# Student Success, Retention, and Graduation: Definitions, Theories, Practices, Patterns, and Trends

#### Introduction: Student Success and Retention

Students persisting to completion of their educational goals is a key gauge of student success, and therefore institutional success. Two most frequently cited statistics in connection with student success are the freshman-to-sophomore retention rate, or first-year annual return rate, and the cohort graduation rate. The freshman-to-sophomore retention rate measures the percentage of first-time, full-time students enrolled at the university the following fall semester. The cohort graduation rate is defined as the percentage of an entering class that graduates within three years with an associate's degree, and within four, five, or six years with a baccalaureate degree. Since the annual return rate of students as they progress through a program is directly related to their degree/certificate completion, the concept of retention usually includes year-by-year retention or persistence rates as well as graduation rates. Together, these statistics represent student success.

These student success statistics are commonly regarded as primary indicators of institutional performance. They have come to reflect the overall quality of student learning and intellectual involvement; how well integrated students are in campus life; and how effectively a campus delivers what students expect and need. According to Vincent Tinto (1993), best known for his work on student departure from college, the first principle of effective retention programs and, therefore, assuring student success is "institutional commitment to students." He notes, "It is a commitment that springs from the very character of an institution's educational mission" (p. 146).

Policy makers at state and federal levels have mandated requirements for reporting retention and graduation statistics. They have also considered using them as measures of institutional effectiveness in determining levels of state/federal support. *U.S. News and World Report's* Best Colleges in America prominently displays freshman persistence and graduation rates among the metrics used to define the quality of universities/colleges. The general assumption is that the more selective or elite an institution (i.e., the older it is, the greater its endowment, and the stronger the academic caliber its students), the higher the quality of the institution and, in turn, the higher the retention and graduation rates.

However, as has been recently demonstrated in a report by the National Center for Education Statistics, there are some relatively less selective institutions serving large, diverse, and economically disadvantaged student populations that have outperformed (higher than average retention and graduation rates) both comparable institutions enrolling higher income populations and even relatively more selective institutions. This suggests that student success may be more a function of institutional commitment than just higher income and ACT performance levels of its students (Horn, 2006). While high retention and graduation rates signify a university's/college's realization of its mission, low graduation rates and high attrition rates not only expose institutional problems in meeting the needs and expectations of its students, but also represent symbolic failure in accomplishing institutional purpose. As measures of the quality of an institution's overall product, retention and graduation rates are of interest not only to accrediting agencies, policy makers, and the general public or taxpayers, but, especially to students, their families, and contributing alumni. For decades, retention experts have claimed that an institution's ability to demonstrate student success and its ability to attract and recruit new students are intertwined (e.g., Pascarella and Terenzini, 2005; and Kuh, et al, 2005; Levitz and Noel, 1998a, 1998b; Astin, 1993; Tinto, 1993; Wingspread Group, 1993; Boyer, 1987; Noel, Levitz, and Saluri, 1985). For example, Randi Levitz and Lee Noel (1998b) maintain that colleges and universities across the nation, irrespective of size and mission, have recognized the principle that "The success of an institution and the success of its students are inseparable" (p. 129). It should come as no surprise that an increasing number of prospective students and their families visit campuses poised with questions regarding retention and graduation rates. An institution's success in recruitment ultimately depends on evidence that its students are satisfied, persisting to graduation, and thus receiving value for the investment they and their families are making in higher education.

While the internal institutional reasons for embarking upon enrollment management/retention strategies vary, there are several general reasons that are held in common across campuses. First, in today's complex and challenging higher education environment – a burgeoning college-bound population, escalating costs, lagging state support, intense scrutiny from state and federal agencies – colleges and universities must not only be able to put policies and practices in place that promote academic goals, but provide empirical evidence of student success (Kuh, 2005). Second, it has been dramatically demonstrated that it is far more cost efficient for institutions to retain students they currently have than recruit new ones to replace the ones they have lost (McGinity, 1989; also see Noel-Levitz Retention Estimator, n.d.). Third, good retention practices make good sense because they are generally learner-centered; they are based on intrusive and intentional interventions that are focused on student engagement and intellectual involvement; and they emphasize general quality enhancements of educational programs and services. Good retention rates are essentially the bi-product of improved quality of student life and learning on college campuses (Noel, 1985). Lastly, research results confirm that campuses with higher retention outcomes are conducting sound educational practices (Pascarella & Terenzini, 1991; 2005).

# Definition of Retention and Key Associated Concepts

The terms retention and persistence are frequently employed interchangeably. Attempts to differentiate the terms have not been successful. For example, it has been suggested that retention is an institutional-level measure of success, and that persistence is an individual or student-level measure of success (Hagedorn, 2005). However, this differentiation of terms has not been widely accepted.

John Summerskill (1962) is perhaps among the first to call for the development of national standards with respect to the definition and measurement of retention including annual return and completion rates. Currently, according to the online glossary provided by the Integrated Postsecondary Education Data System (IPEDS), which is the primary source of retention information for the nation, retention is defined as follows:

A measure of the rate at which students persist in their educational program at an institution, expressed as a percentage. For four-year institutions, this is the percentage of first-time bachelors (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. For all other institutions this is the percentage of first-time degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their program by the current fall.

The IPEDS online glossary does not provide a separate definition for the word, persistence, nor is there any specific mention of the term, attrition, or other related terms. There is, however, a rather long description of graduation rates:

One of the nine components of IPEDS, this annual survey was added in 1997 to help institutions satisfy the requirements of the Student Right-to-Know legislation. Data are collected on the number of students entering the institution as full-time, first-time, degree- or certificate-seeking undergraduate students in a particular year (cohort), by race/ethnicity and gender; the number completing their program within 150 percent of normal time to completion; the number that transfer to other institutions if transfer is part of the institution's mission; and the number of students receiving athletically-related student aid in the cohort and the number of these completing within 150 percent of normal time to completion.... The GRS [graduation rates] automatically generates worksheets that calculate the rate, including average rates over 4 years.

