically prepared peers (Carrol, Fulton, Abercrombie, & Yoon, 2004; Strayhorn, 2011). However, these programs such as academic tutoring and developmental education programs should be coupled with a mandatory program (Pitre & Pitre, 2009; Sasso & Maldonado, 2015; Strayhorn, 2011; Suzuki, Amrein-Beardsley, & Perry, 2012).

Moreover, the most difficult transition for these students is not only cultural and social, but one that is also academic. Often the K-12 disparities may have led to academic under preparedness rather than lack of academic capability (Barrat, 2013). The lack of rigorous coursework, low teacher expectations, and limited resources in the urban and rural school systems they previously attended, students may feel they lacked the content knowledge and study skills necessary to succeed when they begin college (Adelman,1999). Pre-college programs often serve a significant role in easing the academic transition to college and establishing the expectations of persistence in skills so that the institution will retain them (Pitre & Pitre, 2009; Sasso & Maldonado, 2015; Strayhorn, 2011). Being exposed to "college life" on campus in pre- college programs through pre-admissions campus visits as well as weekly academic year programs that comprise first-year experience programs and summer residential programs at local colleges meant that the students may better feel prepared to navigate a college campus as freshmen (Sasso & Maldonado, 2015; Strayhorn, 2011).

When committing to institutional college access, part of the capacity initiatives should include an increase in the offerings of tutoring coupled with supplemental and developmental academic. Such courses help close gaps in students' academic preparation by covering and/or reinforcing material from the high school curriculum as well as by developing study skills (Barrat, 2013). Academic enrichment courses such as first-year seminar and their first-year experience programs also provide students with advanced subject content and skills, allowing them to catch up and also engage in significant academic forward movement (DeWitz, Woolsey, & Walsh, (2009).

Support & Retention Programs

According to Horn (2006) at the National Center for Educational Statistics, 56% of middle- and upper-income students who begin college will obtain their degrees within six years. However, only 26% of low-income students will earn their college degrees within the same time period (Engstrom & Tinto, 2008). Support programs demonstrate to students that the institution is committed to fostering their success (Buck, 1985; Giuliano & Sullivan, 2007; Rita & Bacote, 1997).

Bridge programs.

These programs constituted institutionalized interventions to provide equitable educational opportunities for low-income, first-generation, and disadvantaged students

(Gullatt & Jan). They are initiated on a federal, state, community, and institutional level. With varying levels of demonstrated efficacy, the research reveals that precollege programs reveal promise at addressing the educational gap and promoting the educational dream (Pitre & Pitre, 2009; Sasso & Maldonado, 2015; Strayhorn, 2011). Precollege programs have not provided sufficient evidence to support whether they increase the number of students entering college or whether student attrition rates are reduced as a result (Gandara, 2001). However, what is known is that despite the overall lack of substantive evaluations and data, they demonstrate an attempt to ensure access and equity to postsecondary education (Gandara, 2001).

The Federally funded TRIO program consists of a variety of initiatives to support low income, first generation, and other disadvantaged students with their educational pursuits (U.S. Department of Education, 2013c). Campuses often duplicate these efforts to buttress or expand the limited funding and staff they provide. Campuses should not solely rely on these programs, but to truly enhance institutional capacity to access, they offer additional programs and supports.

A small percentage of each year's entering first-generation or minority student population has the benefit of participating in college preparatory programs intended to enhance their college readiness in terms of the academic and social capital that is expected when they arrive on campus in the fall in such bridge programs like those publicized Pennsylvania (Act 101), California (EOP), New York (HEOP), and New Jersey (EOF) (Sasso & Maldonado, 2015; Winograd & Schick Tryon, 2009). Programs such as the federally funded Upward Bound (U.S. Department of Education, 2013a) and Talent Search (U.S. Department of Education, 2013b) programs as well as campus specific bridge programs have proven to be successful in easing the culture shock for those who are fortunate enough to be selected and are able to participate (Pitre & Pitre, 2009; Sasso & Maldonado; Winograd & Schick Tryon, 2009). Summer bridge programs help students gain experience with registering for classes, finding classrooms on campus, and going to the bookstore. Students also develope study habits and skills for succeeding in college courses with additional tutoring and other support provided during such programs (Sasso & Maldonado, 2015; Suzuki et al., 2012; Winograd & Schick Tryon, 2009).

