An Imperative for Fostering Retention, Advising, and Smart Borrowing
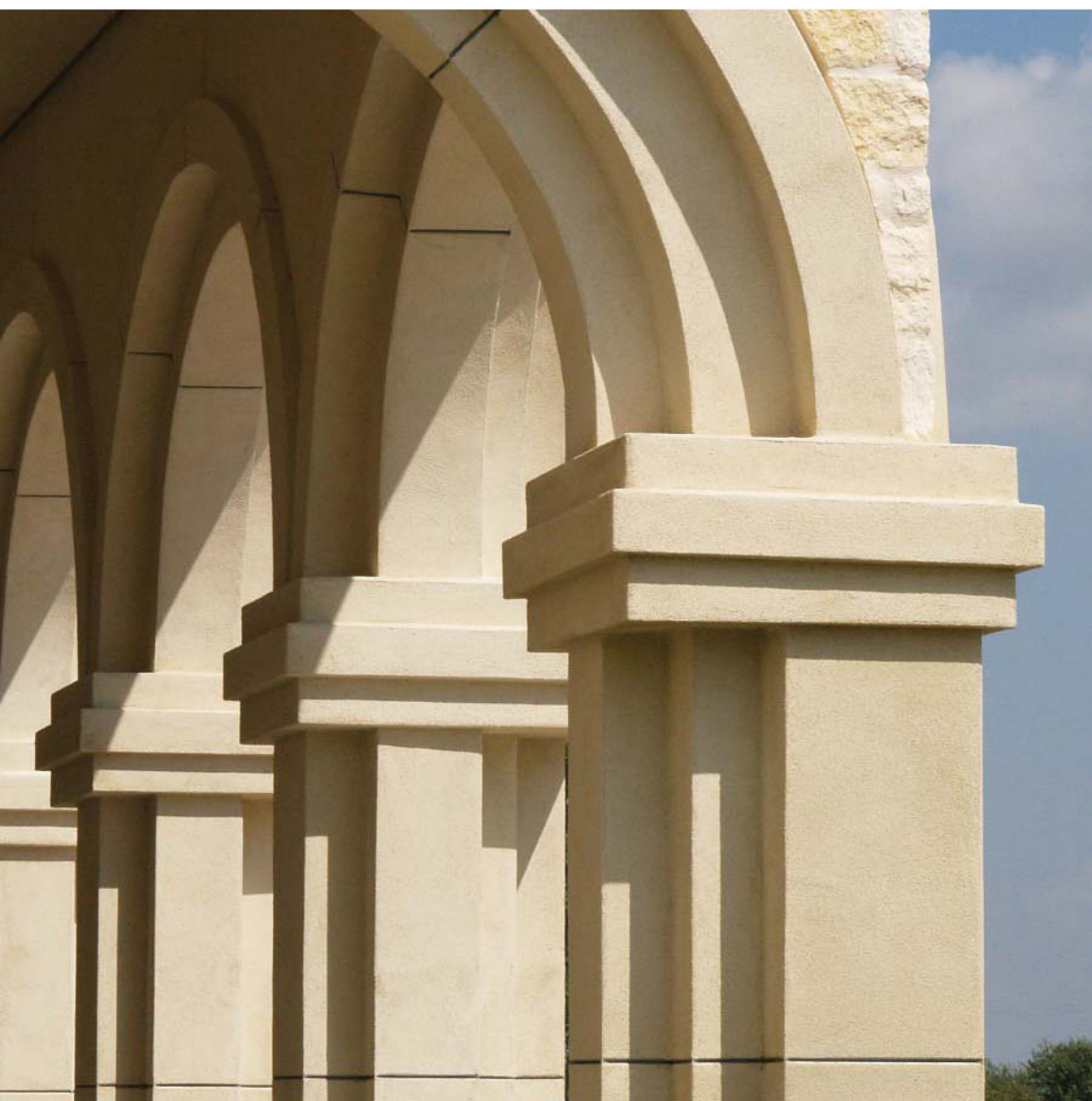
ENGAGING FACULTY AND STAFF

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IN COLLABORATION WITH
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Educational Policy Institute

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ACKNOWLEDGEMENTS

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I

An Introduction to Student Success

The U.S. higher education is the largest and most diverse postsecondary system in the world. Currently, there are more than 6,700 Title IV[1] institutions, of which 2,707 are classified as four-year schools, 2,227 two-year institutions, and 1,767 less-than-two-year institutions (Knapp, Kelly-Reid, Ginder, and Miller, 2007, p. 3). This system of higher education allows students, of any age, the ultimate flexibility in accessing and completing a set course of studies, in a myriad of ways, to better their future. With the exception, perhaps, of Canada, almost all other countries have more restrictive systems that curtail the flow of students from program-to-program and school-to-school.