Even though retention and graduation rates have been annually collected by IPEDS since 1990 on a national level; and they have been widely discussed publicly, there is still no universally accepted definition or measurement (operationalization) of retention. This makes comparisons very difficult (Van Stolk, et al. 2007).

## Persistence, Progression, Retention, Completion/Graduation (PPRCG)

The notion of retention is grounded in student success. Retention related activities focus on providing a campus environment where students successfully complete their goals and complete their academic program/certificate/diploma or graduate from an institution.

Noel-Levitz defines PPRCG as follows:

Persistence is the enrollment headcount of any cohort compared to its headcount on its initial official census date. The goal is to measure the number of students who persist term to term and to completion.

Progression is the rate at which a cohort participates in any activity that an institution has determined to be correlated with persistence. Common measures are course completion rates, success rates of students on academic probation, and/or comparisons of academic credit hours attempted versus academic credit hours

earned. Progression ensures that students demonstrate the skills and competencies needed to complete their academic program and continue successfully towards completion.

Retention is the outcome of how many students remained enrolled from fall to fall. This number is typically derived from first-time, full time traditional day students, but can be applied to any defined cohort.

Completion/Graduation is the outcome of how many students within a cohort complete and/or graduate from an institution. This is typically measured in two or three years for associate level programs and four, five, or six years for a bachelor level programs.

Data drives the analysis of persistence, progression, retention, and completion as appropriate by institutional type. By determining specialty sub-populations or categories based on experiences, courses, student admission or academic status, or other groupings, the institution can use data to deepen their analysis of where persistence and progression issues occur. This allows the institution to create customized strategies to address these subpopulation challenges.

# Scholarly Definitions of Retention and Student Success

Scholars of higher education, especially retention experts, have variously defined retention amplifying certain elements based on their own theoretical perspective. According to a sample of definitions that may be found in the research literature, retention refers to:

- Successful completion of students' academic goals of degree attainment (Levitz, 2001).
- Students meeting clearly defined educational goals whether they are course credits, career advancement, or achievement of new skills (Tinto, 1993).
- Students' successful academic and social integration into the college community, marked by the feeling that one fits at the institution and positive educational attitudes and experiences (Bean, 1980).
- The match between students' motivation and academic ability and their academic and social characteristics (Cabrera, Castaneda, Nora, Hengstler, 1992).
- The degree of direct involvement of students in the academic and social life of their institutions (Astin, 1984).
- The by-product of student success and satisfaction and ultimately an indicator of institutional success (Noel and Levitz, 1985).

For a greater part of the history of the study of retention, little distinction beyond returning and non-returning students has been made. Yet as Jeff Hoyt and Bradley Winn (2003) point out, there are several distinct sub-populations of students who do not return or persist to graduation. These sub-populations include drop-outs, stop-outs, opt-outs, and transfer-outs.

Each of these sub-populations has a unique set of characteristics, experiences and reasons for withdrawing. For instance:

Drop-outs may be defined as:

Previously enrolled students who do not reenroll or do not complete their intended degree program or set of courses (e.g., Tinto, 1993). Research on this group suggests that financial concerns, family responsibilities/marriage, job conflicts, and low grades are among the top reasons for leaving school (Hoyt and Winn, 2003). Support interventions, counseling, and sensitivity in handling students' concerns and issues may be particularly important to consider in such cases.

Stop-outs may be defined as:

Students who begin with a plan of study, however, for some reason, withdraw and leave for a period of time, and then reenroll in order to complete their degrees (e.g., Gentemann, Ahson, and Phelps, 1998). Often reasons for stopping out are financial, job-related, or connected with health issues (Hoyt and Winn, 2003). Usually these students have been satisfied with the institutions and, so, they may be more likely to appreciate being contacted regarding reenrollment when they are ready.

Opt-outs may be defined as:

Students who leave their respective institutions because they have achieved their particular goal (i.e., completion of a course or set of courses they desired or needed). Their goal may not necessarily have been to complete a degree program or certification program (Bonham and Luckie, 1993). Non-degree-seeking students may not be the best targets of traditional retention programs.

Transfer-outs may be defined as:

Students who embark upon their educational careers in one institution and, then, before they complete their goal or obtain their degree, they leave and enroll in another college/university (Bonham and Luckie, 1993). The main reasons for leaving for this group typically include: financial (reflecting not just the issue of ability to pay, but the perception of value of investment), job conflicts, availability of programs/courses, dissatisfaction with the institution, and transfer institution is closer to home (Hoyt and Winn, 2003). This group makes up a significant number of non-returning students. Emphasizing program enhancements and creation of new programs may help in re-recruiting these students.

Hoyt and Winn (2003) argue that these different types of non-returners are important to differentiate if effective retention strategies are to be implemented. Important information can be gained from withdrawal interviews, readmission questionnaires, admission applications, as well as cohort tracking surveys.

# Retention and Student Success: Theory and Research

Historically, scholarly interest in the concept of retention seems to correspond with the growth of students entering post secondary institutions in the 1960s. Interest in the topic has continued to increase, particularly in the context of concerns regarding the enormous financial implications of large attrition rates on the national educational system and the moral and civil rights issues associated with relatively low retention rates of minority and economically disadvantaged students.

Over the decades, the retention literature seems to have concentrated on various issues. For example, Lee Noel (1985) discusses four historical stages of research development. First, researchers viewed retention mainly as a factor in enrollment management and thus placed their attention on developing predictive models of attrition. Second, as researchers shifted their focus on uncovering strategies that work to lessen student attrition, especially for high-risk students, the search for good practices and verifiable outcomes ensued. Third, scholarly interest broadened to include organizational factors of success, and focused on developing effective ways to mobilize campuswide efforts in order to improve retention. Fourth, following the organizational approach, greater consideration has been given to staffing; suggesting that competence as well as a caring attitude of faculty and staff ultimately affects the success of any retention programs or campuswide initiatives.

