

Retention and Persistence in Postsecondary Education

A Summation of Research Studies

Texas Guaranteed Student Loan Corporation

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Executive Summary on Persistence and Retention Topics

- Retention rates commonly measure the percentage of freshmen that re-enroll the next academic year as sophomores. The primary reason that retention rates, along with graduation rates, are important is that retention rates are perceived as indicators of academic quality and student success.
- In addition to retention, persistence, a student's continuation behavior leading to a desired goal, helps describe processes related to student goal achievement.
- Generalizations about retention can be misleading because each school is dynamically unique in terms of academic emphasis and culture. Retention issues can be further complicated because of the necessity to understand students' educational goals in assessing whether leaving school is a negative or positive decision.
- Typically four-year schools have higher retention rates than do two-year schools. For example, in Texas during FY 1997, the average freshmen retention rate at four-year schools is close to 70 percent whereas the average freshmen retention rate at two-year schools is close to 50 percent.
- In general, studies indicate that financial aid helps increase persistence for students who need and receive financial aid.
- Studies indicate that certain student populations, such as older students, African Americans and Hispanics, students who work more than 30 hours weekly, and first generation college students often have persistence problems.
- According to research studies, a few factors that influence persistence include the intent to persist, institutional and student commitment, college grades, high school academic experience, and social and academic integration.
- Schools can improve retention rates by more accurately determining when and why students withdraw. Having more up-to-date information could help administrators determine better strategies for increasing retention rates.
- The Dana Center (1998) recommends increasing retention rates by encouraging schools to develop and implement their unique retention plans and by strengthening freshmen-year instruction.

Table of Contents

1.	Preface	3
	Retention Rates Typically Show	
3.	Retention and Related Terms	5
4.	Problems Understanding Retention	6
5.	Retention by School Sector	7
6.	Financial Considerations	9
7.	Special Student Populations	11
8.	Factors Influencing Retention	14
9.	Improving Retention	15
10.	St. Mary's University: A Case Study on Improving Retention	17
11.	References	18

1. Preface

Purpose

- The purpose of *Retention in Postsecondary Education* is to provide a summary of relevant information focusing on one basic issue keeping postsecondary education students in school. The report provides a number of facts, studies, (a few) theories, and tips on how to increase persistence in postsecondary education.
- Texas Guaranteed Student Loan Corporation (TG) hopes that higher education institutions and organizations may find this information helpful in their individual and collaborative efforts to ensure that students attain their higher education goals.
- The report is intended to provide a point of departure for discussion and future research about retention and persistence.

About the Report

- Although this report is very concise, it fails to include all studies and information about persistence and retention.
- Because this report is a broad overview, space does not allow for discussion of the methodology and technical issues of a particular study. Many studies use various forms of self-reported student surveys, which are always prone to a certain amount of error. A few of the studies use fairly sophisticated analysis tools. Two common methods for analyzing data in the cited studies are LISREL (path) analysis and regression analysis.
- The reader should be cautious about generalizing the results of a particular study to another institution. Most scholarly studies tend to use a limited student population at a given institution, typically outside of Texas. Consequently, these limited studies on retention may or may not be an accurate reflection of persistence in Texas. In contrast, the General Accounting Office (GAO) and the National Center for Education Statistics (NCES) studies look at large student samples in the U.S. which tend to be more comparable to the state of Texas.
- The studies summarized in this report should not be perceived to be the work of TG.

2. Retention Rates Typically Show

- Full-time, traditional freshmen students who re-enroll from one academic year to the next.
- Longitudinal studies of full-time traditional students who attend a school over a six-year time period.
- When retention rates for a given cohort are examined over time, they decrease with time.
- When looking at individual grade levels, the higher the grade level, the higher the retention rate.
- Freshmen and sophomores have the lowest retention rates of college students while juniors and seniors have the highest retention rates.
- Institutions with higher admission standards tend to have higher retention rates.

3. Retention and Related Terms

The following terms about retention are referenced in this report. Some of the terms may have different meanings outside the context of these studies and/or are fairly complex. For example, in the public school system, to retain a student generally means to fail a student. Obviously, in this context, retention could be interpreted as less than desirable. However, in postsecondary education retaining students is perceived to be a positive phenomenon in that students are staying in school to achieve a desired goal. Other complex terms such as "academic" and "social integration" are difficult to define and grasp because they tend to be factors of sophisticated methodological data analysis concerning persistence.