These supports should continue into the first year so that pre-college bridge program staff are not continually overburdened. When students were not academically successful during their first semester, they often did not get much help from college professors or academic advisors (Tinto, 2007). Instead, they reached out to pre-college program staff for academic and social support. This is why the first-year experience program should be a significant portion of continued wrap-around support. Thus,

acclimating students to the college environment is notably important with regard to reducing student transitional issues (Tinto, 2007).

However, pre-college programs and first-year experience programs help them to anticipate and deal with such common anxieties by acclimating them to the college environment. Also, these programs should help students become socially integrated into the campus environment and establish cultural capital (Tinto, 1994). Existing studies show direct correlation between the factors that comprise academic capital and college attendance, performance, and completion (U.S. Department of Education, 2001a; U.S. Department of Education, 2001b). Pascarella, Pierson, Wolniak, & Terenzini, (2004) conclude that differences in social capital function as a handicap for first-generation students in terms of their ability to successfully navigate a system that favors the dominant or prestige culture in our society.

Transition programs.

Welcoming students to college through an intentional, personalized approach to college admissions certainly better establishes a college-bound culture and individual positive expectations by students (Richardson & Skinner, 1990; Seidman, 2007). However, welcoming them to campus is essentially only the initial phase in overall institutional enrollment management plan. The transition to campus and persistence to degree completion is also the next, more difficult experience for both the student and the institutional staff. This is the most significant portion of building the institutional capacity to attract as well as support increased access to marginalized and historically underrepresented populations. Not only are they often the first in their families to go to college with first-generation status, but these students often describe experiencing academic, social, financial, and family issues that made the initial transition to college difficult for them as aforementioned (Barrat, 2013).

Support programs.

Events such as leadership programs etiquette dinners, dress for success training, social networking lessons are designed to build cultural capital, and the presence of these events is one way to understand the aggregate social class of any campus community (Barratt, 2013). Meeting peers from the same family and cultural backgrounds while in such programs helps students transition into college as they begin to interface with the diversity of students once they are on campus. Interacting with peers who had different academic backgrounds also helps to socialize students into the norms and traditional expectations of being a full-time, matriculating student (Tinto, 2006, 2007). Through these experiences and programs, students learn the structure, discipline, and commitment required to participate in the collegiate experience such as attending workshops every week during the academic year or by prioritizing academics over socializing with peers (Bui, 2002). Those students who come to campus with the awareness of social networks

and who have the skills to build and maintain them, will have access to more resources than other students (Barratt, 2011). Further, in their post-college work experiences individuals who can build and maintain personal learning networks will be at an advantage.

Conclusion

As the landscape of higher education continuous to shift and evolve, it is imperative that it meet the demands of an ever-changing, diverse society. With projected enrollment trends revealing the most significant growth in the number of racial and ethnic minority students in particular, colleges and universities will need to be much more intentional with their overall enrollment management practices (Espinosa et al., 2015; NCES, 2013; The Pell Institute, 2015). Other socioeconomic factors, such as college generational status and income level also need to be taken into account in order to ensure an equitable framework for college access and success, since this college-going population is also expected to increase (DeVitis, 2013; Engle et al., 2008).

A fair and equitable enrollment management framework includes intentional practices related to both recruitment/admissions and retention related processes. Beginning from the first point of contact during recruitment season through a recommended holistic application review, the admissions process is one of the most important college access factors (Pascarella, Pierson, Wolniak, & Terenzini, 2004). Furthermore, student engagement strategies that are the most meaningful and beneficial to combating already existing challenges for the historically underrepresented student population should be employed. Examples include early and intrusive academic and career advising, and engaging environments that foster relationships such as learning communities and service learning opportunities (Becker et al., 2010).

As with any institutional goals and outcomes, several stakeholders need to be involved in order to meet the holistic needs of all students. Although enrollment management professionals (e.g., admissions officers) are responsible for the initial recruitment and retention efforts, student affairs offices, faculty and other staff are equally important to the success and persistence for historically underrepresented students especially. Staff who can help students make meaningful connections to their campus experience as it relates to college and career experiences, for example, are integral to student success. Other best practice examples include pre-college outreach programs, early assistance with navigating the college admissions process, and financial literacy. Given the unique needs of the historically underrepresented college student population, intentional and supportive programs like these are necessary for persistence to graduation (DeVitis, 2013; Engle et al., 2008). It is our duty as higher educational

professionals, after all, to lay the groundwork for the experiences by which all student lives can be equitably shaped.