The flexibility we have in the U.S., however, comes with a price. Whereas other countries are more selective than the U.S., the estimated 15.3 million undergraduate students in 2007 (NCES, 2006, Table 9-1, p. 125) who attend degree-granting institutions each year cover the gamut with regard to their academic preparation, motivation, and financial wherewithal to complete a designated course of study. It is speculated that only 20 percent of four-year institutions are selective in their admissions criteria, meaning that the other 80 percent, to

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[1] Title IV is a section of the Higher Education Act of 1965, as amended, which allows institutions to participate in the federal financial aid programs. Title IV eligibility is often used as a criterion for valuing the efficacy of an institution.

some degree, are either open or slightly selective in their admissions practices. If we include public two-year schools in this category, more than 3,300 schools across the United States could be classified as open-admissions institutions. Ultimately, this means that students attending these schools have a broad range of ability to pursue and successfully earn a two- or four-year certificate or degree. In fact, an analysis by the National Center for Education Statistics (NCES) suggests that one-quarter of students who enter a four-year institution are marginally or minimally qualified for college, and an additional 19 percent are "somewhat" qualified for college (Berkner and Chavez, 1997, Table 14, p. 28). For students of color and those from low-income backgrounds, the percentages are much higher.[2]

And while the system in the U.S. is both accessible and forgiving, it is also the proud owner of the most expensive postsecondary system in the world. In 2006-07, the average tuition and fees charged at two and four-year public institutions were $2,205 and $5,495, respectively (Knapp et al, 2007, Table 4, p. 8). Comparatively, the average tuition and fees charged at a private, four-year, not-for-profit institution was $18,143.

As many readers clearly understand, tuition and fees are often the lesser portion of college affordability. In 2006-07, the total cost of attendance, including tuition and fees, room and board, and books and supplies was $15,950 at a public institution and $29,405 at a private, not-for-profit institution (Knapp et al., 2007, Table 5, p. 9).

For students attending postsecondary education, the reality of increased costs for college has resulted in an ever-increasing percentage and number of students requiring financial aid to afford the cost of college. As Table 1 illustrates, 63 percent of all undergraduates received financial aid in some form during the 2003-04 academic year, and about one-third held a student loan (Berkner, L., Wei C.C., He, S., Lew, S., Cominole, M., and Siegel, P., 2005, Table 1, p. 10).

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[2]For instance, 33 percent of low-income students are marginally or minimally qualified for college.

Table 1

Percentage of undergraduates at four-year public, four-year private, and two-year public institutions who receive any financial aid, grants, or student loans and average amounts received, 1995-96.

	PERCENT RECEIVING FINANCIAL AID	AVERAGE FINANCIAL AID	PERCENT RECEIVING GRANTS	AVERAGE GRANT	PERCENT RECEIVING STUDENT LOANS	AVERAGE LOAN
All Undergraduates						
Total	63.2	7,400	50.7	4,000	35.0	5,800
Full-Time/Full-Year	76.2	9,900	62.2	5,600	49.5	6,200
Four-Year Public						
Total	68.6	7,600	51.7	4,000	44.5	5,600
Full-Time/Full-Year	76.3	8,700	59.1	4,600	51.4	5,800
Four-Year Private						
Total	83.3	13,100	73.5	7,700	56.3	6,900
Full-Time/Full-Year	88.7	16,300	81.5	9,400	65.8	7,200
Two-Year Public						
Total	46.8	3,200	39.8	2,200	12.1	3,600
Full-Time/Full-Year	61.3	4,900	52.7	3,400	22.8	4,100

Source: Berkner, L., Wei C.C., He, S., Lew, S., Cominole, M., and Siegel, P. (2005), Tables 1, 5, 9, and 13.

But these numbers are in aggregate. More than three-quarters of full-time, full-year students received an average of $9,900 in financial aid, with 50 percent of this group taking on an average of $6,200 in student loans. The numbers at four-year institutions look similar, but at four-year private institutions, the percentages and amounts are much higher. Almost nine-out-of-10 (88.7 percent) of full-time, full-year students attending a four-year private, not-for-profit level received an average of $16,300 in student aid, and two-thirds of students, or 65.8 percent, received $7,200 in loan aid.

Even while public two-year colleges are relatively affordable, about one-in-five full-time, full-year community college students (22.8 percent) were taking on $4,100 in student loans in 2003-04. While the amount may not be comparable to those of a public or private four-

For students who leave before earning a certificate, diploma or degree, other financial issues take precedence over student loan repayment — the loan that didn't earn them a degree.

year institution, this is a major change in the college affordability discussion over the past few decades. In the early 1980s, it was inconceivable that a community college student would take on a student loan.

This introduction does not discuss the issue of unmet need or private student loans, which have increased dramatically at most institutions, in part due to the inability of Congress to adequately raise both the loan ceiling for students and the value of Pell Grants.[3] Therefore, these numbers tell as good a story as it gets. Certainly, numbers for the fall 2007 class will accentuate the issue.[2]

Loans matter because students who don't complete their studies are burdened with what can be a large debt to the federal government, plus private debt they assume through credit cards and personal loans. We know from empirical data that one-fifth of all borrowers drop out of postsecondary education. Of these students, an additional one-fifth (22 percent) end up defaulting on their student loans (Figure 1).

