

Beyond the First Year Retention: The Graduation Initiative

Patricia Glenn

Graduation Initiative
The University of Texas at San Antonio
Patricia.Glenn@utsa.edu

Clint Rodenfels

Graduation Initiative
The University of Texas at San Antonio
Clinton.Rodenfels@utsa.edu

Abstract - The University of Texas at San Antonio has spent the last ten years developing a highly effective suite of retention programs targeting freshmen and sophomores. To extend the reach of these student success programs, the Graduation Initiative (GI) was created in 2007. The Graduation Initiative completed its first year of operation in June, 2008. Within that short time, the following has been accomplished: 1. GI Analysts assigned to specific colleges researched barriers to graduation and, along with college stakeholders, developed Graduation Improvement Plans specifically tailored to the barriers discovered. 2. Staff of the Initiative also developed an institution-wide Graduation Improvement Plan, delivered to the Provost in July, 2008. The institutional plan incorporates the barriers shared across the colleges, as well as barriers only addressable at the institutional level. 3. GI Analysts have worked with seniors overdue for their four-year graduation, completing tailored progress plans with them and following their semester progress to five or six-year graduation. Last but not least, the GI has helped to increase the six-year graduation rate from 28.2% in 2006 to 31.3% in 2007, the largest increase ever measured at UTSA. Next year's goals include implementation of graduation improvement plans, outreach to employers and money management services.

Introduction

Increases in the freshmen retention rate do not always translate into commensurate gains in the graduation rate. This is a major problem at our institution. The Tomás Rivera Center for Student Success has fielded a very effective suite of retention support programs, including learning communities, freshman seminars, tutoring, an award-winning Supplemental Instruction program and smaller programs for targeted at-risk groups such as provisionally admitted students. These programs have helped to produce a 10 point increase in our retention rate over the past ten years. Therefore, our very low graduation rate (28.2% in 2006) is made more problematic by the fact our freshman retention rate of 66% would portend a higher rate. In a comparison with other Hispanic-serving institutions of our size and characteristics (over 10,000 enrollment, high number of minority students and Pell recipients, similar SAT composite with similar retention rates) all 13 of our peer institutions had six-year graduation rates above ours, ranging from 29.6% to 48.2% (retrieved from www.collegeresults.com, sponsored by The Education Trust). Our unexpectedly lower graduation rate is of particular concern because our President—in response to legislative mandates—has pledged to our UT System officials that we would raise that rate of 28.2% to 40% by 2010 and to 53% by 2016.

Nationally, there has been increasing recognition that our universities and colleges are not graduating enough students to keep pace with the needs of our country and economy. The ASHE monograph, *Piecing Together the Student Success Puzzle* pointed out that, “If current trends continued in the production of bachelor’s degrees, a fourteen million shortfall of college educated working adults is predicted by 2020.” (Carnevale & Derochers, 2005). Even such venerable educational leaders as Vincent Tinto, whose 1976 model for student retention has been the gold standard for twenty or more years, lament the fact that so little progress has been made in our national rates of retention and graduation “Indeed, the national rate of student persistence and graduation has shown disappointingly little change over the past decade (NCES, 2005; Tinto,

2006). Moreover, due to the demographic changes in our country, it is increasingly important that we attract and graduate more students from minority and low-income backgrounds. Increasingly, they will make up our college population (Haycock, 2008.) This realization came earlier in our state, since we are one of those experiencing explosive growth in these groups. According to David Longanecker (2008) the President of the Western Interstate Commission for Higher Education (WICHE), California, Washington D.C., Hawaii, New Mexico, and Texas have been “majority-minority institutions since 2005, and other states are quickly approaching that milestone.”

The state of Texas officially recognized the need to graduate more students, and especially those from minority and low-income backgrounds in 2000, when the Texas Higher Education Coordinating Board (THECB) launched *Closing the Gaps: The Texas Higher Education Plan*, aimed at closing educational gaps within Texas, as well as between Texas and other states. The plan outlined four primary goals: participation, success, excellence, and research. Institutions of higher education in Texas were required to set targets for these goals and report annually on their progress (THECB, 2000). Fundamentally, the impetus is economic necessity. Texas needs skilled, well-educated citizens to sustain and grow its economy. If we cannot produce more college graduates, the poverty rate will increase and average household income will drop. This cycle will place an increasing burden on public support services, while at the same time reducing the tax base used to support such services (Murdock, et al., 2002).