A review of the retention literature suggests that there are two fundamental questions that underlie the theoretical models of retention:

- 1. Why do students leave?
- 2. Why do students stay?

Most of the theories and corresponding research on retention focus on the first question, which puts attention on dropouts and what institutions do wrong. Relatively few researchers have dealt with the latter question, which looks at successful students and emphasizes what institutions do right.

It is essential to underscore the importance of both questions related to leaving and staying and their associated lines of inquiry; both are vital to understanding the complexities connected with retention. For example, it has been noted that the field's "obsession with outliers" has led to many institutions placing almost exclusive attention on students who are most at risk of dropping out rather than on students who are in the "center of the curve," which may account for the inability of these colleges to make substantial gains in their overall retention indicators (Kalsbeek cited in Hoover, 2008). Ethical issues have also been raised in connection with applying resources to retention programs designed to benefit only a very small number of students (Hossler and Bean, 1990).

Over the decades, different theoretical perspectives have dominated the scholarship on retention. John Summerskill's 1962 publication, in which he attributes intellectual ability in meeting the demands of academic programs and students' personality characteristics as the primary factors determining persistence, stimulated discussion on what causes dropping out of college. In the 1960s and 1970s psychological factors and explanations dominated

theoretical development and research on retention (e.g., Heilbrun, 1965; Rose and Elton, 1966; Marks, 1967; Rossmann and Kirk, 1070; Waterman and Waterman, 1972).

Vincent Tinto's work has paved the way for a sociological analysis of retention (e.g., 1975, 1987, and 1993), which has been popular for several decades. His research and that of his followers may be credited with expanding the debate on the causes of attrition by calling attention to institutional factors that affect retention, namely the importance of academic and social integration in lessening dropout rates. Initially building on Emile Durkheim's (1951) treatise on the social roots of social deviation and William Spady's (1971) application of anomie theory (i.e., the effect of relative normlessness on human behavior) to explain dropping out, Tinto's model focuses largely on academic integration (i.e., sharing academic values) and social integration (i.e., developing student and faculty friendships) to account for variations in attrition rates. However, in subsequent renditions of his theory, he places more emphasis on the interaction between individual and institutional factors and adds other theoretical perspectives, such as Van Gennep's (1960) rites of passage theory, suggesting that integration may be facilitated by successful separation from family and high school associates.

John Bean and Shevawn Eaton (2000) offer an integrated multi-level model of causes of dropping out. Their model combines individual characteristics and background variables. Examples include high school experiences; students' intentions or educational goals; family support; indicators of students' academic standing and social integration in college; how students interact with the institutional bureaucratic structures; external factors (i.e., financial situation or personal relationships outside of college); and ultimately students' attitudes toward themselves and the school, including feelings of fit and loyalty to the institution. The model brings together attitude-behavior theory, self-efficacy theory, coping-behavior theory, organizational turnover theory, and social integration and alienation theory.

Alexander Astin (1997) in his book, *What Matters in College*, takes a unique approach by focusing mainly on the patterns of engagement exhibited by successful students. He concludes that the keys to success or graduation are involvement and connection. Involvement refers to both formal academic or intellectual pursuits as well as co-curricular activities. Among the primary measures of academic involvement is time spent on academic studies and tasks, and the development of higher cognitive skills (e.g., understanding, application, analysis, synthesis, and evaluation). Co-curricular involvement includes measures of participation in campus activities and membership in academic/honors associations and social clubs. Connection refers to bonding with peers, faculty and staff as well as sharing the institutional values.

Similar to Astin's orientation, George Kuh's work emphasizes the role of student engagement in student success. In his coauthored book, *Student Success in College: Creating Conditions that Matter*, he and his associates depict major policies and practices coming from a two-year study (called Documenting Effective Educational Practices (DEEP) project) of 20 strong-performing colleges and universities all of which represent higher than predicted student engagement as indicated by student responses on the National Survey of Student Engagement (NSSE) and higher than predicted graduation rates. The results of the study suggest that DEEP schools all clearly articulate expectations of success and demonstrate to students how to take advantage of institutional resources. They have acculturation processes in place. They also have events to connect students with peers, faculty, and staff and to communicate what is valued and how things are done. They align resources, policies, and practices with the institutional mission and purpose. Further, they represent the cultural norm of the continuous process of innovation and "ethic of positive restlessness" or "improvement-oriented ethos" (Kuh, et al. 2005; Whitt, et al. 2008).

The parallel results of studies that are based on different fundamental questions may serve to confirm the importance of certain campus dynamics to student success. Hence, whether one begins with the question of why students leave or with the question of why students stay, in either case, student engagement, including academic and social involvement and connection with the campus community, and its values are vital to student success and retention. Several decades worth of research have supported the critical role of the institutional/student bond to both preventing attrition and ensuring student success.

Most research on the topic of retention, however, is not driven by any grand theory. Rather, as John Braxton (2000) notes, there are hundreds of studies or partial theories that focus on particular aspects of student attrition, persistence, or graduation. All of these are working to contribute to our understanding of the complex retention puzzle. Lee Noel (1985) identifies some common themes in the retention literature that continue to be of interest today. Some of the themes identified are academic boredom and uncertainty, transition/adjustment difficulties, limited or unrealistic expectations of college, academic underpreparedness, incompatibility, and irrelevancy. (For comprehensive reviews of the history and development of retention theories and issues, see Pascarella and Terenzini, 2005; Berger and Lyons (2005), and Braxton and Hirschy (2005).)