Disclosure Statement

No potential conflict of interest was reported by the authors.

References

- Adelman, C. 1999. Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment. Washington, D.C.: U.S. Department of Education Office of Educational Research and Improvement.
- Astin, A.W. (1993). What matters in college?: Four critical years revisited. San Francisco, CA: Jossey-Bass.
- Barratt, W. (2011). Social class on campus. Sterling VA: Stylus
- Barratt, W. R. (2013, May 24). Etiquette and campus [Web log entry] Retrieved from http://socialclassoncampus.blogspot.com/2013/05/etiquette-andcampus.html
- Becker, K.A., Krodel, K.M., & Tucker, B.H. (2010). Understanding and engaging under- resourced college students. Highlands, TX: aha! Process, Inc.
- Boulard, G. (2004). College access still tied to income, report says. Diverse Issues in Higher Education. Retrieved from http://diverseeducation.com/article/3688/#
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), Handbook of theory and research for the sociology of education (pp. 241-258). Westport, CT: Greenwood Press.
- Boyer, E. (1987). College: The undergraduate experience in America. New York, NY: Harper Row.
- Boylan, H. R., & Bonham, B. S. (2007). Thirty years of developmental education: A retrospective. Journal of Developmental Education, 30(3), 2-4.
- Buck, C. B. (1985). Summer bridge: A residential learning experience for high risk freshmen at the University of California, San Diego (Report no. CG01690; ERIC document reproduction service no. ED264262). Paper presented at the annual meeting of the National Conference on the Freshman Year Experience, University of South Carolina, Columbia.
- Bui, V. T. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and firstyear experiences. College Student Journal, 36, 3.
- Burton N. D. (2006). Career advisors: A new breed. Retrieved from http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/careeradvisors.asp

- Carrol, T., Fulton, K., Abercrombie, K., & Yoon, I. (2004). *Fifty years after* Brown v. Board of Education: *A two-tiered education system*. Retrieved from http://wwwpathwaystocollege.net?PCNLibrary?ViewBiblio.aspx?aid=11
- Chickering, A. W. & Reisser, L. (1993). *Education and Identity* (2nd ed). San Francisco, CA: Jossey-Bass Publishers.
- Consolacion, T. B., Russell, S. T., & Sue, S. (2004). Sex, race/ethnicity, and romantic attractions: Multiple minority status adolescents and mental health. *Cultural Diversity and Ethnic Minority Psychology*, *10*(3), 200-214.
- Davis, J. (2010). The first-generation student experience: Implications for campus practice, and strategies for improving persistence and success. Sterling, VA: Stylus.
- Delbanco, A. (2012). *College: What is was, is, and should be.* Princeton, NJ: Princeton University Press.
- Dennis, J. M., Phinney, J., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first- generation college students. *Journal of College Student Development*, 46, 223-236.
- DeVitis, J. L. (Eds.) (2013). *Contemporary colleges and universities: A reader*. New York, NY: Peter Lang.
- DeWitz, S. J., Woolsey, M. L., & Walsh, W. B. (2009). College student retention: Anexploration of the relationship between self-efficacy beliefs and purpose of lifeamong college students. *Journal of College Student Development*, 50(1), 19–34.
- Duranczyk, I. M., & Higbee, J. L. (2006). Developmental mathematics in 4-year institutions: Denying access. *Journal of Developmental Education*, 30(1), 22–31.
- Early, J.S., DeCosta-Smith, M., & Valdespino, A. (2010). Write your ticket to college: A genre- based college admission essay workshop for ethnically diverse, underserved students. *Journal of Adolescent & Adult Literacy*, *54*(3), 209-219.
- Engle, J., Tinto, V., & Pell Institute for the Study of Opportunity in Higher Education. (2008). Moving beyond access: College success for low-income, first-generation students. *Pell Institute for the Study of Opportunity in Higher Education*.
- Engstrom, C., & Tinto, V. (2008). Access without support is not opportunity. *Change*, 40(1), 46 50.
- Espinosa, L. L., Gaertner, M., & Orfield, G. (2015). Race, class, and college access: Achieving diversity in a shifting legal landscape. *American Council on Education*.
- Fosnacht, K. (2013). Undergraduate coping with financial stress: A latent class analysis. Paper presented at the annual meeting of the American College Personnel Association. Retrieved from