It is within this environment of increased state scrutiny that we currently find ourselves. In 2007, our university decided to take direct action to improve our 6-year graduation rate by creating the Graduation Initiative, staffed with retention and graduation analysts who have backgrounds in demographic and qualitative research and headed by an administrator with long experience heading academic support programs. The charge to the unit was straightforward: improve the graduation rates. We utilized two strategies during our first year, one a short-term strategy, the Late Intervention, and the second a more comprehensive, long-term strategy, the College and Institutional Graduation Improvement Plans.

A Short-Term Strategy: The Late Intervention

Rationale

Our basic assumption was that improving the graduation rates was going to be a long-term project, one that would necessarily involve the participation of many institutional stakeholders. The theory that underlies this assumption is that causes of attrition are multiply determined and thus require the cooperation and input of many, as Tinto originally postulated in 1976. Against this, we placed the urgency of the problem for our students. We were also fortunate to find one other organization engaged in a mission similar to ours. Ten years ago, the University of New Mexico created The Graduation Project (www.unm.edu/~thegrad). The mission is to look for students who were very close to graduation and, for whatever reason, dropped out. Their success rate is impressive; sixty-nine percent of the people they contacted and enrolled in their project ended up graduating. Some only lacked paperwork! After seeing their presentation at a conference of the Tomás Rivera Policy Institute in 2006 (Goring, W., Gomez.,D. & Shields,V., 2006), we invited two staff members to come as consultants to our university. We remain grateful for their ideas and encouragement. In searching for other graduation projects, we found that the University of Wisconsin at Oshkosh (<http://www.uwosh.edu/graduationproject/index.php>) also has one utilizing the UNM model.

While cognizant of our basic assumption, we realized that working within the colleges would necessarily be a long-term process. After hearing about the Graduation Project at the University of New Mexico, we became interested in adapting it to our situation in order to make a more immediate impact on the graduation rate. UNM’s Graduation Project had contacted and worked with all former students who had approached graduation and dropped out—even if they had been out for twenty years. However, we were under pressure to demonstrate some immediate improvement in our critical six-year graduation rate.

Participants

Our participants for the Late Intervention were students still enrolled, but fast approaching their six-year graduation deadline. Surprisingly, there were only 221 students still in school from the 1677 students who comprised the target entering cohort of 2001. After reviewing their degree plans, we found only 125 with enough credits and a high enough grade point average to graduate in the short time left until the August cut-off for computing the six-year graduation rate for their cohort. We decided to work with those who had accumulated at least 100 credit hours and had a grade point average of at least 2.0.

Procedure

We were also fortunate enough to find a funding source that had been languishing unused. This money had been earmarked to help students graduate whose financial aid had run out. Having secured some of the money, we were able to offer scholarships to the 125 students who were within striking distance of making the six-year graduation cutoff. We called, emailed and mailed the eligible students and 79 of them accepted our offer. There were 31 students we were not able to reach or who did not return messages. For participating students, we required that they submit a course plan, which listed the courses they needed to take in order to graduate within the six-year limit, by August of 2007. We checked the courses they were proposing to be sure that they could, in fact, get all of the requirements for graduation. We had students also check with their academic advisors. Analysts also provided aid and advice about such things as dropping a minor, clearing a parking hold or otherwise pulling out all the stops to remove the individual barriers participants might be encountering. After awarding the scholarships to the 79 individuals, we worked with them, on a modified case-management basis, to be sure that all of their paperwork was complete to apply for graduation. For some, we had to help them petition for a late application.

Results and Discussion

After the August graduation list came out, we found that 72 of our 79 participants were successful in graduating. We estimate that this short-term strategy accounted for a 1% percent increase in the six-year graduation rate for the entire cohort. The net positive estimate is based on an extrapolation of the average percent change in previous years. We also discovered in our conversations with these students some of the many barriers that might have otherwise prevented their timely graduation. The Late Intervention is not theoretically based and it is not comprehensive. It is simply an attempt to address the all-too-common lament of these students that “I never thought I would need so much help to get graduated, but I guess I did!” We will nevertheless, accept our non-theoretical, non-research-based success.