Comparatively, only 2 percent of students who complete a bachelor's degree default on their student loans (Gladieux and Perna, 2005). And this makes perfect

Figure 1

Percentage of students who default on their student loans or who are unemployed, by completion status.

Source: Gladieux, L., and Perna, L. (2005). Borrowers Who Drop Out: A Neglected Aspect of the College Student Loan Trend. National Center for Public Policy and Higher Education: San Jose, CA.

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[3]Even with the recent passage of the College Cost Reduction Act (P.L. 110-84) allowing for increases by Congress, the amounts of both loan limits and Pell Grants are well below the current needs of students attending U.S. institutions of higher education.

sense. Those students who do not earn an academic credential have limited access to the job market, at least the job market that h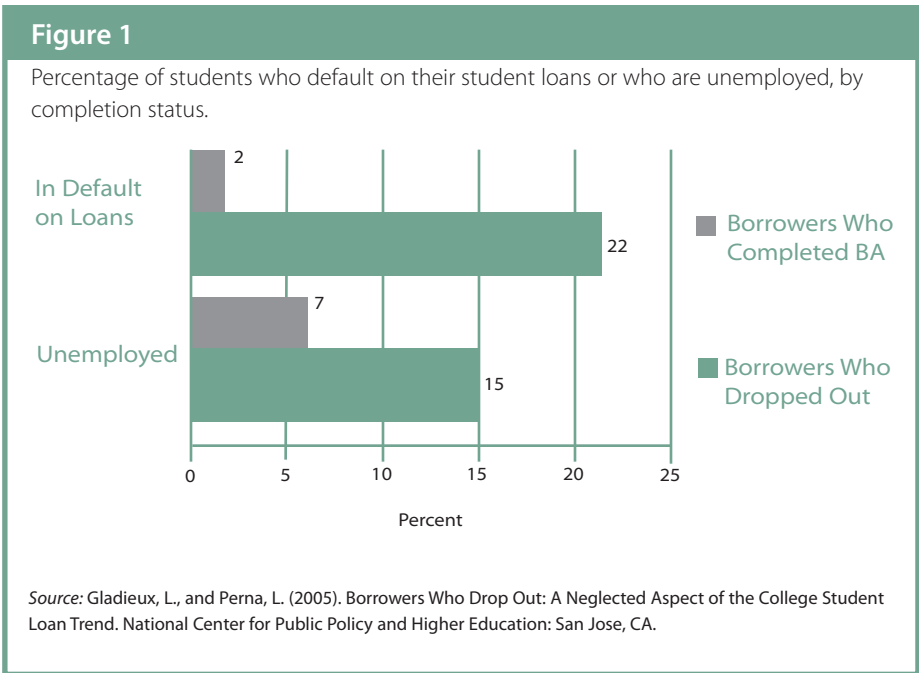as a reasonable rate of return for their investment of time. For students who leave before earning a certificate, diploma or degree, other financial issues take precedence over student loan repayment — the loan that didn't earn them a degree.

◀ Purpose and Framework

This publication, *Engaging Faculty and Staff: An Imperative for Fostering Retention, Advising, and Smart Borrowing*, was written to provide useful insight and strategies for institutions to use in order to increase student retention, persistence, and postsecondary success, and, in turn, to reduce the burdens of student loan defaults for students served by US colleges.

There are many reasons for success and failure for students on campus. Part II of this book provides more information on the causes and determinants of student departure. For this very reason, however, this publication cannot tackle all challenges an institution may face. Instead, it focuses on issues primarily located within academic and financial services on campus.

Part II provides a background of student success issues, and introduces the reader to a model for student retention and persistence. This forms a foundation for the remainder of the book.

Part III looks at how faculty/student relationships can support student engagement on campus, therefore supporting future student success. Part IV looks at three types of advising that are clearly important for student success: academic, financial, and career counseling. And Part V looks at the early warning system as an important process of identifying students at risk, at a time that the institution can still intervene to make a difference.

In addition, real examples from real institutions are provided throughout the book to enhance the utility of these pages. It is our hope that readers may not only learn more about these complex issues, but walk away with an idea of what they may do at their campus or within their system.

For those who want to learn more about student success, we suggest the Effective Practices in Student Success (EPSS) database, a joint effort of the

Educational Policy Institute and TG. The EPSS is an online database of effective practices for practitioners in higher education. Visit the EPSS at **http://www.educationalpolicy.org/epss**.

Student Departure, Retention, Persistence, and Success

The nomenclature is such that the education profession uses many names to discuss the issue of student success. The terms "retention," "persistence," and "departure" are often used synonymously to refer to the same thing: whether students succeed or not in postsecondary education.

