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Reframing the Narrative of Hispanic Student Success: From Pipelines to Ecosystems

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The terms Hispanic and Latino/a

are used interchangeably within the context of this manuscript.

Abstract

At one time the analogy of a pipeline that funneled students from K-12 through higher education and on to a career was appropriate. Due to the multiple entryways that students can obtain high school credit and enter into higher education, a pipeline is no longer applicable. Students can take Advanced Placement, International Baccalaureate, dual-credit or early college high school to earn college credit. Within higher education, students can earn credits for licensure and certificate programs for immediate entry into the workforce or transfer from a two-year to a four-year institution for an advanced degree. Through reverse transfer agreements, students can earn an associate's degree from one institution and a bachelor's from another. Through multiple ingress and egress, we are no longer working with a pipeline but an ecosystem built from partnerships in conjunction with interested parties from the community to advance student success.

Keywords: collaborative partnership, anchor institutions, ecosystems

Somewhere in a rural community, the Superintendent of the local school district walks into a community meeting on workforce development and happens to sit next to the President of the local college. They start talking about state budgets and the impact they will have on their respective institutions. The Superintendent is concerned that due to the tough economic times in the area, many of his high school students, upon turning 16, are dropping out of school to get a job. Empty seats equals less state funding to the district. Some students are even leaving the community for better economic prospects. The President of the local college remarks that a program at her college meant to provide certificates in various trade jobs, such as electrical, plumbing, wielding, diesel maintenance, solar installation, etc., is not attracting enough eligible students in the community. A lightbulb clicks on, the President turns to the Superintendent and asks, "Do you think your students could finish their high school diploma in a year while earning a certificate for a more lucrative job?" A member of the city council happens to overhear their conversation and tells them that a local store on main street is closing and rather than have an empty space, the city will lease the space to the school district and college for a fraction of the cost if they can all work together.

Although this conversation has been oversimplified, sometimes a collaborative partnership can occur this simply and organically. Realistically, as PK-12 and higher education institutions are asked to do more with fewer resources, different community stakeholders have intentionally come together to facilitate these partnerships. Whether the reasons stem from an isolated geography, limited infrastructure, fiscal resources or simply a mandate from the state to do more with less, community stakeholders are beginning to

work with each other to increase educational and economic opportunities for the community.

Diversity of Institutional Types in Higher Education

Higher education is the great equalizer that will bring equality and prosperity to everyone, or so President Johnson thought when he signed the Higher Education Act of 1965 into law. In time, we have realized that for institutions that serve underrepresented students, this goal is more difficult to reach. Within institutions of higher education (IHEs), there are a subset of schools known as minority serving institutions (MSIs) that have carved out a niche in the nation, serving the needs of low-income, underrepresented students of color. For many underrepresented students, MSIs are the gateway to higher education. According to Rutgers Center for Minority-Serving Institutions, Historically Black Colleges and Universities (HBCUs), Hispanic-Serving Institutions (HSIs), Tribal Colleges and Universities (TCUs) and Asian American, Native American, and Pacific Islander Serving Institutions (AANAPISIs) emerged in response to a history of inequity and lack of minority people's access to majority institutions. Rutgers Center states that in 2012, MSIs enrolled approximately 3.6 million undergraduate students per year-20% of all undergraduate students enrolled in higher education. While HBCUs represent just 3% of all colleges and universities, they enroll 11% of African American students. TCUs represent less than 1% of higher education institutions and enroll 9% of Native American students. AANAPISIs represent less than 1% of all colleges and universities yet enroll 20% of all Asian Americans and Pacific Islanders.

In the case of HSIs, they represent a singular and distinct enrollment of students. HSIs represent slightly more than 15% of all colleges and universities yet enroll 66% of all

Hispanics in higher education. Additionally, they enroll more African Americans than all the Historically Black Colleges and Universities combined, more Native Americans than all the Tribal Colleges and Universities, more Asian Americans than any other institutional cohort, and a sizeable number of white students. They are home to students from all known national origins and ethnic backgrounds in the country. HSIs are a microcosm of 21st Century America.