As the staff of the Graduation Initiative worked pragmatically to get participants in the Late Intervention graduated, we also became increasingly aware of the barriers that we could not help them surmount at the end of their educational program. Even having achieved respectable short-term gains, we became much more conscious of the limitations of any short-term strategy. Using only the Late Intervention, we would never be able to achieve the 6-year graduation goal of 53%, set by our university system. There was a ceiling at about 40% that we could achieve by salvaging only the students still enrolled at the very end of the six-year period. Therefore, we set to work on the long-term strategy of systematically collaborating with stakeholders within the colleges to identify and remove their specific barriers.

One Long-Term Strategy: The Colleges’ Graduation Improvement Plans

Rationale

We developed our first long-term strategy based on the following assumptions: (a) removing the barriers to graduation would be a complex task and could not be done by one small team in isolation; (b) that some, but not all, barriers would be locally based within the colleges—within their zone of control; (c) that student and faculty within each college had much valuable knowledge that we could use to identify college-specific barriers; and (d) the collaboration of key college stakeholders would be needed to overcome these barriers.

Participants

Our target participants within this strategy were the major stakeholders within the colleges: the faculty members, the students and related staff members such as academic advisors. In total, we have 586 full-time faculty, 24,705 undergraduate students and 95 academic advisors. By the conclusion of our interviewing stage, we had conducted detailed interviews with 196 faculty members, 33% of the total, including nearly all department chairs, and 48 administrators or professional staff members. Over 1400 undergraduates were either surveyed or contacted directly.

Procedure

Our analysts began their work in the colleges in September of 2007. They had a mission: to find out what was keeping students in each college from graduating. In pursuit of that mission, they were to talk to, listen to, interview and conduct focus group with as many faculty members, students and relevant staff as they could. In order to encourage open and frank feedback, interviewees were assured their responses would be held in strict confidence.

We had to diffuse suspicions that we might be spies, auditors or other minions of the administration, so that we would be trusted and allowed access to sensitive information. We also asked the analysts to make themselves as useful as possible, in order to become accepted as valuable university resources to the college stakeholders. This usefulness could take the form of providing statistics, as requested and within reason, helping with college orientation sessions, even bringing doughnuts to meetings. We ended up calling our interesting statistical snippets “data-doughnuts.”

The university has seven major colleges. We had 3.5 graduation analysts and an associate director, acting in that capacity for the first year of our program. We assigned one analyst to each of our three largest colleges, the College of Sciences, the College of Business and the College of Liberal and Fine Arts. It was clear that these large colleges would have a great deal of impact on our graduation rate. Together, they are home to 62% of our students. A single analyst took on two smaller colleges, the College of Education and the College of Engineering. Another (our half-time analyst) took on the two very small colleges of Public Policy and Architecture. In order to make these assignments, we equated loads in terms of the number of faculty and the number of students in the college, with the most weight given to faculty numbers, since we anticipated conducting personal interviews.

The team came up with a script to use when interviewing faculty members. The script contained many structured interview questions, along with follow-up options (Seidman, 2006). However, most analysts found that they had trouble getting beyond, “What do you see as barriers to graduation for undergraduates?” Faculty members had a great deal to say on the topic, almost always interesting, usually relevant. The team also met together for two hours a week to share experiences, good and bad. This supportive atmosphere was invaluable in keeping motivation and focus up. We would never advise putting analysts directly and unsupported into the college structure. The ability to share trends, discover techniques and commonalities, while still maintaining a beachhead among college stakeholders has proven to be a key to our efforts.