- Academic integration includes a number of factors that influence students' ability to become a part of a scholastic college environment. Some examples of these factors are GPA, students' satisfaction with faculty, participating in study groups, and academic advising. Different studies may measure different factors.
- Attainment reaching a desired goal.
- Attrition a school's loss of students.
- Completer a student who finishes a program.
- Completion rates the percentage of students who finish a program.
- Dropouts students who leave school and do not return.
- Graduation rates the percentage of students who graduate from a program.
- Matriculate to enroll as a student at a school.
- Persistence a student's postsecondary education continuation behavior that leads to graduation.
- Retention usually a percentage measurement showing how many students re-enrolled at an institution that they attended the previous year.
- Social integration includes a number of factors that contribute to students' ability to develop relationships with other students and student groups outside an academic setting. Examples of some of these factors are students having lunch together, participating in school clubs, and attending football games.
- Stayouts students who drop out of school and who fail to return within a given time frame.
- Stopouts students who leave school and return at a later time (also called sysouts).
- Sysouts students who leave school and return at a later time.
- Transfer frequently thought of as a credit transition process that occurs when a student moves from one institution to another institution.

4. Problems Understanding Retention

Students Who Leave

- According to Bean, college dropouts are often misperceived in several ways: (1990, Using Retention)
 - Students may enter and leave college getting exactly what they desired from the college experience. Neither the institution nor the individual failed.
 - Students' educational goals must be known before they can be considered a dropout.
 - It is easy to confuse dropouts, or stopouts, with sysouts.

Conceptual Misunderstandings (Bean, 1990, Using Retention)

- Retention rates depict a complex interaction between both the characteristics of a school *and* the students attending the school.
- Retention rates change as the demographics, student experiences, academic, social and psychological changes occur.
- Retention rates are as individual as the institutions themselves.
- Retention and persistence studies often examine one institution and should not be generalized to larger populations.
- It is important to know the student's goal before retention can effectively be measured.

5. Retention by School Sector

- Four- and two-year institutions report retention rates for full-time returning freshmen, but proprietary schools report completion rates since they are typically of shorter duration.
- Most studies account for the diverse purposes, objectives, and student populations in different school sectors.

Four-year Institutions

- In 1996, the average retention rates in Texas for full-time returning freshmen attending four-year public and four-year private schools were 69 percent and 71 percent respectively. (THECB, 1997, Peterson's, 1998)
- Of the students who left a four-year school their first year (NCES, September, 1998)
 - Two-thirds would return to school, either to a two-year or four-year school, within five years.
 - One-third would fail to return to any school in five years.
- Students transferring from one four-year institution to another four-year institution can get lost in the statistical shuffle of reporting retention. (Mallette and Cabrera, 1991)
- Transferring from a four-year institution to another four-year institution may increase time to degree without undermining persistence. (NCES, 1997)
- Students who seek a bachelor's degree are more likely to attain one or still be enrolled five years after their initial enrollment than are students seeking associates or certificates. (NCES, 1997)
- Individuals seeking a bachelor's degree who initially enroll at a two-year institution (with the intent to transfer to a four-year institution) are far less likely than individuals who start out at a four-year institution to attain a bachelor's degree. (NCES, 1997)
- For individuals who do complete a bachelor's degree, those who start at a two-year institution are twice as likely to take more than six years to complete their degree. (NCES, 1997)
- The intent to persist is highly related to college GPA. (Cabrera et al., 1993)
- The combined factors, in order of importance, contributing to increasing the number of completers at four-year public institutions are college grades, having a child/children (negatively related) and the number of science courses in high school. (Porter, 1990)
- The combined factors contributing to student persistence at private schools are the number of months in higher education, high school grades, and race/ethnicity. (Porter, 1990)
- Graduates of public four-year institutions take longer to complete their bachelor's degrees than graduates of private four-year institutions. (NCES, 1997)

Two-year Institutions

- In 1996, retention rates in Texas for full-time returning freshmen attending two-year public schools were 52 percent. (THECB, 1997)
- Of students who originally enrolled in a two-year school, 42 percent would leave during their first year. (NCES, September, 1998)
- Okua et al (1996) studied a community college in Phoenix, Arizona, and found
 - As long as GPA remains above a 2.0, GPA is not an important factor that affects a student's departure from the institution.
 - When students encourage other students to stay rather than transfer to another institution, student retention can increase.
 - Students who enrolled in three or fewer credit hours were highly likely to depart.
- Romano (1995) examined first year attrition and retention at a community college in New York and found
 - Academic problems were the main reason for attrition.
 - The first dollars spent in retention programs are the most effective. The benefits per dollar spent declines as more money is spent.
 - The best retention effort strategy focuses on students who are placed on academic probation.
 - Attrition is blamed more on life circumstances than school-related problems.