In 1992, the Hispanic Association of Colleges and Universities (HACU) led the effort to convince Congress to formally recognize campuses with high Hispanic enrollment as federally designated "Hispanic-Serving Institutions" (HSIs) and to begin targeting federal appropriations to those campuses. As a result, HSIs were first recognized in federal legislation with the 1992 amendments to the Higher Education Act of 1965 (HEA). Subsequently, approximately 100 HSIs were designated in FY 1995 for grant funding purposes. Their explosive growth since then, both in number and student enrollment, was driven by the rapid increase in Hispanic population, the gains made in Latino/a high school graduation, and by the demands from the American workforce for greater postsecondary education. Since 2009, on average, 30 new HSIs have emerged annually. Currently, there are 523 Hispanic-Serving Institutions and 328 emerging Hispanic-Serving Institutions.

The Pre-College Pipeline for Hispanic Students

Subsequently, in recognizing the critical value of adequate preparation at the PK-12 level, in 2005, HACU established the Hispanic-Serving School District (HSSD) affiliation for school districts with 25% or more Hispanic student enrollment. HACU, in taking on

this new initiative, understood that PK-16 pipeline issues facing Hispanic students could not be resolved without bringing higher education and school districts together to address critical issues within the Hispanic educational pipeline. According to Cantor, Englot and Higgins (2013),

> A starting place, therefore, for sustainable anchor institution work is to move beyond the one-way flow of intellectual capital and technology transfer independently generated within the ivory tower and given to communities. Instead, universities need to create communities of experts, with coalitions from within and outside the academy that draw on diverse collective expertise to make a difference. If universities want to take on the economic, environmental, educational, social, and health challenges of metropolitan America, and revive the nation's urban cores, they must merge *innovation* and *full participation* as linked means to a more prosperous and just end (p.20-21).

Throughout history, the well-known disconnect between K-12 and postsecondary education has inhibited the ability of schools and colleges to address the issues of inadequate preparation for college, high levels of remediation, and low rates of college completion (Venezia, A. Kirst, M. and Antonio, A., 2003). School districts and institutions of higher education have been talking at each other and not to each other when discussing the critical issues that create challenges for first-generation, underrepresented students. Discussions about the unhealthy divisions between the two educational systems mostly fell on deaf ears, but there has been a renewed recognition on the part of policymakers, educators, and legislators as to just how inefficient and even harmful these gaps have been. Even as the 1990s were coming to a close, partnerships were viewed so positively that they

appeared as mandates in federal statutes, such as the Higher Education Act of 1998 and the re-authorization of the Elementary and Secondary Education Act (Barnette, Hall, Berg and Camarena, 2010).

Collaboration partnerships between PK-12 and higher education are most needed in institutions working with underrepresented populations. Most recently, the impetus for collaboration has arisen from the changing demography, on a national level, within school districts and their subsequent impact on institutions of higher education. Higher education institutions are becoming increasingly diverse, and the demographics of the nation are shifting to reflect the diversity and fast-growing minority populations (Núñez, Hurtado, Calderón Galdeano, 2015). Between 2008 – 2018, the Latino population growth in the West increased by 19%, in the Midwest by 24%, in the Northeast by 25% and in the South by 33% (Pew Research Hispanic, 2019). The Hispanic population in the United States (U.S.) is on the rise with some projections indicating that by 2050, at least 3 in 10 U.S. residents will be of Hispanic origin (Saenz, 2010). According to the US Census Bureau, the latest data indicates that the total number of students, nationwide, enrolled in education in 2017, was 76.4 million. White, Non-Hispanic comprised 54.7% of the students enrolled in higher education; down from 66.1% in 2007, compared to 19.4% Hispanics enrolled in 2017, which increased from 12.1% in 2007. Similar shifts occurred in K-12 enrollments with 50.9% White, Non-Hispanic in 2017; a decrease from 57.6% in 2007. Overall Hispanic student enrollment increased by 5.2%, from 19.9% in 2007 to 25.1% in 2017. Current demographics indicate an increase in the number of Hispanic students enrolled in the K-12 system. According to Fry and Gonzales (2008), today's kindergartners offer a glimpse of tomorrow's demographics across the nation. There are 17 states where Hispanic