- http://cpr.iub.edu/uploads/Fosnacht%20-%20ACPA%20-%20Financial%20Stress.pdf
- Gandara, P. (2001). Paving the way to postsecondary education: K–12 interventions for underrepresented youth. Washington, DC: National Center for Education Statistics.
- Gordon, V. N., & Steele, G. E. (2003). Undecided first-year students: A 25-year longitudinal study. Journal of the First-Year Experience, 1 (1), 19–38.
- Giuliano, B., & Sullivan, J. (2007). Academic wholism: Bridging the gap between high school and college. American Secondary Education, 35(3), 7–18.
- Grable, J.E., Law, R., & Kaus, J., (2012), The need for financial education programs. In Durband, D.B., & Britt, S.L. (Eds). Student financial literacy campus-based program development, New York. Springer, 9–26.
- Grant-Vallone, E., Reid, K., Umali, C., & Pohlert, E. (2003-2004). An analysis of the effects of self-esteem, social support, and participation in student support services on students adjustment and commitment to college. Journal of College Student Retention, 5(3), 255-274.
- Hall, W. D., Cabrera, A. F., & Milem, J. F. (2011). A tale of two groups: Differences between minority students and non-minority students in their predispositions to and engagement with diverse peers at a predominantly white institution. Research in Higher Education, 52, 520-539.
- Hertel, J. B. (2002). College student generational status: Similarities, differences, and factors in college adjustment, The Psychological Record, 52, 3-18.
- Horn, L. (2006). Placing college graduation rates in context: How 4-Year college graduation rates vary with selectivity and the size of lowincome enrolment. The National Center for Educational Statistics: Washington, D. C.
- Ishitani, T. (2006). Studying attrition and degree completion behavior among firstgeneration college students in the United States. The Journal of Higher Education, 77(5), 861-885.
- Johnson, E.J., & Brandt, E.A. (2009). Targeting diversity: A critical description of language policy and public education in the United States. Harvard Journal of Hispanic Policy, 21, 59-68.
- Johnson, E. J., & Castrellon, T. (2014). Recoding discourses in higher education: Critical views on recruiting materials for Latin@ college students. Journal of Latinos & Education, 13(3), 166-180.
- Kerr, C. (2001). The uses of the university: Fifth edition. Cambridge, MA: Harvard University Press.
- King, J. E. (1996). The decision to go to college: Attitudes and experiences associated with college attendance among low-income students. Washington, D.C.: The College Board.

- Kuh, G. D. (2005). Student engagement in the first year of college. In L. M. Upcraft, J. N.Gardner, and B. O. Barefoot (Eds.), *Challenging and supporting the first-year student (pp.86–107)*. San Francisco, CA: Jossey-Bass.
- Lepre, C. (2007). Getting through to them: Reaching students who need career counseling. *Career Development Quarterly*, 56(1), 74-84.
- Luzzo, D. A. (1999). Identifying the career decision-making needs of nontraditional college students. *Journal of Counseling & Development*, 77(2), 135-140.
- Luzzo, D. A., & McWhirter, E. H. (2001). Sex and ethnic differences in the perception ofeducational and career-related barriers and levels of coping efficacy. *Journal of Counseling & Development*, 79, 61-67.
- Marx, G. (2006). Sixteen trends, their profound impact on our future: Implications for students, education, communities, countries, and the whole society. Alexandria, VA: Educational Research Service.
- McCarron, G. P., & Inkelas, K. K. (2006). The gap between educational aspirations and attainment for first-generation college students and the role of parental involvement. *Journal of College Student Development*, 47(5), 534-549.
- McWhirter, E. H. (1997). Perceived barriers to education and career: Ethnic and gender differences. *Journal of Vocational Behavior*, 50(1), 124-140
- National Center for Educational Statistics, (2013). National postsecondary student aid study.
 - Retrieved from http://nces.ed.gov/surveys/npsas/
- National Center for Education Statistics (2013, January). *Projection of Education Statistics to 2021*. Retrieved from http://nces.ed.gov/programs/projections/projections2021/sec5c.asp
- The National Center for Fair & Open Testing. (n.d.). Retrieved March 18, 2016, from http://fairtest.org/
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *The Journal of Higher Education*, 75, 249-284.
- Perkhounkova, Y., Noble, J., &McLaughlin, G. (2006). Factors related to persistence of freshmen, freshmen, transfers, and nonfreshmen transfer students. AIR Professional File, *99*, 1-9.
- Pike, G. R., and Kuh, G. D. (2005). A typology of student engagement for American colleges and universities. *Research in Higher Education*, 46(2), 185-209.
- Pitre, C.C., & Pitre, P. (2009). Potholes on the road to college: High school effects in shaping urban students' participation in college application, four-year