Results and Discussion

By October, common themes began to emerge: problems with academic advising, course availability, student under-preparation and the overuse of adjunct faculty were concerns for almost every college’s stakeholders. There were also problems specific to one college or to two colleges: lack of student math skills, problematic internship practices, lack of storage for bulky student materials are examples of such situations. Analysts were beginning to see the outlines of their assigned college’s graduation improvement plan taking shape. Databases were established to store coded records of interviews to help analysts more easily pull together their stakeholder responses for triangulation and integration. We also requested and received quantitative data from our Office of Institutional Research, which gave substance to the observations of stakeholders. We began to integrate the qualitative data produced by the interviews, with descriptive

quantitative institutional data and to connect the barriers that we saw emerge from that integration with the review of literature data we continued to gather and share within the team

By January of 2008, each analyst had written an Analysis and Recommendations document for their college(s) that was shared with the college dean and associate dean. Some deans also chose to share the plans with their department chairs for comment. The format of each plan was similar: background, college context, affordances for success, barriers discovered and recommendations for overcoming the barriers, where possible. Analysts were instructed to support qualitative data wherever feasible with quantitative data and to utilize charts and other visual aids to present information. It became clear that some barriers were university-wide and could not be addressed at the college level by any dean. These barriers made it evident that a second long-term strategy would have to be developed at the University level.

The stakeholders were asked to look over the plan with the understanding that the plan belonged to their college, rather than to the analyst, or the Graduation Initiative. Deans and associate deans were asked to make comments or suggestions and to indicate their acceptance of the plan that resulted from their input. Almost without exception, the deans and other stakeholders embraced the recommendations. This set the stage for setting up the final plan with specific implementation schedules. As anyone who has ever served on a university committee knows, 90% of all committee recommendations become shelf-ware unless someone is actually charged with implementing them.

By June of 2008, analysts had produced a final graduation improvement plan for each college, outlining barriers to graduation for students in that college, along with recommendations for overcoming the barriers. Each recommendation included an implementation schedule with specific actions to be taken. Each analyst made an appointment with the college dean and his/her designee to go over the plan. For the most part, the plans reflected the earlier analysis and recommendations modified and adopted by the college.

Somehow, the addition of the implementation schedule seemed to disconcert some of the deans, even though they had earlier agreed upon the barriers and solutions. Perhaps their previous experience of the fate of recommendations was at odds with the actual reality of the necessary implementation. Most deans asked for more time to study the document, others wondered about who would implement the recommendations. One dean postponed any implementation until a new dean was on board. After a problem-solving meeting of the Graduation Initiative, we agreed on a solution. In order to reduce the anxiety of our stakeholders, we volunteered to get some of the implementation items off the ground (some were time sensitive) by pitching in ourselves. As a result, the Math Jump Start and the Just-in-Time math class (two recommended programs in a college improvement report) were implemented by the analysts, with the clear understanding that we would train stakeholders from the college to handle the task in the future.

A Second Long-Term Strategy: The Institutional Graduation Improvement Plan

Rationale

Following the development of the college-specific plans, we reviewed all of the documented barriers. In conjunction with our research on retention and graduation efforts across the nation, we identified barriers that were: (a) common across multiple colleges, (b) rooted in institutional policies or (c) could only be addressed at the highest institutional level. Here, we made institutional recommendations for improving graduation rates, along with specific actions for implementation. Barriers that were unique to a college or could successfully be addressed at the individual college level were not included in this plan.

Participants

Since the Institutional Graduation Improvement Plan was developed by identifying barriers that could not be effectively resolved through the individual College Improvement Plans, the participants were those 196

faculty members, 45 staff members, and 1400 students who had given input during interviews and surveys that led to the college-level plans.

Procedure

Barriers that were determined to exist at the institutional level and to be addressable only at the institutional level were compiled to create the Institutional Plan. This plan was delivered in July, 2008 to the Provost and to the President, for their approval and implementation.

Results and Discussion

This report identified several institutional-level barriers to graduation reported by students, faculty, administrators, and supporting staff. Often, the barriers have their etiology in our pursuit of research status. For example, lack of classroom space is perceived to be caused by the transformation of classrooms to research space, while at the same time our enrollments continue to grow. New buildings are built for research with few or no classrooms. The undergraduate curriculum is increasingly the province of adjunct faculty and their percentage swells, as tenure track faculty are reassigned or choose to pursue research.