children comprise at least 20% of the public school kindergarten population (Fry & Gonzales, 2008). In Kansas and Oregon, 25% of the kindergartners are Hispanic; the same share as in New York, which has the 4th largest population in the country (Fry & Gonzales, 2008). Within 10-15 years, these Hispanic students will be matriculating and enrolling into emerging and established minority serving institutions throughout the U.S. Even within MSIs, the student demographics are rapidly changing. According to a HACU analysis of 2017 IPEDS data, nearly 29 % of the nation's PK-12 and 20 percent of college students are Hispanic. As the non-Hispanic white student enrollment continues to decline, Hispanics will increase their share of student enrollment at all levels in the years ahead. In some of the largest states, like California and Texas, more than half of the PK-12 enrollment is Hispanic. Other states are moving in the same direction, such as Florida, New York, and Arizona. This surge of PK-12 Hispanic enrollment across the nation will continue to increase Latina/o college entrance.

Increasing Economic Mobility for the Most Needy Students

According to HACU, in 2016-17, HSIs enrolled 66% of Hispanics, 39% of Asian Americans and Pacific Islanders, 21% of African Americans, and 18% of Native Americans (2019). With the increasing diversity on an HSI campus, HSIs are no longer just about serving Hispanic students but a future workforce. Hispanic degree attainment is in the nation's interest given the increased awareness of Hispanics' demographic growth in the U.S., the importance of an educated citizenry, and the need for a well-educated workforce to remain economically competitive (Santiago, 2012). The issue of having an educated nation and viable workforce is contingent upon the success of educating the fastest-growing minority population and ensuring their progression through the educational pipeline.

America's labor force is becoming increasingly Hispanic. The U.S. Census Bureau projects that nearly three of every four new entrants to the national workforce from 2010-20 will be Hispanic. Yet Latinos/as remain at the bottom of the educational attainment ladder. The economic and civic future of our nation is synonymous with the success of Hispanic students. They will be our workforce, civic and community leaders, and parents of the next generation. Nevertheless, too many qualified students encounter insurmountable barriers in their pursuit of higher education. Financial barriers are often at the forefront. For example, HSIs enroll nearly one out of four Federal Pell Grant recipients. HSIs received $6.7 billion of the total $26.8 billion in Federal Pell Grants in 2016 or 25% of the total, and, on average, serve a full-time student body with over 50 % needy students. While HSIs are among the lowest resourced colleges and universities educating the most diverse and underserved student populations in the nation, they are uniquely positioned to play an important role in the economic and career development of their students. For example, according to the most widely cited study on economic mobility by the Equality of Opportunity Project, HSIs represented 7 of the top 10 colleges and universities that produced the greatest level of economic mobility for college students.

The Convergence of Educational Pipelines

HSIs receive 68 cents for every dollar going to all other colleges and universities annually, per student, from all federal funding sources (HACU, 2019). As HSIs continue to receive reduced funding as compared to pre dominantly White institutions (PWIs), partnerships between university and PK–12 institutions are more than an instructional relationship based on a one-way flow of information from an expert to his or her novice