- college enrollment, and college match. *Sociology of Education*, 84(3), 178-211.
- Pritchard, M. E. & Wilson, G. S. (2003). Using emotional and social factors to predict student success. *Journal of College Student Development*, 44(1), 1828.
- Reeves, E. & Lowe, J. (2009). Quantile regression: An education policy research tool. *Southern Rural Sociology*, *24*(1), 175-199.
- Renick, J. (2006). A call to action for providing access. *Presidency*, 9(3), 20–25.
- Richardson, R. C., Jr., & Skinner, E. (1990). Adapting to diversity: Organizationa influences on student achievement. *Journal of Higher Education*, 61(5), 485-511.
- Ringer, C. H., & Dodd, J. E. (1999). Why are they communication majors?: Factors influencing students' career decisions. *Community College Journalist*, 26, 2-4.
- Rita, E., & Bacote, J. B. (1997). The benefits of a college discovery prefreshmen summer program for minority and low-income students. *College Student Journal*, 31(2), 161.
- Roderick, M., Coca, V., & Nagaoka, J. (2011). Potholes to success: High school effects in shaping urban students' participation in college application, four-year college enrollment, and college match. *Sociology of Education*, 4(3), 178-211.
- Roscoe, J. L. (2015). Advising African American and Latino students. *Research & Teaching in Developmental Education*, 31(2), 48-60.
- Sackett, P. R., Kuncel, N. R., Arneson, J. J., Cooper, S. R., & Waters, S. D. (2009). Does socioeconomic status explain the relationship between admissions tests and post-secondary academic performance?. *Psychological bulletin*, 135(1), 1.
- Sacks, P. (2007) *Tearing down the gates*. Berkeley, CA: University of California Press.
- Sasso, P. A. & Maldonado, J. (2015). The effectiveness of U.S. summer bridge programs in supporting minority Student college admissions. In Stead, V. (Eds). *International perspectives on higher education admission policy*. New York, NY: Peter Lang Publishing.
- Seidman, A. (Ed.) (2005). College student retention: Formula for student success. Westport, CT: ACE/Praeger.
- Seidman, A. (Ed) (2007). Minority student retention. The best of the Journal of College Student Retention: Research, Theory & Practice, Amityville, NY: Baywood Publishing Co.
- Shim, S., Barber, L., Card, N., Xiao, J., & Serido, J. (2009). Financial socialization of first-year college students: The roles of parents, work, and education. *Journal of Youth Adolescence*, 29. 1457-1470.
- Somers, P., Cofer, J., and Vander Putten, J. (2002). The early bird goes to college: The link between early college aspirations and postsecondary matriculation. *Journal of College Student Development* . 43(1): 93-107

- Strage, A., & Brandt, T. S. (1999). Authoritative parenting and college students' academic adjustment and success. *Journal of educational Psychology*, 91(1), 146.
- Strauss, L. C., & Volkwein, F. (2002). Comparing student performance and growth in 2-and 4-year institutions. *Research in Higher Education*, 43(2), 133-161.
- Strayhorn, T.L. (2011). Bridging the pipeline: Increasing underrepresented students' preparation for college through a summer bridge program. *American Behavioral Scientist*, *55*(2), 142-159.
- Super, D. E. (1990). A life-span, life-space, approach to career development. In D. Brown & L. Brooks (Eds.), *Career choice and development*. San Francisco, CA: Jossey-Bass.
- Suzuki, A., Amrein-Beardsley, A., & Perry, N. J. (2012). A summer bridge program for under-prepared freshmen: Confidence, community, and re-enrollment. *Journal of the First-Year Experience and Students in Transition*, 24(2), 85-106.
- Syverson, S. (2007). The role of standardized tests in college admissions: Test-optional admissions. *New Directions for Student Services, 118*, 55-70.
- The Pell Institute for the Study of Opportunity in Higher Education (2015).