The 2004 ACT Policy Report, which is based on many years of ACT research on retention, including three national studies on retention practices, six national studies on academic advising, and 20 years of data collection and reporting of college retention and degree completion rates through ACT's Institutional Data Questionnaire, recommends an integrated approach to retention. The report's recommendations include: (1) determining student characteristics and needs and setting priorities; (2) incorporating academic and non-academic factors and creating educationally and socially inclusive and supportive learning environments; (3) implementing early alert systems that assess, monitor, and adequately respond to at-risk students; and (4) tracking retention indicators and conducting cost-benefit analyses of attrition and persistence, including assessment of results of intervention strategies and evaluation of institutional decision-making and commitment to continuous improvement (Lotkowski, Robbins, and Noeth, 2004).

It has been increasingly documented over the years in the retention literature that in order for institutions to be maximally effective and realize their mission, retention must be viewed as an ongoing, campuswide responsibility requiring everyone's participation and contributions. Indeed, it takes a campus to educate and graduate a student. The critical components that consistently have been shown to ensure student success and, therefore, institutional success include: (1) satisfied students and alumni; (2) competent caring faculty and staff; and (3) concerned/aware administration (Noel, 1985; Levitz, 2001).

The Noel-Levitz National Center for Enrollment Management has been tracking retention data and research results as well as collecting information from campuses around the country and internationally on what works and what doesn't work for several decades. The following list of retention principles may serve to summarize some key findings of retention-related research and state-of-the art knowledge on retention:

# **Retention Principles**

1.	The ultimate goal of a retention effort is improved educational experiences for students, rather than retention per se.
2.	Improving the quality of student life and learning is a continuing and important priority for all institutions of higher education.
3.	Engaging in a quality of student life and learning (retention) improvement process should provide an approach to organizing a systematic effort, while at the same time enhancing overall institutional quality, effectiveness, and student success.
4.	Increases in retention rates are a function of the current state of efforts to improve the quality of educational programs and services. Most institutions engaging in a systematic and comprehensive retention effort should be able to expect, over time, a "lift" in cohort graduation rates between 10 and 20 percent and improvements in annual retention rates of 2 to 5 percent.
5.	Improving retention is a complex task: retention and attrition are multi-variant phenomena and are not subject to "quick-fix" strategies.
6.	Retention tools, systems, staff development activities, computer software, and professional consultation can make a significant contribution to an organized retention effort.
7.	Retention strategies already in place can serve as an excellent foundation for developing an ongoing, more systematic approach to improving the quality of student life and learning (retention).
8.	Retention is a key component of a comprehensive enrollment management program.
9.	Some attrition is inevitable and acceptable.
10.	Attrition is expensive, and improvements in retention rates can add to the annual operating budget.
11.	Attrition is a problem for which there is a solution, and retention is one aspect of an enrollment management program over which an institution can exert considerable influence and control.
12.	Single casual factors of student attrition are difficult to ascertain.
13.	Some attrition is predictable and preventable by focusing special efforts on selected target groups of students.
14.	Effective retention strategies are comprehensive focusing on improving campus programs, services, attitudes, and behaviors that result in quality educational experiences for all students.
15.	Educational programs and services cannot compensate for the absence of competent, caring, and conscientious faculty and staff.
16.	Key to improving the quality of student life and learning (retention) are student-centered policies, procedures, and programs.
17.	Persistence depends upon the extent to which an individual has been integrated and engaged in the academic and non-academic components of the campus community.

Furthermore, research evidence has shown that the target areas listed below are particularly relevant to improving retention and thus may serve to stimulate retention planning and the development retention action plans.

## **Target Areas for Retention Planning**

- **Recruiting.** Providing students with adequate and accurate information assists in the selection of an institution that best matches their needs, which in turn increases their chances of persisting.
- Admissions Selectivity. Even though academic ability is a strong predictor of student retention, and there is clearly a relationship between the degree of admissions selectivity and institutional retention rates, high institutional commitment to student success can lead to higher than predicted retention rates and performance.
- **Financial Aid.** The type and mix of financial aid provided to students can have either positive or negative influences on students' decisions to remain in college depending upon their circumstances and background factors as well as cost of tuition, room and board, and fees.
- **Commuter Students.** Regardless of differences in backgrounds and educational goals, commuter students share a common core of needs and concerns. There are issues related to transportation that limit the time they spend on campus, multiple life roles, the importance of integrating their support systems into the collegiate world, and developing a sense of belonging to the campus.
- Orientation. Orientation programs are important to the successful integration of students into the academic and social environment of the campus community. They serve to communicate the values of the institution and what is required to be successful. They also help establish consonance between student expectations and actual experiences.
- Academic Advising. Advising provides the most significant mechanism by which students can directly interact with representatives of the institution and clarify their educational/career goals as well as relate these goals to academic offerings. While many models of advising now exist, a critical element to advising systems is ensuring advisees are connected to faculty who will mentor and guide them through their academic experience and help them meet their career and graduate education goals.
- Sectioning/Placement. Homogeneous grouping of students based on their level of academic ability is a common educational and retention strategy. Careful placement of students helps ensure that they can compete successfully academically.
- Effective and Efficient Course Management. The services and processes typically evolve around activities associated with coordination of course planning, managing classroom scheduling, creating and publishing master schedules, developing and implementing registration/enrollment management policies and procedures, maintaining accreditation and professional standards, analyzing time-to-degree factors, and tracking university/college/program/course enrollment and retention patterns.