Of the 15 million undergraduates attending postsecondary education each fall in the U.S., the reality is that one out of every two students will not complete a degree or certificate (Berkner et al, 2003). When this is disaggregated by sector, the story is variable (Table 2). Data from the Beginning Postsecondary Student (BPS) study of 1995-96 followed first-time postsecondary students for six years. The findings are striking. For instance, six years after first-time students entered postsecondary education, 50.8 percent received a degree of any type, regardless of sector or level. At the six-year point, an additional 14 percent are still enrolled, giving us a total persistence level of 65 percent. But not all these students will persist to degree. Thus, about 45 percent of students leave postsecondary education without earning a degree of some type.

At the public two-year level, only one-of-three students complete a certificate or associate's degree within six years, compared to 60 percent at four-year public institutions and 74 percent at

Of the 15 million undergraduates attending postsecondary education each fall in the U.S., the reality is that one out of every two students will not complete a degree or certificate.

Table 2

Percentage distribution of 1995-96 beginning postsecondary students by degree attainment and six-year persistence.

	HIGHEST DEGREE ATTAINED ANYWHERE			NO DEGREE ANYWHERE			SIX-YEAR STUDENT PERSISTENCE SUMMARY		
	BACHELOR'S DEGREE	ASSOCIATE'S DEGREE	CERTIFICATE	AT 4-YEAR INSTITUTION	AT LESS THAN 4-YEAR INSTITUTION	NOT ENROLLED	ATTAINED ANY DEGREE	STILL ENROLLED	TOTAL PERSISTED
Total	28.8	10.0	12.0	8.8	5.6	34.8	50.9	14.4	65.2
First type of institution									
Public 2-year	10.3	15.7	9.7	8.4	9.1	46.9	35.7	17.4	53.1
Public 4-year	53.0	4.4	2.8	14.5	2.8	22.5	60.2	17.3	77.5
Private for-profit									
4-year	68.8	2.8	1.8	7.1	2.3	17.2	73.5	9.4	82.9
Private for-profit less than 4-year	0.6	8.4	51.3	0.8	2.2	36.7	60.3	0.3	63.3

four-year, private, not-for-profit institutions. Graduation rates increase as the selectiveness of an institution, and the academic preparation of its student body, similarly increases.

Some additional facts from the BPS study:

- Almost half (46 percent) of first-time students who leave their initial institution never come back to postsecondary education;

- One quarter of all students who enter postsecondary education for the first time end up at another institution before attaining a postsecondary degree;

- Students who attend full time or whose attendance was continuous were much more likely to achieve their degree goals than other students. However, only about two-thirds of students were continuously enrolled;

- 50 percent of four-year students who did not delay entry into postsecondary earned their degree at their first institution, compared to only 27 percent of students who were delayed entrants; and

- 42 percent of students whose first-year grade point average was 2.25 or less left postsecondary education permanently.

What these data points indicate is that academic preparation matters, as does immediate matriculation from high school to college, continuous enrollment in

postsecondary education, and the importance of maintaining a moderate to high grade point average while in college.

Some of these things can be controlled by the institution; some cannot. Selective institutions have much greater control over who is admitted to their college or university. Therefore, the academic preparation variable can be controlled to a degree. Open admissions institutions have much less control in that area, admitting almost everyone who applies. In this case, the academic preparation of students attending these institutions is broad in range.

> *It is imperative that institutions provide the necessary programming, strategies, and interventions to help students succeed not only in the first year of college, but in each and every year that the student is enrolled.*

Regardless of institutional selectivity and admissions requirements, institutions still have much control on their outreach (who they attract and identify for possible admissions) and services provided to students once they are admitted and enrolled at the institution. These are the areas where most of the retention effort is focused.

Also of interest is when students leave. The prior table and data illustrate the final outcomes for students: who earns a degree and when. It is important to step back, using data from the same BPS study, to look at when students leave. For the purposes of this discussion, the focus will be on first-time students at four-year public institutions.

Figure 2 illustrates that 14 percent of all entering students leave during or immediately after their freshman year. There are variations on who leaves by income and race/ethnicity. Poor students leave at higher rates than more affluent students, and Black and Hispanic students leave at higher rates than White and Asian students. Still, on average, one in seven students leave during the first year.

This is important, because it has been told in a number of ways that most students leave higher education not only during the first year, but during the first semester, and even during the first three weeks of the semester. And certainly, this is largely true. For residential students at an institution — which mostly implies four-year institutions — the adjustment to a campus, especially for 17 and 18-year olds, is a difficult process. Many students feel homesick and choose to

Figure 2

Departure rates, by year, of beginning postsecondary students who started at a four-year institution with a BA-degree goal, by family income (dependent student only) and race/ethnicity.