students. The construct of "partnership" implies direct benefits for all parties involved, each with expertise or skills to contribute, working toward a common goal (Barnette, Hall, Berg and Camarena, 2010). No single institution can meet the needs of a diverse and increasing number of students with different education, social and cultural challenges. There is a growing need for educational institutions to collaborate with each other in addressing diverse concerns of the various students within these institutions. Porter (1987), Welch and Scheriden (1993) viewed collaboration as an important element in the survival and growth of educational institutions, which can benefit the institutions as well as the students enrolled in these institutions. Schools and universities must work together to forge long-term relationships that can benefit both types of institutions and will lead to improvement that can come only from collaborative effort. Erlandson, Skrla, Westbrook, Hornback and Mindiz-Melton (1999), Robbins and Skillings (1996), and Russell and Flynn (2000) observed that evidence of successful school-university collaboration is spotty and that survival qualities of school-university collaboration go beyond mere mechanical arrangement for student teachers in the schools, the most common form of the partnership being teachers' education. Russell and Flynn (1992) asserted that school-university collaboration is more than a case of institutional friendliness of 'You scratch my back, I will scratch yours,' but, rather, it involves working together to address common concerns with a specific agenda for action.

Public schools and universities both acknowledge that they represent two communities that share a common purpose. Participants in both institutions are concerned with curriculum content, instructional strategies, and learning environments. All are committed to designing educational experiences that enable students to develop socially,

emotionally and intellectually. A review of the literature on collaboration between PK-12 schools and universities reveals a lack of an adequate definition for such partnerships (Clifford & Millar, 2007). School-university partnerships range from cooperative agreements to true collaborations. They often transform from what was originally intended due to lack of structure and sound practices (Marlow, 2000). Marshall (1999) emphasizes the importance of both partners engaging in a shared teaching and learning experience. Not only should the school/district program be viewed as the recipient of expertise knowledge, but the university partners should value the benefit of engaging in authentic PK-12 schooling experiences outside of the usual observations (Walkington, 2006). Stephens and Boldt (2004) propose that the main goal of school/university partnerships should be the concurrent revitalization of institutions of higher education, specifically schools of education and of PK-12 schools.

The major impediments to collaborative partnerships are those associated with the following major areas: (a) cultural gap; (b) administrative support; (c) resources; and (d) complexity of collaborative process (Wasonga, Rari & Wanzare, 2011). The ways in which individuals in school-university collaboration engage one another in constructive, problem solving behavior to address collaborative concerns must be identified. The partners must develop means for effective and efficient sharing of information and knowledge relative to their collaborative links. School-university collaboration must be conceptualized in terms of distinct endeavors within the total contexts of school and university functions. Collaboration between schools and universities does not work in isolation; it is affected by other aspects or variables within these two types of institutions. The process should be considered in the context of the total school and university organizations. The

organizational factors which must be considered include: (a) objectives; (b) development strategies; (c) human relations; (d) material resources; and (e) policies (Wasonga, et al, 2011). Similarly, individual factors, such as beliefs, philosophies and time available, must also be considered. Abundant in the literature are examples of failure in such collaborations due to a lack of initial communication and planning or misunderstandings by one of the parties. According to Sandlin and Feigen, a successful, "joint intellectual effort" can result in the school district-university collaboration when "care is given to the initial planning stage of the collaboration as well as establishing clear guiding principles and choosing a cohesive group of members" (1995, p. 76).

It is important to examine the transition of Hispanic students from secondary to post-secondary education and their subsequent college choices. According to Turley (2009), the ability to attend college close to home is often among the most important factors considered by U.S. high school students, especially minority and socioeconomically disadvantaged populations. The location of college and universities is significant for socioeconomically disadvantaged students because of cost-savings associated with living at home related to rent, food, and utilities, as well the availability of cheaper in-state tuition rates (Turley, 2009). Furthermore, the importance of location of colleges and universities is not only important with regard to financial obligations, but it is also important for maintaining familial ties (Turley, 2009). These considerations can be taken into account when examining the college choices of Hispanic students at institutions of higher education across the country, with particular attention paid to the characteristics of institutions where the preponderance of Hispanic students are enrolling, Hispanic Serving Institutions (Núñez et al., 2015). Within the continental U.S., HSIs tend to be concentrated in states with a

history of large Hispanic populations, like California, Texas, Florida, Arizona, New Mexico, and New York (Torres & Zerquera, 2012). Most HSIs have emerged within the last 30 years due to social, political, economic, and demographic factors. HSI's contribution to a healthier economy and greater social and cultural integration of the U.S. as a whole should be explored; the social and economic well-being of the nation increasingly depends on the education benefits accrued by the Hispanic population (Laden, 2004). At the same time, Hispanics are among the least educated of the U.S. population, but given their numbers, they are making a significant impact in classrooms at all levels (Laden, 2004).