- **Teaching/Learning.** Academic programs and experiences must be consistent with, and relevant to, students' educational/career goals. There is no substitute for good instruction in promoting academic integration. Studies have shown a strong relationship between student learning and increased persistence. Support of instructional effectiveness constitutes one of the strongest strategies for improving retention. Students need assurance that they are gaining the best skills that prepare them for their careers.
- Academic support. Retention literature documents that academically underprepared students are more dropout-prone. Institutions should ensure that students enter with, or have the opportunity to acquire, the skills needed for academic success. Learning support programs improve students' chances of success and persistence. Examples of this include tutoring programs, peer mentoring, and title III and title V grant programs.
- **Supplemental instruction.** In courses with high D, F, W rates, supplemental instruction has proven to be a highly successful intervention strategy. Peer tutors participate in the course and then provide course content tutorial-like sessions for course participants ensuring course concepts are mastered.
- Academic enrichment. Academic boredom is a common reason talented students drop out of higher education. Providing enriched or accelerated programs can have a positive impact on the persistence of some of these students.
- **Residential living.** The quality of on-campus residential living is an important element in social integration. Through living/learning communities students become active participants in their academic and social community.
- Learning communities. Learning communities are programs that use a variety of approaches that link or cluster classes during a given term, often around an interdisciplinary theme. This represents an intentional structuring of students' time, credit, and learning experiences to foster more explicit intellectual connections between students, between students and faculty, and between disciplines of smaller subgroups of students, with a common sense of purpose, leading to an integration of classroom and non-classroom experiences.
- Service Learning. Courses specifically designed to engage students with the external community providing services to specific organizations. These courses are designed to connect theory with practice and focus on building stronger relationships with external companies or organizations.
- **Counseling.** With the significant increase in personal counseling usage, this strategy can be important in assisting students to overcome problems that may interfere with their performance and involvement in academic and non-academic programs and activities.
- **Extracurricular activities.** The literature indicates that significant and meaningful participation in extracurricular activities contributes to student success and retention. Campus clubs, organizations, intramurals, campus events and traditions all play a role in engaging the student and providing intentional connection opportunities.
- Underrepresented students/specialty sub-populations. Some racial/ethnic groups or specialty sub-population groups (student-athletes, first-generation, rural or urban, etc.)

experience relatively higher dropout rates. Special programs and efforts can be successful in addressing students' needs, reducing isolation and facilitating integration in the academic community, and thereby helping to ensure student success and retention.

- Undecided students. Retention research identifies this group as being highly dropoutprone. Lack of clearly defined educational or career goals is often the main reason students give for not returning or pursuing a college degree. Programs targeted specifically for undecided students have proven to significantly reduce attrition rates.
- **Early alert.** Prediction of dropout-prone students when combined with early warning strategies and support programs can increase retention.
- **Policies/procedures.** Colleges and university whose policies and procedures are aligned with the institutional mission and reflect student-centeredness, and are committed to continuous improvement usually demonstrate higher retention rates.
- **Faculty/staff development.** The frequency and quality of faculty/staff and student interactions has been shown to contribute positively to student retention. In-service faculty/staff development efforts resulting in more competent, caring, and concerned individuals are critical to successful retention initiatives/programs.
- **Internal marketing programs.** During the recruitment process campuses communicate with students regularly keeping them informed of changes occurring on the campus and providing general information about campus life. Once students arrive on campus, internal communication often stops. Ongoing communication can have a positive impact on the persistence of some students because they stay in touch with current campus events and developments. In addition, ongoing communication with the faculty and staff is vital to fostering learning of the entire campus.
- **First Year Experience course.** Many successful first-year retention programs stem from the creative teams of mentors/instructors who participate in some type of first-year experience course. This course is generally focused on time, life, and study skills, and has a career exploration component. The essential goal of the First-Year Experience or University 101 course is to maximize the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by collegiate life.
- **Sophomore strategies.** Next to improving the freshman-to-sophomore return rate, campuses increasingly have been focusing on reducing the sophomore-to-junior dropout rates by implementing strategies to support second-year students. These support programs usually center on helping students who are still undecided determine an academic major and assisting students in creating clear career objectives related to their majors.
- **Junior jaunt.** Determine strategies that lessen the number of junior status students that leave the institution. This process requires creating specific strategies designed typically by academic program fostered around degree completion and career goal obtainment.
- **Engagement and satisfaction.** Understanding the undergraduate student experience is central to promoting student learning, success, and educational attainment. Measuring a student's levels of satisfaction and levels of engagement in the academic and social

community are critical to ensure a conducive environment exists that fosters student success.

- **Quality Service.** A keen attention towards creating and maintaining a culture that is built around quality service initiatives that lessen student run-around and focus on meeting the needs and demands of diverse student populations. This is an ongoing initiative that focuses on all staff and faculty and maximizes uses of technology and intrapersonal skills to help build relationships, provide answers to questions, and focus on improved outcomes.
- Adult learning strategies. Adult learners, by their nature, fall into many risk categories for student attrition. Adult learners tend to be transfer students, many were not successful in previous college experiences, most work more than 20 hours per week (usually 40 or more) off-campus, and they are almost exclusively commuter students. Traditional strategies for student retention are not easily applicable to adult learners; however, with some revision of assumptions retention strategies can be developed to promote adult learner success. Campuses must pay individual attention to the demographics and economic conditions of their adult population customizing strategies that fit the individual campus.
- Exit interviews. Exit interviews conducted in a way in which the institution is perceived as being helpful and supportive rather than just running a student through unnecessary hoops, may create an environment for students to exit gracefully. Well trained staff who are working one on one with students to help them leave are much more likely to find out the real issues related to the departure. As well, students who leave in good standing can learn that they are welcome to return to the institution should the opportunity present itself.
- **Re-entry interviews.** As students re-enter an institution, a designated person(s) should meet individually with the student to discuss their reasons for returning to the institution, help students create goals, and map out a completion plan by selecting courses in the appropriate sequence that will move the student back towards timely completion.
- **Recruit back.** Strategies that recruit a student back to the institution who has left in good standing. This strategy is particularly valuable when reaching out to students who have completed 90 or more hours in their academic career and can complete within two to three terms.
- **Technology.** A major vehicle of connecting students to an institution through the recruitment process is using a wide variety of technology tools that engage students and allow them to opt in and out of conversation as they desire. Campuses need to provide intranet type tools that provide students with campus information, calendars, networking tools, and support services. Campuses need to ensure faculty maximize technological learning tools to engage students both in and out of the classroom and provide accurate and updated information on campus classroom technological sites.