The Institutional Plan categorizes barriers into five specific areas, having both a significant impact on students and existing at a level requiring university-wide intervention: (a) problems with academic advising; (b) under-prepared students; (c) course availability; (d) over-reliance on adjunct teaching faculty; and (e) educational costs. The Plan provides recommendations to the university leadership on how to overcome the identified barriers to graduation. Below is a summary of each area and its associated recommendation(s).

Problems With Academic Advising

A key institutional-level barrier that we found in our research in the colleges was the difficulties that students face in selecting and registering for the courses they need. A strong, recurring theme from students in all the colleges, as well as from a surprising number of faculty members, had to do with the provision of academic advising. Repeatedly, we heard about the lack of satisfaction with our provision of academic advising. This concern was confirmed by the Graduating Student Survey of 2007 when students across the board gave a satisfaction rating equivalent to a “D” to their academic advising centers (Wilkerson, 2008). In the 2006 and 2007 NSSE Surveys our students’ rated satisfaction with academic advising was the lowest in the UT System (UTSA, 2008). The organizational structure of advising, with a split reporting system was also seen to create difficulties in policy implementation and management oversight.

Recommended action. Commission a high-level, systems analysis of the entire UTSA academic advising process and oversee implementation of the findings.

Under-Prepared Students

It is certainly true that some students come to our institution academically unprepared. On the average, 25-30% of our entering freshmen have test scores that require them to take a remedial course in reading, writing or mathematics. Seventy percent of that remediation need is in mathematics (UTSA, 2006). Our faculty frequently report that many students entering our university do not understand enough about academic policies and procedures to take advantage of available opportunities and to avoid common pitfalls. Some of our academic support programs can help students gain the knowledge and skills necessary to succeed. Unfortunately, many of our most effective support programs, such as Supplemental Instruction and Freshman Learning Communities, cannot grow due to shortage of space for them.

Recommended action. Provide appropriate space resources for proven academic support programs to grow. In some instances, existing space can be reallocated to these support programs; in other cases, temporary classroom buildings will need to be installed.

Recommended action. Create a comprehensive, professionally produced, online Survival Guide for Freshmen modeled after that developed by the University of Louisville’s Student Tutorial Online Module Program (available at <http://www.s4.louisville.edu/stomp/>). This website offers students tutorial modules on General Education, Faculty-Student Interaction, Technology, Academic Services, Personal-Social

Development, and Academic Information. Input would be required from our student government leaders to identify topics that would be most helpful to our students.

Course Availability

Students need access to courses in order to graduate. Students we surveyed were especially vocal about the lack of evening courses in some disciplines, required courses offered only once a year and cascading prerequisites causing them to wait as long as a year to get into required classes. In the Student Perceptions on Barriers to Graduation Study (Johns, 2006), this lack of classes was the most frequent student concern.

Recommended action. Erect temporary buildings to provide additional classroom space. Our institution is now at 115% space usage and the need for more classrooms is critical. Spaces such as rooms in the University Student Center and group activities rooms in our on-campus housing have been pressed into academic service, giving rise to the 115% figure.

Recommended action. Implement an alternative class scheduling pattern, scheduling two-day-a-week classes in three separate tracks: Monday-Wednesday, Tuesday-Thursday, and Friday-Saturday. Faculty and student alike now express a preference for two-day schedules, with Tuesday/Thursday classes being more heavily subscribed than the alternate three-day schedule. Having three two-day class schedules available would allow for more distributed usage and would more efficiently utilize Friday and Saturday times.

Recommended action. Increase the use of online and hybrid courses to reduce physical seat requirements and provide students access to needed courses on a 24-hour basis. This change will require a significant increase in the staffing of our Academic Technology Office, but the investment would allow students to access courses at their own convenience and keep students from being locked out of the courses they need to graduate due to room limitations.

Over-Reliance on Adjunct Faculty

Two-thirds of our undergraduate courses are being taught by adjunct faculty. This practice can hinder student persistence if part-time faculty are consistently assigned to teach our large, gateway classes. It is not the credentials or capabilities of these faculty that creates the problem, but rather the part-time nature of their teaching assignments. The gateway courses are crucial in the academic careers of our students, and putting our best faculty in those courses is a prudent investment. Part-time faculty frequently have to cobble together a living by teaching at several institutions and this means they are often unavailable to students or do not have knowledge of university procedures or resources to share with students (Glenn, 2007). In addition, they are often only granted marginal status in the faculty community.