Accordingly, examining enrollment trends of Hispanic students is important because enrollment choices offer insights into how colleges and universities may emerge as HSIs (Torres & Zerquera, 2012). Considering the next set of HSIs is important because these institutions continue to play an important role in educating Hispanic college students (Torres & Zerquera, 2012). Furthermore, there is a focus on community college HSIs due to their role in providing entry into higher education for most Hispanics and a growing number of other racial and ethnic students (Laden, 2004). Holistically, examining enrollment choices will be coupled with addressing HSI effectiveness, which includes considering: educational attainment; enrollment of students and efforts to support and graduate; graduation rates as a measure of educational attainment; connecting an increase in HSIs and Hispanic educational attainment; and intentionality in enhancing Hispanics' educational experience (Santiago, 2012). Describing higher education enrollment trends among Hispanic students is the first step in ensuring student success and societal economic vitality.

From Pipelines to Ecosystems

Despite growing demand for higher education, the nation has failed to take the steps to ensure that public four-year universities have the capacity to accommodate these eligible students. It is a moral, social, and economic imperative that our nation's educational system provide every student the opportunity to attend and successfully complete college. Moreover, disparate outcomes based on economic circumstances or race, ethnicity, or gender are unacceptable. It is imperative that we address the racial, ethnic, and gender gaps that begin in high school or earlier and persist through college completion.

Minority students and their families believe in the importance of a college degree and that it is key to their future prosperity (Valencia & Black, 2002). Working from a students' perspective, minority students find themselves stymied by requirements or barriers that keep them from accessing or completing a college education, including: lack of information, financial resources; conflicting requirements for entry, remediation, confusing transfer pathways between community colleges and universities and graduation (Martinez, 2014). The administrators of educational institutions and organizations need to work together to focus on targeted, strategic ways to improve how our nation's educational systems and institutions provide the information, channels, and resources students need to complete a post-secondary degree.

All educational institutions share responsibility for student success. Identifying and understanding institutional obstacles that block or slow down a student's college trajectory is a first step. Too often, however, this turns into finger pointing between educational institutions, or detailing of students' shortcomings as a way to explain unsatisfactory results. Unfortunately, when multiple institutions are brought together, their

bureaucracies/organizational leaderships are incompatible even if their missions are similar in task and orientation. We need to try a different approach, reframing student success as a responsibility shared by all educational institutions that students attend on their way to and through college. Most low-income, minority students attend colleges within commuting distance of their homes (Fry, 2005). These attendance patterns create opportunities to align educational offerings, expectations, and opportunities among high schools, colleges, and universities serving those students. By supporting local and regional collaborations, secondary and postsecondary institutions can work together to identify major barriers and work together to improve college success. Working regionally allows communities to support interventions tailored to different economic and cultural conditions, populations, and priorities, an important consideration in minority communities where one size seldom fits all. Working in regions also means that increasing educational attainment is linked with strategies to improve regional economies. These efforts involve school districts, colleges and universities, businesses, and civic leaders working together to set regional education goals, to align leaders, resources, and decision-making, and to measure progress—all in pursuit of student success and thriving communities. Despite the challenges of changing demographics, reductions in education budgets, and standardized testing, in some regions PreK-12 and higher education institutions are working together in an effective and efficient manner to guarantee the success of Hispanic students and close the education gaps. Within their research, Barnett, Hall, Berg & Camarena (2010) state that as prominent as partnerships have become, creating and sustaining them is new, complex, and important work for most educators.