Proprietary Institutions

- Proprietary schools report completion rates.
- The combined U.S. 1996 completion rate for accredited proprietary schools was 55 percent. (GAO, 1997)
- Proprietary schools that have less reliance on Title IV funding have higher completion rates. (GAO, 1997)
- St. John's (1995) study on proprietary schools and persistence found
 - Students most likely to persist at proprietary schools were African Americans, and to some extent Hispanics.
 - Minority students are most likely to persist if they were high school dropouts and/or have earned a GED.

6. Financial Considerations

College Costs

- As the cost of college rises, many students fail to enter or complete college because of financial considerations.
 (THECB, 1998)
- The greater the costs of proprietary school tuition, the less likely students are to persist. (St. John et.al., 1995)
- Students are not price responsive to tuition charges. (St. John, 1990)
- When looking at individual factors in the ability-to-pay-for-education model, (Cabrera, Stampen, and Hansen, 1990)
 - Students who are dissatisfied about the cost of attendance are more likely to withdraw.
 - The higher the socioeconomic status, the less likely a student is to withdraw.

Financial Aid

- TG found the most significant factor in predicting student loan default was whether a student withdrew prior to program completion. (1998)
- Perna's study concluded that (1998)
 - The direct impact of receiving aid toward bachelor's completion is marginal.
 - Financial aid has eliminated the problems lower income students face from inadequate financial resources.
 - Financial aid packaging, specifically combining work-study with grant aid, has a positive and direct effect on persistence.
- One study found (Cabrera, Nora, and Castañeda,1992)
 - Financial aid develops a more even playing field between low-income and affluent students attending college.
 - Financial aid helps students mesh into the academic and social setting of an institution.
 - Financial aid influences students' commitment to stay in college.
- Overall, the interaction of factors in the ability-to-pay model directly affects college persistence, but
 - Money alone is not enough to keep students in college. It also takes student commitment, support from significant others, institutional fit, and a positive social setting at college for students to stay in school. (Cabrera, Stampen, and Hansen, 1990)
- Financial aid is positively related to attainment among students seeking sub-baccalaureate degrees. (NCES, 1997)
- Financial assistance helps aided students graduate at the same rate as non-aided students. (NCES, 1997)
- Loan aid and grant aid have different outcomes for low-income students. The earlier low-income students receive grant aid, the more likely they will stay in college. (GAO, 1995)

- The Department of Education's longitudinal studies show that borrowing fails to be detrimental to college persistence or academic success. (King, 1998)
- Borrowing could increase students' likelihood to persistence by reducing their need to work full time and allowing students to attend full time. (NCES, 1998)
- Receiving aid, typically loans, had some effect in increasing the probability of persistence at proprietary schools. (St. John, 1995)

Socioeconomic Status (SES)

- When examining SES quartiles, students at four-year institutions who leave their first year tend to be from the lowest SES quartile first followed by students in the middle quartile. (NCES, June 1998)
- Delaying entry, which tends to decrease persistence, is more common among lower SES than higher SES students. (NCES, 1997)
- Low-income students are more likely to dropout of college than are middle and high-income students. (GAO, 1995)
- When looking at different SES groups St. John found (1990)
 - Low-income students were more responsive to grants than to tuition and were not responsive to loans.
 - Middle income students are more responsive to loans than grants or tuition costs.