Recommended action. Offer full-time appointments to our best adjunct faculty. If not feasible, assign part-time faculty to smaller, upper-division courses and not to large, gateway courses.

Recommended action: Support the Teaching Excellence, Advancement, and Mentoring Center with the resources and staff needed to provide adjunct orientation, training, and support. These efforts should ensure that adjunct faculty have the necessary pedagogical training and awareness of campus resources and should also help them connect with their departments and the larger faculty community.

Cost of Education

Another institutional-level barrier, appearing in feedback from faculty and students alike, was money and the trade-offs made between work and studies. Since 2002, our students have experienced a 112% increase in their tuition and fees. These increases have effectively priced some of our university's traditional students and their families out of the higher education market. Those students who persist in coming to us often feel driven to work long hours or mortgage their future through the accumulation of crippling levels of debt. Moreover, while tuition and fees have risen significantly, federal grant aid has remained, essentially, flat (Haycock, 2008). This year, Tinto (2008) points out that, increasingly poor students are finding their funds will only cover the tuition of a community college. "In 1973, the first year of the Pell Grant program, the percentage of Pell Grant recipients enrolled in four-year colleges and universities was 63 percent. By 2006 it had shrunk to

about 40 percent.” Students at all levels are incurring more debt and working more hours, shifting their focus from obtaining an education, to paying for an education

Recommended action. Freeze tuition and fees at current rates.

Recommended action. Increase the number of work study positions. Students working in campus offices and departments not only receive the benefit of pay but are usually “adopted” into an academic family. They graduate at a higher rate than those working off-campus.

Recommended action. Support the proposal for an Office of Student Money Matters, which is designed to help students make optimal choices in managing their time and money resources.

The colleges are now engaged in removing the specific barriers, discovered or rediscovered, and documented in their own graduation improvement plans. Encouraged by the President and the Provost, the implementation of the plans will be the job of the colleges. Similar barriers were found across some or all of the colleges, along with others that are systemic to UTSA and must be dealt with at a level above that of the individual colleges. The Graduation Initiative will continue to work with our administrators to implement plans to remove the high-level barriers. Barriers of this sort are especially difficult to surmount, but substantial gains in graduation rates are not feasible otherwise.

Conclusion

As for the future of the Graduation Initiative, members of our staff will begin a new phase of our initiative during our second year, with specialized long-term assignments, which grow out of the needs we discovered in our research. One of our senior analysts will be researching and starting a student money management service, another will research policies and procedures detrimental to timely graduation. We are also beginning an outreach to local employers to help them provide a student-friendlier workplace and this will be the assignment of another of our analysts. Finally, an analyst with high-level statistical skills will be completing departmental and other specialized analyses, upon request. We have high hopes that the outcome of our combined improvement plans, along with our special missions, which grew out of our research in our first year, will prove to be successful in helping our students to achieve their goals and helping our university to achieve a higher rate of graduation.

In terms of the portability of our strategies to other institutions, the following limitations would apply. Your institution must have a felt need to go beyond improving the freshman retention rate to increasing the rate of graduation. You must have administrators, especially within academic affairs, who are willing to fund and empower a small group of seasoned and skilled professionals. Your analysts must possess both research and diplomatic skills; we have had good experience with former advisors, but only those whose skills include a lively and insatiable curiosity about research in the field. Your operation should be located in a close line from your chief academic officer in order to have immediate credibility. And finally, your success will be greatly enhanced by having access to a funding source for student awards.

In the process of implementing our short- and long-term strategies, we have concluded that short-term interventions, such as our Late Intervention, can produce small but worthwhile increments in our graduation rates. However, these gains are limited to those students who are still enrolled and can be successfully re-directed during their last few semesters. The progress that can be made solely through such short-term interventions will not be sufficient to meet the very ambitious goals for six-year graduation improvement set by our university system. Something more comprehensive must be done to eliminate barriers much earlier in a student’s academic career. The college and institutional plans are the bases for the more substantial increases in graduation rates that we must produce. We cannot tell, a priori, which recommendations will have the greatest impact. The Graduation Initiative will also continue to work within the colleges to help them implement and assess their individual Graduation Improvement Plans, in order to close the loop between

assessment, implementation, outcomes and feed-back corrections as suggested by our accrediting body. We hope to be able to report out on the formative and summative outcomes at a later date.