Legend: ■ After first year ■ After second year ■ After third year ■ After fourth year

Category	After first year	After second year	After third year	After fourth year
$70,000 or greater	11	9	6	1
$45,000–69,999	12	12	5	5
$25,000–44,999	16	14	8	3
Less than $25,000	15	16	7	4
Asian/Pacific Island	7	12	5	4
Hispanic	17	15	9	4
Black, non-Hispanic	17	16	9	6
White, non-Hispanic	14	12	6	3
All four-year students	14	13	6	3

Percent Departure (0, 10, 20, 30, 40, 50)
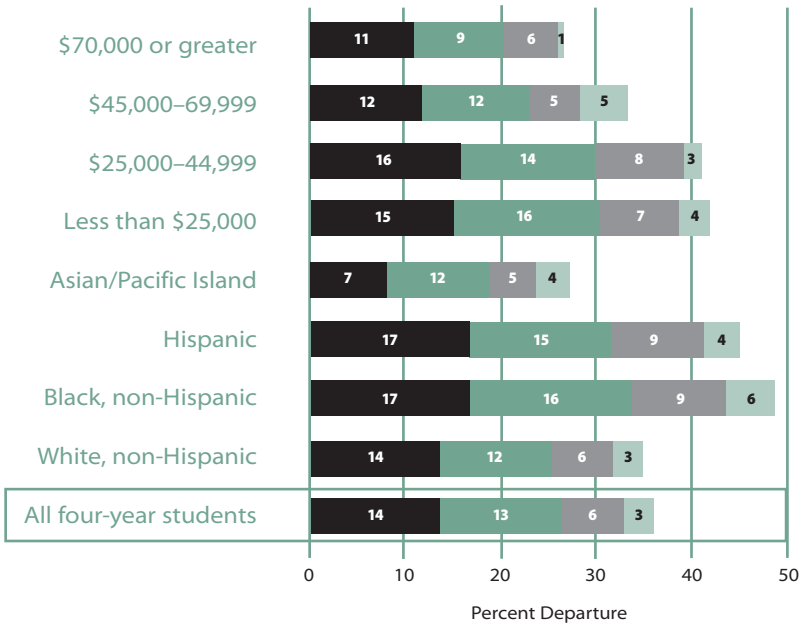
Source: Berkner, L., He, S., Cataldi, E., and Knepper, P. (2002). Descriptive Summary of 1995-96 Beginning Postsecondary Students: Six Years Later. U.S. Department of Education, Institute of Education Sciences, NCES 2003-151, data extracted by the author from multiple tables within the Table 7 series, pages 152-163.

leave. Even for community college students, the first days of school are very difficult. The adjustment to new people, new classes, and new ways of learning are stressful. Consequently, students leave.

These experiences have sprung a series of freshman orientation courses to help students adjust to the academic and social nuances of the postsecondary world. And many of these programs, like University 101 at the University of South Carolina, have shown that institutions can have a tremendous impact on the future success of their students if schools act proactively and quickly.

But the data in Figure 2 weave a story that implies a freshman myth. Clearly, almost the same percentage of students, 13 percent, leave during or immediately

after the second year of a four-year degree program, and low-income students actually leave at a slightly higher rate than during the freshman year. And an additional 9 percent of all students will leave the institution during their third and fourth years.

It is imperative that institutions provide the necessary programming, strategies, and interventions to help students succeed not only in the first year of college, but in each and every year that the student is enrolled. Clearly, the strategies would not be duplicated each year, because the issues and needs would certainly evolve. Institutions must ensure that needs of students are measured and provided for in an equitable manner.

◀ Defining "Success"

It is important to define what we mean by student "success." Most institutions have defaulted to the understanding that success is defined by the graduation rate of the institution. Because public policy counts graduation rates, as in what percentage of an incoming class graduate by a certain point in time, that is what most people rely on. Of course, it is clearly understood that students stay or leave for a variety of reasons. Some students who leave an institution will go on and achieve success at other institutions, while still others who leave will enjoy success without having completed a college degree or certificate.

> *Unfortunately, the graduation rate — one number in time — becomes that all-knowing measure for student success. This is an inappropriate measure, because all institutions are different and the cohort groups at each institution are different in their academic preparation and ability.*

Unfortunately, the graduation rate — *one number in time* — becomes that all-knowing measure for student success. This is an inappropriate measure, because all institutions are different and the cohort groups at each institution are different in their academic preparation and ability. In "systems" of higher education, as in a state system, it is often possible to track students from institution-to-institution. This allows administrators to see if some of those who have left have found success at another institution. These students are clearly successes, but not by any measure used in the current system. The U.S. Department of Education uses graduation

rates as indices for success, but again, it relies completely on a distant cohort graduation rate that does not take into consideration the complexities of the incoming class and the institution.

According to Peter Dietsche, a professor at the University of Toronto and a senior scholar at the Educational Policy Institute, there are four different categories of students at a postsecondary institution. There are students who either (a) persist or (b) leave and those who (c) pass or (d) fail (Figure 3). Those who pass and persist are called "successful persisters." These are the students who do well and remain to complete their degree. Alternatively, there are the "failed leavers," who fail and leave the institution. In many cases, these students make a decision to leave because they just don't "cut it" academically. With the aid of the institution, some of these students could become successful persisters, but the institution would need to identify these students and provide appropriate interventions to make that happen.