# National Retention Rates and Benchmarks

Among the most widely cited set of retention statistics is the ACT Institutional Annual Data File, which provides yearly graduation and persistence rates that serve as retention benchmarks for institutions. Rates are presented by institutional admission selectivity (see table below):

Selectivity Level	ACT	SAT
Highly Selective	25-30	1710-2000
Selective	21-26	1470-1770
Traditional	18-24	1290-1650
Liberal	17-22	1230-1530
Open	16-21	1170-1480

The 2008 ACT graduation rates follow in the tables below:

Admissions Selectivity	AA	BA	MA	PhD	
Highly Selective		65.3	73.5	78.2	
Selective		71.5	50.4	52.5	
Traditional	24.4	39.5	37.8	39.7	
Liberal	37.6	42.5	35.0	55.7	
Open	26.3	27.6	32.6	42.8	

## **Graduation Rates\* – Public Institutions**

\*Graduation in 3 years for Associate Degree; 5 years for BA/BS

Source: Compiled from ACT Institutional Data File, 2008

#### **Graduation Rates\* – Private Institutions**

Admissions Selectivity	AA	BA	MA	PhD	
Highly Selective		86.7	80.4	81.9	
Selective	79.5	69.8	66.7	66.0	
Traditional	48.9	44.7	51.0	52.1	
Liberal	61.2	43.2	43.9	40.1	
Open	46.2	49.4	49.4	54.1	

\*Graduation in 3 years for Associate Degree; 5 years for BA/BS

Source: Compiled from ACT Institutional Data File, 2008

The 2008 ACT first-to-second year persistence rates follow in the tables below:

AA	BA	MA	PhD	
	87.3	91.5	90.2	
	90.7	80.5	81.8	
56.6	70.7	70.5	73.1	
54.8	62.4	64.1	60.3	
53.6	60.3	64.4	74.8	
	56.6 54.8	87.3   90.7   56.6 70.7   54.8 62.4	87.3 91.5   90.7 80.5   56.6 70.7 70.5   54.8 62.4 64.1	87.3 91.5 90.2   90.7 80.5 81.8   56.6 70.7 70.5 73.1   54.8 62.4 64.1 60.3

#### First- to Second-year Retention: Public

First time, full time, degree seeking

Compiled from ACT Institutional Data File, 2008

#### First- to Second-year Retention: Private

Admissions Selectivity	AA	BA	MA	PhD	
Highly Selective		93.5	87.9	91.4	
Selective	72.6	78.7	80.1	83.7	
Traditional	58.9	67.1	70.9	73.1	
Liberal	63.1	63.2	62.5	70.3	
Open	50.6	63.6	67.2	74.3	

First time, full time, degree seeking

Compiled from ACT Institutional Data File, 2008

**Ba**sed on evidence of tracking retention data over several decades it appears that the rates reported by ACT have been relatively stable. However, according to results of a recent survey based on responses from 193 four-year institutions, 35.4 percent of public institutions and 43.2 percent of private institutions have remained stable (i.e., within +/- 1% variation during the past three years) (Noel-Levitz, 2007, p. 11). Survey results also show that 47.7 percent of public institutions and 49.8 percent private institutions have experienced increases in their graduation rates, while 16.9 percent of public institutions and 6.7 percent private institutions have reported decreases in their graduation rates over the same time period. Offering academic support programs along with placing campuswide attention on undergraduate teaching and learning has been rated the most widely used retention practice by both public and private institutions. In response to the question: Does your institutions and 30.1 percent private institutions have indicated "yes." And yet, overwhelming evidence suggests that:

Every college and university has the potential to improve the quality of its undergraduate education. Turning this potential into reality requires cultivating an ethic of positive restlessness that takes the form of an institutional commitment to continual innovation and improvement focused on student success (Whitt, et. al., 2008, p. 1).

# Successful Retention Programs

Effective retention initiatives are multifaceted in their approach and provide comprehensive services. Several different strategies to complement a comprehensive retention plan are listed below:

## **Ten Elements of Successful Retention Programs**

1.	Collect, compile, and analyze pertinent retention data and research
2.	Implement early identification/alert and intervention strategies
3.	Commit to both "front-loading" and "progressive responsibility" philosophies and strategies
4.	Concentrate energies on the importance of the teaching and learning process
5.	Emphasize a deliberate strategy of student engagement and involvement
6.	Address students' affective – as well as cognitive – needs
7.	Create programs and services based on meeting students' individual needs and differences
8.	Develop a student-centered institution
9.	Monitor – on a systematic basis – student expectations and levels of satisfaction
10.	Establish an organizational structure/mechanism of life and learning issues and an institutional change process

Noel-Levitz National Center for Enrollment Management

# Assessing the Effectiveness of Retention Initiatives

Assessment is critical to informing the direction of planning and determining success. By using the "student success funnel," which represents a model with key metrics for measuring persistence and progression, campuses can better meet the needs of their students and help them be successful (Culver, 2008). The funnel depicts the movement of incoming students (Pre-Term 1) as they progress term to term in the first year to the second, third, and fourth years to graduation (up to the 6th year). For example, the funnel addressed the following data questions:

- What is the retention rate for first time, full-time freshmen that return for their sophomore year?
- What is the retention rate for first-time transfer students that return for their second year?
- What is the return rate of students from their sophomore year to their junior year?

- What is the retention rate for students in special populations?
- What is the four, five, and six year graduation rate?

The model is based on persistence and progression rate data that is date-, year-, and cohortspecific. The progression indicators also should include such measures as course registration rates, rate of participation in orientation programs, rates of participation in academic support programs, placement rates, rates of advising, and participation in early intervention program and/or programs for students at risk. It is important for institutions to identify their own sets of retention indicators/measures that correspond with their array of intervention programs as well as patterns of attrition. Along with measures of retention, surveys of students' level of satisfaction with the educational product and campus services are helpful in letting campuses know which strategies work and which do not work. If students do not respond favorably to institutional initiatives, improvement in retention may not be realized.