To assist with these partnerships, HACU, with assistance from Congressman Castro's office has introduced the Hispanic Educational Resources and Empowerment (HERE) Act of 2019. The HERE act serves as an amendment to Title V of the Higher Education Act to promote and support opportunities for academic alliances and collaborative partnerships between HSIs and HSSDs in order to improve post-secondary attainment and to expand and enhance the course offerings, program quality, and overall functionality of the colleges, universities and school districts that educate the majority of Hispanic students. PK-12 and higher education institutions need to implement policies that support effective practices to improve student outcomes and encourage innovations within and across institutions. Policies that are responsive to the problems practitioners in the field identify are needed at the federal, state and institutional level, and advocacy is needed to inform and support these changes. Leaders in higher education and PK-12 communities, need to promote and empower communities and institutions to create a shared vision and sense of purpose, to form partnerships with strong and lasting ties with common language and information. Instead of leading with anecdotal solutions, strategic partners must turn to student data, identify issues, explore alternatives, and plan practical and tailored solutions. There must be a reframing of solutions. For this reason, partnerships should see themselves not as pipelines that are one dimentional and miopic, but instead as part of a regional educational ecosystem that is multi-dimentional and macro.

If we think of our educational institutions as a microcosm of the communities we live in then our institutions of higher education specifically Hispanic-Serving Institutions have physically and metaphorically become an embedded and trusted anchor institution by building civil infrastructure to enable lasting social infrastructure, as defined by Cantor,

Englot and Higgins (2013). As an anchor institution pursuing a vision emphasizing the need to partner with others outside academe to increase the impact of scholarship on the pressing problems of the world, we need to engage with communities of experts as complex as the challenges we face today. Along with experts from multiple scholarly disciplines, partners from the public, private and non-profit sectors need to be included to create these ecosystems.

References

Barnett, B. G., Hall, G. E., Berg, J. H., & Camarena, M. M. (2010). A typology of partnerships for promoting innovation. Journal of School Leadership, 20(1), 10-36.

Cantor, N., Englot, P., & Higgins, M. (2013). Making the work of anchor institutions stick: Building coalitions and collective expertise. *Journal of Higher Education Outreach and Engagement*, *17*(3), 17-46.

Clifford, M. & Millar, S. B. (2007). *K-20 partnerships: Literature review and recommendations for research.* Arlington, VA: National Science Foundation.

Erlandson, D. A., Skrla, L., Westbrook, D., Hornback, S., & Mindiz-Melton, A. (1999). Reshaping urban education: A school–community–university collaborative initiative. *Journal of School Leadership*, *9*(6), 552-573.

Fry, R. A. (2005). The high schools Hispanics attend: Size and other key characteristics. Washington, DC: Pew Hispanic Center.

Fry, R., & Gonzales, F. (2008). One-in-Five and Growing Fast: A Profile of Hispanic Public School Students. Pew Hispanic Center.

Hispanic Association of Colleges and Universities Office of Policy Analysis and Information, Analysis of 2017-18 IPEDS data using Title IV eligible, 2 year & 4 year, Public and Private, non-profit institutions. July, 2019

Hispanic Association of Colleges and Universities (2019). 2019 Fact Sheet on Hispanic Higher Education and HSIs. Retrieved from https://www.hacu.net/hacu/HSI_Fact_Sheet.asp.

Hispanic Association of Colleges and Universities (2019). Hispanic Educational Resources and Empowerment Act of 2019. Retrieved from https://www.hacuadvocates.net/HEREAct?4

Hispanic Association of Colleges and Universities (2019). HSI Definitions. Retrieved from https://www.hacu.net/hacu/HSI_Definition1.asp.

Laden, B. V. (2004). Hispanic-serving institutions: What are they? Where are they? *Community College Journal of Research and Practice, 28*, 181-198.

Martinez, M. A. (2014). College information, support, and opportunities for all? Journal of Cases in Educational Leadership, 17(2), 94-107.

Marlow MP (2000). Collegially, collaboration and Kuleana: three critical components for sustaining effective school-university partnerships. Educ., 121(1): 188-195.