There are two other groups in the figure. First are the "failed persisters." These students, regardless of their failing status, stay in school anyway. It may be unlikely they complete their degree because they do not achieve the academic requirements for the degree, but they're staying anyway. With this group, the institution would need to provide academic support to try and lift them up to the passing level.

Figure 3

Types of students at a postsecondary institution by academic achievement and registration status.

Academic Achievement	Registration Status	
	Persist	Leave
Pass	Successful Persister	Successful Leaver
Fail	Failed Persister	Failed Leaver

Source: Dietsche, Peter (2007). *Why Students Leave*. A presentation at the International Conference on Student Retention (Retention 2007), May 22-24, 2007, San Antonio, TX.

The final group contains the "successful leavers." This is perhaps the most interesting group because, regardless of the strength of their academic ability, they leave anyway. This is for either of two main reasons, knowing full well that there are many reasons why students choose to leave postsecondary education. The first is because they decide that the institution simply isn't providing what they want or need. They decide that another institution is a better fit with where they want to be. The second is a less academic and more social reason: that the student doesn't feel engaged with the institution, therefore they self select out of the institution, with the hope that they may succeed somewhere else or in some other manner.

> *If the institution fails to identify these students and intervene proactively, there is a better-than-good chance that the leavers will be gone before anyone even knows they are gone.*

The four categories described are important for an institution to understand because the solutions or strategies vary greatly by student type. What one must do for a successful leaver compared to either a failed persister or failed leaver are quite different. But the institution must be able to identify these students in order to know what to do. If the institution fails to identify these students and intervene proactively, there is a better-than-good chance that the leavers will be gone before anyone even knows they are gone. At that point, anything an institution does is too late.

The bottom line is that institutions must proactively identify students who need help, whether academically, financially, or emotionally. But they must be identified.

◂ Why Students Leave

Students leave higher education for a variety of reasons. For some students, the decision is less about themselves and more the decision of others, the example being the institution removing a student for poor academic performance. For others, the student may self select himself or herself out for academic reasons, social reasons (e.g., family issues), and, of course, financial issues.

The decision to stay or leave is difficult for many students, especially those who are successful leavers, because they've shown the ability to succeed at the

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academic level. But even the failed leavers make a decision to self select themselves out of the institution, even when they possibly could succeed with appropriate attention to their studies and with the successful intervention of the institution. While it is hoped that these students will do well wherever they go, it is an uncomforting thought for institutional practitioners to know that students with the potential to succeed didn't. Knowing that the outcome could have been different is difficult and should be impetus for change.

As stated, students leave for a variety of reasons. Some students who come to postsecondary education do not have the courtesy of a fine-grained public or private education, so they come with a disadvantage. While many of these students will overcome these deficiencies and succeed in college, others will find that the challenges gradually become greater until they are too much to bear.

The literature is abundant with reasons for student departure. The most prevalent model of student departure is based on the theoretical construct of Emile Durkheim, a French sociologist who is best known for the 1987 book titled *Suicide.* Durkheim posited that people tended to take their own lives because they are largely unattached to society. It was Durkheim who coined the term "social integration," suggesting that unless people are socially integrated into the fabric of society, they may choose to self select themselves out in a rather permanent manner.

Spady (1970) was one of the first researchers to suggest that Durkheim's theory could be used to describe why students leave higher education. According to Spady, the social integration of students increases the probability of academic and social success in the institution. If students are engaged, they are more likely to feel a part of the larger organism, which in this case is the college or university.

In the mid-1970's, Vince Tinto of Syracuse University took Spady's work further by creating a more distinct model of student success.

Briefly stated, Tinto's Student Integration Model consists of six characteristics (see Figure 4). Prior to matriculation to postsecondary education, students develop certain attributes that are shaped by their familial upbringing. They also develop academic and social skills and abilities in both formal and informal settings. These, in turn, help form students' goals and commitments regarding college, the workforce, and their place within society as a whole. During college, formal and informal college experiences influence the student's level of 'integration' into the college, academically and socially. According to Tinto, this level of integration has an impact on the students' development of goals and commitments, resulting in either a decision to persist in or depart from college. Essentially, the match