In addition, predictive models can be created to identify common campus characteristics that lend to persistence or attrition. These variables combined with student levels of academic preparation, educational aspiration, social integration, and financial needs provide a strong understanding of students needs.

Assessment also includes general information regarding the state of retention services on campus both for benchmarking and tracking purposes. For instance, it is important to conduct a campus inventory and consider such questions as:

- What are current campus retention initiatives?
- What is the campus definition of a successful retention program?
- What philosophical or theoretical base is used to define retention?
- What types of student support services are provided?
- What is the level of student satisfaction with the quality of instructional and other educational services?

# **Case Studies**

Since its establishment in 1973 Noel-Levitz has partnered with over 2,000 colleges and universities across the United States and in other nations of the world. The Retention Excellence Award Program, which was instituted in 1983, serves to recognize campus achievements and innovations in retention. Nearly 150 winners comprise an impressive list of case studies of success; both specific programs and campuswide initiatives have been recognized. The winners of the 2008 Noel-Levitz Retention Excellence Awards include:

• Grand View College in Des Moines, Iowa, for their student success program that combines four strategies to improve retention of all first-year students: including the establishment of learning communities, early alert and intervention programs, Web site for student services, and the Center for Excellence in Teaching and Learning.

- South Plains College in Levelland, Texas, for their comprehensive retention plan involving the collaborative efforts of members from the divisions of academic and student affairs.
- Virginia Commonwealth University in Richmond, Virginia, for their innovative discovery program for undeclared students.

## See

https://www.noellevitz.com/About+Us/In+the+News/News+Item/2008+REA+Winners.htm

## Noel-Levitz Products and Services in Support of Retention

Noel-Levitz's vast array of retention products and services, ranging from high quality consulting to a wide assortment of retention tools, are designed to assist campuses in identifying and overcoming nearly any challenge to student success. Student success and retention services include:

- **Retention consulting**: Both focused and extended retention consulting services are offered by expert practitioners who employ state-of-the-art approaches in evaluating the current campus conditions and facilitating strategic planning, in addition to helping with the development of plans and implementation of changes necessary for student success and institutional effectiveness.
- Student Satisfaction Inventory (SSI): This survey measures both students' perceptions of importance and satisfaction with key retention areas, which offers not only benchmarking data, but helps in prioritizing strategies and tracking changes in student attitudes.
- **Institutional Priorities Survey (IPS)**: This survey of faculty, staff, and administrators is a companion to the SSI. It is designed to help identify where there is agreement or a gap in perceptions of importance and satisfaction related to key retention areas.
- Adult Learner Inventory: This survey, which is comparable to the SSI, is designed for students 25 years and older, with an undergraduate focus.
- Adult Priorities Survey: This survey is also for students who are 25 years or older, however, it is more suitable for graduate level students.
- **Priorities Survey for Online Learners**: This survey has been designed especially for students in online distance learning programs.
- **Retention Management System/College Student Inventory**: This inventory has been created for new entering freshmen in order to identify students who are most at risk, providing an early alert system, which can assist in directing retention efforts.
- **retentionRT**: This is a powerful predictive modeling tool which uncovers students selfreported challenges and uses enrollment data to identify key risk factors that may hinder student success. It is also an early-alert tool.
- Advising Webinar Series: This series of Webinars, which has been designed to be part of a faculty/staff advisor development program and to stimulate campus discussion of key issues in advising, features leading experts in the field of advising.

- Academic advising for student success and retention: This is a video-based training program, designed to strengthen advising on campus.
- Connection NOW Online Course How to Provide Winning Service: This online course provides a quality service training and development opportunity for staff across campus and serves to reinforce the value of student-centeredness.
- **Connections and Advanced Connections**: This campus personnel training and development program is designed to raise the level of student satisfaction by improving student services across campus.

#### **References and Resources**

ACT, Inc. (2008). Act Institutional Data File, 2008. www.act.org/path/policy/pdf/retain\_2008

Astin, A. W. (1984). "Student involvement: A developmental theory for higher education." *Journal of College Student Personnel*, 25 (2), 297-308.

Astin, A.W. (1997). *What Matters in College? Four Critical Years Revisited*. San Francisco, CA: Jossey-Bass.

Bean, J. P. (1980). "Dropouts and turnover: The synthesis and test of a casual model of student attrition." *Research in Higher Education*, 12 (2), 155-187.

Bean, J. P., and Eaton, S.B. (2000). "A psychological Model of College Student Retention." In J. M. Braxton, Ed., *Rethinking the Departure Puzzle: New Theory and Research on College Student Retention*. Nashville, TN: Vanderbilt University Press.

Berger, J. B., and Lyons, S. (2005). "Past to present: A historical look at retention." In Siedman, A. (Ed.). *College Student Retention: Formula of Student Success*. Westport, CT: Praeger Press.

Bonham, L. A., and Luckie, J. I. (1993). "Community college retention: Differentiating among stopouts, dropouts, and optouts." *Community College Journal of Research and Practice*, 17, 543-554.

Boyer, E. (1987). *College: The Undergraduate Experience in America*. New York, NY: Harper and Row.

Braxton, J. M., Ed. (2000). *Rethinking the Departure Puzzle: New Theory and Research on College Student Retention*. Nashville, TN: Vanderbilt University Press.

Braxton, J. M., and Hirschy, A. S. (2005). "Theoretical developments in the study of college student departure." In Siedman, A. (Ed.). *College Student Retention: Formula for Student Success*. Westport, CT: Praeger Press.

Cabrera, A. F., Castaneda, M. B., Nora, A. & Hengstler, D. (1992). "The convergence between two theories of college persistence." *Journal of Higher Education*, 63 (2), 143-164.