7. Special Student Populations

• Different types of students depart for different reasons. Retention should be viewed differently for distinct types of student needs. (Bean 1990, Why Students)

High-Risk Students

- Characteristics of a high-risk college student include (NCES, 1998)
 - Being from a low-income family.
 - Having lower achievement (scores).
 - Having lower degree aspirations.
 - Increased likelihood of being an older student.
 - Having children.
- Students who complete remediation earn a larger proportion of certificates and associate degrees, and they earn them sooner than students not requiring remediation. Students who do not require any remediation continue their education through the baccalaureate degree at a much higher proportion than students who require and complete remediation. (THECB, 1996)
- Low-income and minority/ethnic groups frequently have lower attainment outcomes. (NCES, 1997)
- Students who face substantial challenges such as graduation from an inadequately funded or low-performing high school, inadequate resources to pay for college, or inadequate encouragement and support from family and friends are much more likely to drop out of college and need greater support services if they are to succeed. (THECB, 1998)

First Generation Students

- Twenty four percent of non-persisting students were first generation students. (Naretto, 1995)
- NCES (June, 1998) found that first generation students
 - With parents that never attended college have a more difficult time remaining and completing their degrees.
 - Are 16 percentage points behind non-first generation students in degree attainment/enrollment for all school types.
 - Who tend to persist and attain their goals in the U.S. are Asian/Pacific Islander students.
 - Who attend a public two-year institution are the least likely to be enrolled or attain a degree than students who attend school in any other school sector.
 - Who have persistence problems.
 - Score low on social integration.
 - Attend school part-time.

Minority/ethnicity

- In general, African American and Hispanic students fail to persist at the same rates as do Asian Pacific/Islanders and Anglo students. (THECB, 1997)
- Individuals with higher persistence at proprietary schools tend to be African Americans, and to some extent Hispanics. (St. John et. al., 1995)
- African American and Hispanic students have similar completion rates at public and private four-year institutions. (Porter, 1990)
- While high GPA is associated with high retention in the most typical non-minority students, this may not be the case for African American students. (Bean ,1990, Why Students)
- Reasons for African American student persistence problems include (Bean, Why Students, 1990)
 - Perceiving faculty prejudice.
 - Feeling lack of control because of too many rules and regulations of white institutions.
 - Fitting in at school may fail to be a priority.
 - Lack of positive interracial relationships before and during college.
 - Lack of parental support.
- The largest effect on Hispanic retention is the institution's goal and commitment. (Nora, 1985)
- The initial commitment of Hispanic students has a direct effect on retention. (Nora, 1985)

Traditional and Nontraditional Students

- The traditional student is characterized by being between 19 and 24 years old, attending school full-time, being a dependent, and working a few hours per week. (NCES, 1997)
- The nontraditional student has one or more of the following traits 25 years old or older, working full-time, attending school part-time, being independent, commuting to school, and having children. (NCES, 1997)
- One community college study looked at persistence with younger and older students and found (Grosset, 1991)
 - Younger persisters valued college integration more than older persisters.
 - Older persisters viewed study skills as more important than younger persisters.
 - Both younger and older persisters believed that cognitive and personal development was important.
 - Both younger and older persisters viewed goal commitment as important.

Full-time and Part-time Students

- Full-time enrollment is associated with higher rates of persistence and attainment. (NCES, 1997, 1998)
- Full-time students who work may risk their academic success if they work too many hours. (King, 1998)
- Breaking continuous enrollment is related to lower persistence and increases the degree attainment timeframe. (NCES, 1997)
- The full-time student works an average of 25 hours per week. (King, 1998)
- Non-persisters work more hours while attending college than do persisters. (Naretto, 1995)
- More part-time students were non-persisters than were full-time students. (Naretto, 1995)
- Delaying entry into college by as much as one year after high school is associated with poorer persistence and attainment. (NCES, 1997)

8. Factors Influencing Retention

- Tinto developed an important model used by other researchers concerning student withdrawal. The model suggests that withdrawing from college is like withdrawing from society, or in effect, is like committing suicide. The model maintains that students who withdraw from college have failed to successfully integrate either academically or socially in a college environment. (Tinto, 1975)
- Bean developed an important model and it is often used as a point of departure in research on persistence. Bean's model supports the idea that student withdrawal from college is like employee turnover. (Bean, 1980)
- Important factors influencing college persistence is the student's intention to persist, college GPA, and the institutional commitment to the student. (Cabrera, Nora and Castañeda, 1993)
 - The intent to persist overwhelmingly leads to persistence.
 - The intent to persist in college is influenced the most by institutional commitment, student encouragement, and student goal commitment.
- College grades and the number of months enrolled in a college have the most influence on student persistence. (Porter, 1990)
- Important factors, ranked in importance from the left column to the right column, affecting student college persistence behavior are (St. John,1990)
 - Postsecondary plans
 - Full-time enrollment
 - High school academic experience
 - Family income
 - Attending a four-year college
 - The first two years' grades