Figure 4

Tinto's Longitudinal Model of Institutional Departure (Student Integration Model).
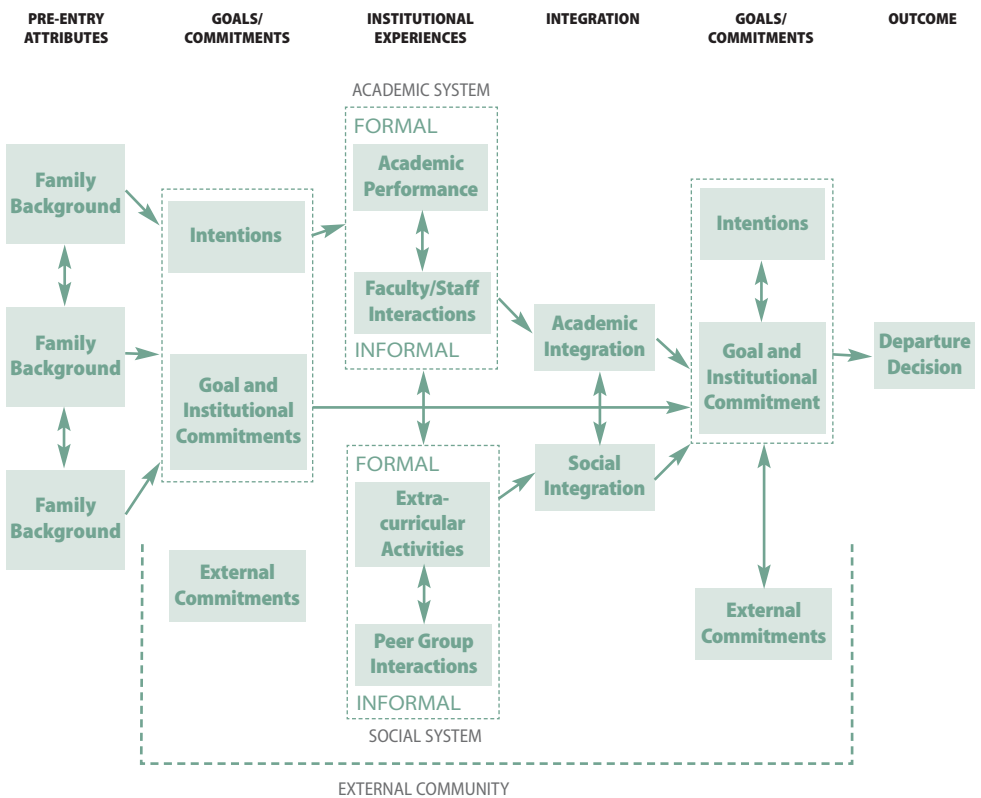
Source: Tinto, Vincent (1993). *Leaving College.* The University of Chicago Press: Chicago, IL. P. 114.

> *Unless the institution makes a true effort to understand, in real terms, who their students are with regard to cognitive and social skill sets, the institution can hardly comprehend what it is they must to do to help students succeed.*

between student characteristics and the institution shape students' goals and commitments, which in turn influence persistence.

During the 1990s and 2000s, the terms "integration" and "engagement" have become important catchphrases for higher education. The National Survey of Student Engagement (NSSE) is a large survey used at hundreds of institutions across the U.S. and Canada. Institutions subscribe to the NSSE (and to its community college sister, the CSSE) because they believe that their success is related to the success of their students, which, in turn, is defined in part by the level of engagement between the student and their institution.

In the mid-1990s, Swail (1996) created the geometric model for student retention, based in part on the works of Spady (1970), Tinto (1975; 1993) and many others (Bean, 1982; Anderson, 1985; Cabrera, Nora, and Castañeda, 1992). This model attempted to create simple graphic representation of the link between the student and institution.

In brief, the model assumes that the student comes to the institution with certain attributes along two lines: cognitive and social factors. These attributes define who the student is and what his or her strengths and weaknesses are in the

Figure 5

Swail's Geometric model of student persistence and achievement.

Source: Swail, Watson S., Redd, Kenneth, and Perna, Laura (2003). *Retaining Minority Students In Higher Education*. An ASHE-ERIC Reader. San Francisco. CA: Jossey-Bass.

academic and social realms. It is the connection of these attributes-those of the student-with those of the institutions that help define the future success of both the student and the institution.

On a theoretical level, this, of course, makes sense. How the student blends with an institution in both cognitive and social ways will have an impact on academic achievement. In a practical sense, the model is only helpful if the components can be operationalized. Put another way, unless the institution makes a true effort to understand, in real terms, who their students are with regard to cognitive and social skill sets, the institution can hardly comprehend what it is they must to do to help students succeed. This is a tremendously important point: institutions need to know about their students — on an individual basis — if they want to truly provide the necessary resources to support their educational and future success. Anything else is simply tinkering at the margins and not taking student retention seriously.

Figure 6 shows an expanded view of Swail's model. Fully defined, the cognitive side of the equation includes those issues/sets that relate to the academic ability of the student. The scholastic ability developed by the type and level of course work undertaken previously, as well as other important cognitive traits and skills, such as time management, study skills, and technological ability. All these things matter greatly for student success.

Not to be discounted are those on the other side of the model: the social factors. These factors, often called "non-cognitive" factors, are more representative of the softer side of student success, such as the social/emotional skills of the student, their family background and heritage, the educational legacy of the family, and certainly cultural values and attitudes. These greatly define who the student is, and in partnership with the cognitive skill sets, present the "whole" student to the institution.