Culver, T. (2008). *A New Way to Measure Student Success*. Noel-Levitz National Center for Enrollment Management. www.noellevitz.com

Durkheim, E. (1951). *Suicide*. Translated by J. A. Spaulding and G. Simpson. Glencoe, OH: The Free Press. (Originally published in1897).

Hagedorn, S. L. (2005). How to define retention: A new look at an old problem. Paper sponsored by the Transfer and Retention of Urban Community College Students Project (TRUCCS) funded by the Lumina Foundation (Grant # 1415). Retrieved online: www.chepa.org , August 2008.

Horn, L. (2006). *Placing College Graduation Rates in Context: How 4-Year College Graduation Rates Vary with Selectivity and the Size of Low-Income Enrollment* (NCES 2007-161). U. S. Department of Education. Washington, DC: National Center for Education Statistics.

Hoover, E. (2008). Enrollment expert gives top 5 reasons why student-retention strategies fail. *Chronicle of Higher Education*. August 7, 2008. Retrieved online: www.chronicle.com, August 10, 2008.

Hossler, D., and Bean, J. P. (1990). *The Strategic Management of College Enrollments*. San Francisco, CA: Jossey-Bass.

Hoyt, J. E., and Winn, B. A. (2003). Understanding retention and college student bodies: Differences between drop-outs, stop-outs, opt-outs, and transfer-outs. *NASPA Journal*, 41(3), Art 1. Retrieved from: http://publications.naspa.org/naspajournal/vol14/iss3/art1

IPEDS Online Glossary. (2008). www.necs.ed.gov/ipeds/glossary/

Kuh, G. D., Kinzie, J., Schuh J. H., Whitt, E. J. & Associates. (2005a). *Student Success in College: Creating Conditions that Matter*. San Francisco, CA: Jossey Bass.

Kuh, G. D., Kinzie, J., Schuh J. H., Whitt, E. J. & Associates. (2005b). Assessing Conditions to Enhance Educational Effectiveness: The Inventory for Student Engagement and Success. San Francisco, CA: Jossey Bass.

Kuh, G. D., et al. (2007). *Connecting the Dots*. www.nsse.iub.edu/pdf/Connecting\_the\_Dots\_Report.pdf

Levitz, R. (2001). *What's Working Right Now in Student Retention! Building Blocks for Retention Success – the Basis for Recruiting Success*. Unpublished report prepared for the National Conference for Student Retention July 2001.

Levitz, R. and Noel, L. (1998a). "Taking the initiative: Strategic moves for retention." Iowa City, IO: USA Group Noel-Levitz, Inc.

Levitz, R. and Noel, L. (1998b). "The earth-shaking but quiet revolution in retention." Iowa City, IO: USA Group Noel-Levitz, Inc.

Lotkowski, V., Robbins, S. B., and Noeth, R. J. (2004). *The Role of Academic and Non-Academic Factors in Improving College Retention*. Washington, DC: Act Policy Report. (ACT's Web site www.act.org/research/policy/index.html).

McGinity, D.A. (1989). A Path of Analysis of Effects of Multiple Progress of Student Persistence. Ann Arbor, MI: University of Michigan.

Noel, L., Levitz, R., and Saluri, D. and Associates. (1985). *Increasing Student Retention*. San Francisco, CA: Jossey-Bass.

Noel-Levitz, Inc. (2005a). Making Sense of the Retention Puzzle. www.noellevitz.com

Noel-Levitz, Inc. (2005b). *Connecting Enrollment and Fiscal Management*. www.noellevitz.com

Noel-Levitz, Inc. (2007). *Student Retention Practices at Four-Year Institutions*. www.noellevitz.com

Noel-Levitz, Inc. (n.d.). Retention Revenue Estimator. www.noellevitz.com

Pascarella, E. T. and Terenzini, P. T. (1991). *How College Affects Students*. San Francisco, CA: Jossey Bass.

Pascarella, E. T., and Terenzini, P.T. (2005). *How College Affects Students: A Third Decade of Research*. San Francisco, CA: Jossey-Bass.

Seidman, S. (Ed.). (2005). *College Student Retention: Formula for Student Success*. Westport, CT: ACE/Praeger, Publishers.

Spady, W. (1971). "Dropouts from Higher Education: Toward an Empirical Model." *Interchange* 2: 38-62.

Swail, W. S. (2006). "Seven guiding questions for student retention." *Student Success*, January, 2006.

Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition* (2nd Edition). Chicago, IL: University of Chicago Press.

U.S. Department of Education. (2006). *A Test of Leadership: Charting the Future of U.S. Higher Education*. Washington, DC: U.S. Department of Education. www.ed.gov/about/bdscomm/list/hiedfuture/index.html

Van Gennep, A. (1960). *The Rites of Passage*. Translated by M. B. Vizedon and G.L. Caffee. Chicago, IL: University of Chicago Press. (Originally published in 1909.)

Van Stolk, C., Tiessen, J., Clift, J., and Levitt, R. (2007). *Student Retention in Higher Education Courses: International Comparison*. Santa Monica, CA: The Rand Corporation. Report available online: www.rand.org/pubs/technical\_reports/TR482/

Whitt, E. J., Kinzie, J., Schuh, J. H., and Kuh, G.D. (2008). "Assessing conditions to enhance student success." *About Campus*, July-August. Wiley InterScience, www.interscience.wiley.com

#### **Other Resources:**

Consortium for Student Retention Data Exchange (CSRDE), www.csrde.org

Education Trust, www.edtrust.org

Educational Policy Institute, www.educationalpolicy.org

Integrated Post Secondary Data System (IPEDS), www.ipeds.org

Lumina foundation for Education, www.luminafoundation.org

National Academic Advising Association, www.nacada.ksu.edu

National College Access Network, www.collegeaccess.org

National Symposium on Postsecondary Student Success, http://nces.ed.gov/npec/papers.asp

Noel-Levitz National Center for Enrollment Management, www.noellevitz.com

Authors: Lydia Voigt, Ph. D. and Jim Hundrieser