 Indicators of Higher Education Equity in the United States: 45 Year

 Trend Report. Retrieved from

 http://www.pellinstitute.org/downloads/publicationsIndicators_of_Higher_Education_Equity_in_the_US_45_Year_Trend_
 Report.pdf
- Terenzini, P. T., Rendon, L. I., Upcraft, M. L., Millar, S. B., Allison, K. A., Gregg, P. L., & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education*, *35*, 57–73.
- Theilan, J. R., & Gasman, M. (2011). Historical overview of American higher education. In J.H. Schuh, S. R. Jones, & S. R. Harper (Eds.), *Student services: A handbook for the profession* (5th ed., pp. 3-23). San Francisco, CA: Jossey-Bass.
- Tinto, V. (2006). Research and practice of student retention: What next? *Journal of College Student Development*, *5*(1), 1–19.
- Tinto, V. (2007). Research and practice of student retention: What next? *Journal of College Student Retention: Research, Theory & Practice*, 8(1), 1-19.
- Tinto, V. (1994). *Leaving college: Rethinking the causes and cures of student attrition*. (2nd ed.).University of Chicago Press; Chicago.
- Titus, M.A. (2006). Understanding college degree completion of students from low socioeconomic status: The influence of the institutional financial context. *Research in Higher Education*, 47(4), 371-398.
- U.S. Department of Education, (2001a). National Center for Education Statistics. *Bridging the Gap: Academic Preparation and Postsecondary Success of First-Generation Students (NCES 2001–*

- 153). Retrieved from http://nces.ed.gov/das/epubs/pdf/2001153 es.pdf.
- U.S. Department of Education, (2001b). National Center for Education Statistics, Students Whose Parents Did Not Go to College: Postsecondary Access, Persistence, and Attainment (NCES 2001– 126).
- U.S. Department of Education, (2012). Federal Pell Grant Program. http://www2.ed.gov/programs/fpg/index.html
- U. S. Department of Education, (2013a). Upward Bound Program. Retrieved from http://www2.ed.gov/programs/trioupbound/index.html
- U.S. Department of Education, (2013b). Talent Search Program. Retrieved from http://www2.ed.gov/programs/triotalent/index.html
- U.S. Department of Education, (2013c). Federal trio programs home page. Retrieved from http://www2.ed.gov/about/offices/list/ope/trio/index.html
- Walpole, M., McDonough, P.M., Bauer, C.J., Gibson, C., Kanyi, K., & Toliver, R. (2005). This test is unfair: Urban African American and Latino high school students' perceptions of standardized college admissions tests. Urban Education, 40(3), 321-349.
- Warren, J. (2013). The rhetoric of college application essays: Removing obstacles for low- income and minority students. American Secondary Education, 42(1), 43-56.
- Watson, L. W., Terrell, M. C., Wright, D. J. & Associates, (2002). How minority students experience college: Implications for planning and policy. Sterling, VA: Stylus.
- Wightman, L. F. (2000). The role of standardized admission tests in the debate about merit, academic standards, and affirmative action. Psychology, Public *Policy, And Law*, *6*(1), 90-100.
- Winograd, G. & Shick Tryon (2009). Counseling expectations among students in an opportunity program: Dispositional and cultural influences. Journal of Counseling and Development, 87(4), 438-448.
- Wolfe, R. N. & Johnson, S. D. (1995). Personality as a predictor of college performance. Educational and Psychological Measurement, 55(2), 177-185.
- Xiao, J. J., Shim, S., Barber, B., & Lyons, A. (2008). Academic success and wellbeing of college students: Financial behaviors matter. Tucson, AZ: Take Charge America Institute for Consumer Financial Education and Research. Retrieved from http://www.cefe.illinois.edu/research/reports/Academic Success and Well-Being of College Students 112007.pdf
- Xiao, J. J., Newman, B. M., Prochaska, J. M., Leon, B., Bassett, R. L., & Johnson, J. (2004). Applying the transtheoretical model of change to debt reducing behavior. Financial Counseling and Planning, 15(2), 89–100.

Zwick, R. (2007). College admissions in 21st century America: The role of grades, tests, and games of chance. *Harvard Educational Review*, 77(4), 419-429.