Marshall, C. S. (1999, Spring). Constructing knowledge about teaching and learning in early childhood teacher education because of a partnership. Education, 199(3), 400-408.

Núñez, A.M., Hurtado, S., & Calderón Galdeano, E. (2015). *Hispanic-Serving Institutions: Advancing research and transformative practice*. New York: Routledge.

Pew Research Center (2019). South region has seen the nation's biggest Latino population growth since 2008. Retrieved from https://www.pewresearch.org/fact-tank/2019/07/08/u-s-hispanic-population-reached-new-high-in-2018-but-growth-has-slowed/ft_19-07-08_hispanicpopulation_south-region-seen-biggest-latino-population-growth-2008_2/.

Porter AC (1987). Teacher collaboration: New partnerships to attack old problems. Phi Delta Kappan, 69(2): 147-152.

Robbins, V., & Skillings, M. J. (1996). University and Public School Collaboration: Developing More Effective Teachers through Field-Based Teacher Preparation and New Teacher Support Programs.

Russell, J. F., & Flynn, R. B. (2000). Setting the stage for collaboration. *Peabody Journal of Education*, *75*(3), 1-5.Saenz, V. B. (2010). Breaking the segregation cycle: Examining students' precollege racial environments and college diversity experiences. *The Review of Higher Education*, *34*(1), 1-37.

Russel JF, Flynn RB (1992). School-University collaboration. Bloomington, IN: Phi delta Kappa Educational Foundation.

Rutgers Center for Minority Seving Institutions. (2019). What are MSIs? Retrieved from http://cmsi.gse.rutgers.edu/content/what-are-msis

Saenz, V. B. (2010). Breaking the segregation cycle: Examining students' precollege racial environments and college diversity experiences. *The Review of Higher Education, 34*(1), 1-37.

Sandlin, R. A. & Feigen, S. (1995, Fall). Collaboration between the university and school district: Can it work? Teacher Education Quarterly (22), 75-82.

Santiago, D. (2012) Public Policy and Hispanic-Serving Institutions: From Invention to Accountability. *Journal of Latinos and Education, 11*(3), 163-167.

Stephens, D. & Boldt, G. (2004, May). School/university partnerships: Rhetoric, reality, and intimacy. Phi Delta Kappan, 85(9), 703-707.

The Equality of Opportunity Project (2019). Top Colleges by Mobility Rate. Retrieved from http://www.equality-of-opportunity.org/college/

Torres, V. & Zerquera, D. (2012). Hispanic-Serving Institutions: Patterns, predictions, and implications for informing policy discussions. *Journal of Hispanic Higher Education, 11*(3), 259-278. doi: 10.1177/1538192712441371

Turley, R. N. L. (2009). College proximity: Mapping access to opportunity. *Sociology of Education*, *82*(2), 126-146. Retrieved from http://www.jstor.org.libweb.lib.utsa.edu/stable/40376042

U.S. Census Bureau. (2017). Hispanic Heritage Month *Fact Sheet, 2017*. Retrieved from http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Valencia, R. R. & Black, M.S. (2002). "Mexican Americans Don't Value Education!" On the Basis of the Myth, Mythmaking, and Debunking. Journal of Latinos and Education, 1(2), 81-103.

Venezia, A., Kirst, M. W., & Antonio, A. L. (2003). Fix K-16 disconnections, or betray the college dream. The Education Digest, 68(9), 34.

Walkington, J. (2006, November). Captalising on shared knowledge, experience and expertise to enhance professional learning for school and university educators. Paper presented at the APERA 2006 Conference, Hong Kong.

Wasonga, C. O., Rari, B. O., & Wanzare, Z. O. (2011). Re-thinking school-university collaboration: Agenda for the 21st century. Educational Research and Reviews, 6(22), 1036-1045.

Welch M, Sheridan SM (1993). Educational partnerships in teacher education: re-conceptualizing how teacher candidates are prepared for teaching students with disabilities. Action Teach. Educ., 15(3): 35-46.