References

- Carnevale, A., & Desrochers, D. (2003). Preparing students for the knowledge economy: What should counselors need to know. As quoted by G. D. Kuh, J. Kinzie, J. A. Buckley, B. K. Bridges, & J. C. Hayek (Eds.), *Piecing Together the Student Success Puzzle: Research, Propositions, and Recommendations: ASHE Higher Education Report* (p.1).
- Glenn, D. (2007) Keep adjuncts away from intro courses, report says. *The Chronicle of Higher Education* 54, A1. Retrieved June 30, 2008. from <http://chronicle.com/weekly/v54/i30a00104.htm>
- Goring, W., Gomez D., & Shields, V. (2006, November). *UNM Graduation Project*. Presentation at the Tomás Rivera Policy Institute Conference, Longbeach, CA.
- Haycock, K. (2008). Class dismissed: Are America's colleges and universities ready for the changing mix of students? *Commonfund Chronicle: Mission Matters*, Spring/Summer, 19- 24.
- Johns, L. (2006). *Report: Student perceptions on barriers to graduation*. San Antonio, Texas: Office of Undergraduate Studies, University of Texas at San Antonio.
- Longanecker, D. (2008). The road to 'majority-minority'. *Commonfund Chronicle: Mission Matters*, Spring/Summer, 25.
- Murdock, S., White, S., Hoque, M., Pecotte, B., You, X., and Balkan, J. (2002). *A summary of the Texas challenge in the twenty-first century: Implications of population change for Texas*. Retrieved March 20, 2008, from <http://txsdc.utsa.edu/download/pdf/TxChall2002Summary.pdf>
- National Center for Education Statistics (NCES) (2005). College persistence on the rise? Changes in 5-year degree completion and postsecondary education. As quoted by V. Tinto, Research and practice of student retention: What next? *Journal of College Student Retention*, 8(1), 1-19.
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*, 3rd Edition. New York, Teacher's College Press: Columbia University.
- Texas Higher Education Coordinating Board (THECB). (2000). *Closing the gaps: The Texas higher education plan*. Retrieved March 20, 2008, from <http://www.thecb.state.tx.us/reports/PDF/0379.PDF>
- Texas Higher Education Coordinating Board (THECB). (n.d.). *Tuition and fees data* [Data file]. Retrieved June 11, 2008, from <http://www.thecb.state.tx.us/Reports/PDF/1498.PDF>
- Tinto, V. (1976) Dropout from higher education: Toward an empirical synthesis of recent research. *Journal of Review of Educational Research*, 45, 89-125.
- Tinto, V. (2006). Research and practice of student retention: What next? *Journal of College Student Retention*, 8(1), 1-19.
- Tinto, V. (2008, June 9). Access without support is not opportunity. *Inside Higher Ed*. Retrieved June 10, 2008, from <http://www.insidehighered.com/views/2008/06/09/tinto>
- The University of Wisconsin- Oshkosh. (March 6, 2008). The Graduation Project. Retrieved July 7, 2008, from <http://www.uwosh.edu/graduationproject/index.php>
- University of Louisville. (2007). Student tutorial online module program. Retrieved June 9, 2008, from <http://www.s4.louisville.edu/stomp/>

University of Texas at San Antonio (UTSA). (2006). *Subcommittee on student academic support: Final report*. San Antonio, TX: Taskforce for Improving Student Success and Graduation Rates, 2006, Subcommittee on Student Academic Support, University of Texas at San Antonio.

University of Texas at San Antonio (UTSA). (2008). *UTSA NSSE means and frequencies reports*. San Antonio, TX: Office of Institutional Research, University of Texas at San Antonio.

Wilkerson, S. (2008). *2007 Graduating senior survey*. San Antonio, Texas: Office of Institutional Research, University of Texas at San Antonio.