- Receiving loans or grants
- Mother's educational level
- Achievement tests scores
- Attending a private college
- Tuition costs
- Three student outcomes that can increase the likelihood of student persistence are student academic integration, student social integration, and student confidence in the quality of the institution. (Thomas, 1990)
- The single most important student service schools can offer to increase student persistence is academic advising. (Thomas, 1990)
- An important factor in explaining persistence toward degree completion is that adult students benefit from a supportive community environment. (Naretto, 1995)

9. Improving Retention

Encourage School Participation

- The Dana Center recommends schools (1998)
 - Develop and implement their unique retention plans.
 - Strengthen freshmen-year instruction.
- TCRSB advises schools to (1998)
 - Create safety nets for at-risk students.
 - Involve students in pre-matriculation programs.
 - Provide introductory college culture and skills courses.
 - Provide learning support and tutorial services.
 - Provide assessment/diagnostic placement tests.
 - Provide faculty, staff, and alum mentors.
- Bean suggests schools (Why Students, 1990)
 - Admit students who match the institution's strengths.
 - Support the student academically and socially.
 - Develop the student's loyalty to the school use symbols, rites, and rituals.
 - Have services giving students a positive attitude toward themselves and membership in the college.
 - Recognize that some students leave no matter what you do.
 - Understand that all attrition is not bad.
 - Track retention rates of groups of students who enroll from important market segments.
 - Identify the causes of student retention and departure decisions.

Activities Promoting Academic Integration May Include (Thomas, 1990)

- Emphasizing the student-faculty classroom experience, faculty advisors, quality teaching, faculty sponsorship/participation with student organization, and faculty scholarly participation.
 - Helping students increase academic skills by adding student services.
 - Sponsoring a job placement service.

Activities Promoting Social Integration May Include (Thomas, 1990)

- Supporting a strong sense of community and tradition.
- Stressing advisor, faculty, or staff contact during the first three weeks of school increases persistence. Orientation is important.
 - Affirming parental student support.
 - Having students live on campus.
 - Having part-time jobs available for students on campus.

Management Guidelines for Improving Retention (Bean and Hossler, 1990)

- Develop a database. Find out who stays and leaves.
- Do not treat all students alike.
- Make sure students have the skills and abilities necessary to do the academic work.
- Provide curriculum students want.
- Understand support psychological, emotional, and financial; when the support is lacking or withdrawn, attrition will likely increase.
- Admit students who are likely to fit and help them adjust.
- Make everyone aware of the importance of attitudes toward school in influencing retention.
- Provide activities to enhance students' loyalty to the institution.

Policy Recommendations to Improve Retention

- The Dana Center suggests funding and incentive for schools to develop and assess their unique student persistence patterns. (1998)
- TCRSB recommends the Texas Legislature more actively support full-time professors in their teaching and academic advising roles. (1998)

10. St Mary's University: A Case Study on Improving Retention

The St. Mary's University case study shows that using an enrollment management plan can increase retention. Some of the case study highlights are discussed below. (Abrams, Krotseng, and Hossler, 1990).

- A new senior administration created a Retention Task Force (RTF) in 1981 to advise the president and vice-president on retention and enrollment improvements. An enrollment manager was hired in 1983 who became co-chair of the RTF and who also supervised student admissions and financial assistance programs.
- St. Mary's developed an enrollment management system. The enrollment management system focuses on four concepts: market theory, student-institution fit, educational excellence, and pricing and financial aid.
- The Enrollment Management Council, the Admissions Marketing Council, and the Student Retention Council (SRC) were created to affirm a commitment to enrollment planning.
- The enrollment manager had a major role in developing additions to academic programs such as adopting an honors program and an internship program.
- A marketing plan was established to increase enrollment and to contribute to retention through recruiting betterprepared students. The plan emphasizes follow-up and person-to-person contact.
- In 1989, St. Mary's experienced a slight enrollment decline. The decline shows that despite retention efforts, set backs can occur.
- Student needs from orientation to graduation were studied and recommendations to the president were made and implemented.
- The number of Hispanic and African American graduates increased so much that their graduation rates became similar to Anglo students' graduation rates.
- In 1981, fewer than 50 percent of entering freshmen graduated in a six-year period, which increased to 60 percent in 1989. Retention rates (for one year only) in 1996 were 83 percent.

¹1996 rates are reported in *Peterson's*.

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