Finally, on the bottom side of the model are the "institutional" factors that impact achievement and success. While there are many areas of consideration on behalf of the institution, five come out more strongly than others:

- **financial aid**, which helps support the financial challenges that students must navigate;
- **student services**, which represents the various services provided by the institution that assist many of the social issues noted by the model for students, including personal counseling and advising, as well as housing

Figure 6

Swail's Geometric model of student persistence and achievement.
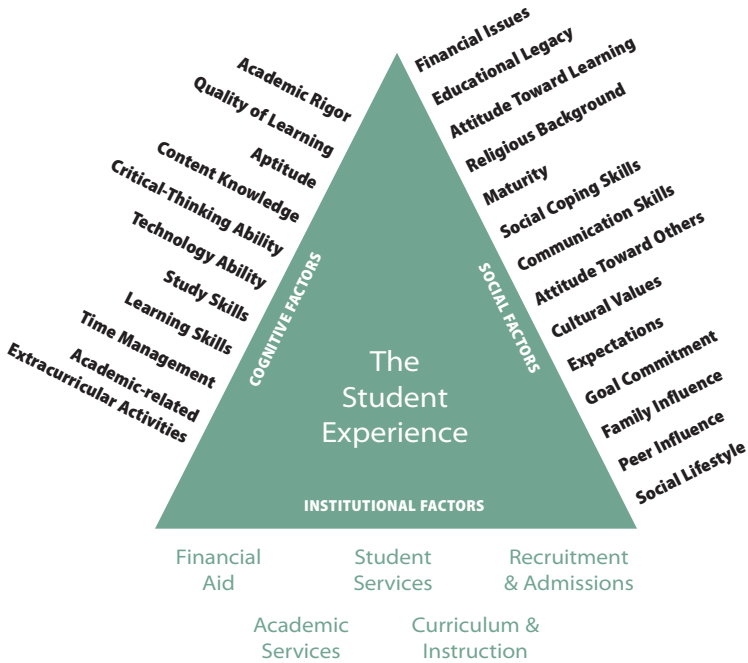
The Student Experience

COGNITIVE FACTORS: Financial Issues, Educational Legacy, Attitude Toward Learning, Religious Background, Maturity, Social Coping Skills, Communication Skills, Attitude Toward Others, Cultural Values, Expectations, Goal Commitment, Family Influence, Peer Influence, Social Lifestyle

SOCIAL FACTORS: Academic Rigor, Quality of Learning, Aptitude, Content Knowledge, Critical-Thinking Ability, Technology Ability, Study Skills, Learning Skills, Time Management, Academic-related, Extracurricular Activities

INSTITUTIONAL FACTORS: Financial Aid, Student Services, Recruitment & Admissions, Academic Services, Curriculum & Instruction

and other important issues that allow students to focus on their academic studies;

- **recruitment and admissions**, which is responsible for identifying potential and future students, as well as to help target students who have particular needs for intervention;

- **academic services**, which includes the strategies used to support learning in and outside of the classroom; and

- **curriculum and instruction**, which is focused on what happens within classes and between faculty and students.

The model described here hopefully helps readers visualize the interaction between all three sets of factors: cognitive, social, and institutional. Again, for theoretical discussion, when the three sets interact and are in some form of "equilibrium," or balance, the student is in a position to persist and achieve

academically. This does not mean that all students who are in equilibrium will succeed. As noted by Dietsche (2007), the successful leavers are those who, despite their academic ability, may leave because they find that there is something else they want that the institution does not provide or they cannot afford to stay. This does not necessarily mean that the institution has failed, although it could. But it

does illustrate an example where students will look toward their own personal goals and make alterations to ensure that they can meet those goals. Alternatively, students who are not in balance with the institution, whose personal "model" is not in equilibrium, will have a difficult time succeeding at the institution either because the student is not able to provide the necessary academic or social ability to succeed, or because the institution is also unable to provide the necessary support to help the student succeed.

Figure 7 illustrates four examples of equilibrium. In reality, there is an infinite number of ways that a student can succeed in higher education. In each of the four examples, students hold the potential to succeed when the institution provides the necessary support to allow that success to happen. Ultimately, this is a model of shared responsibility: students must responsibly attend to their studies, and institutions must equally attend to their students.

Illustration A represents the so-called 'perfect' situation where the student has relatively equivalent levels of cognitive and social resources, and requires a similar level of institutional commitment to aid their persistence and performance. This is "so-called" because there is not an average or perfect situation. But these could be represented by the average students at a particular institution. The bar chart to the side of the illustration is used to help define the relative force of each axis apart from the illustration. In this case, the three levels, cognitive, social, and institutional, are similar in weight.

Illustration B represents a student with low academic resources, but excellent social skills with the requisite institutional intervention and support. Through social networks, strong will, and the appropriate assistance from the institution, the student may be able to apply the necessary cognitive skills, while also developing

new skills, to succeed in college. An example would be a good-natured student who lacks the academic fortitude, due perhaps to below-average quality of education during middle and high school. With diagnosis from the institution and the implementation of appropriate support programs, the student could persist in college and build up his or her cognitive resources.

Figure 7

Variations on Model Stability.
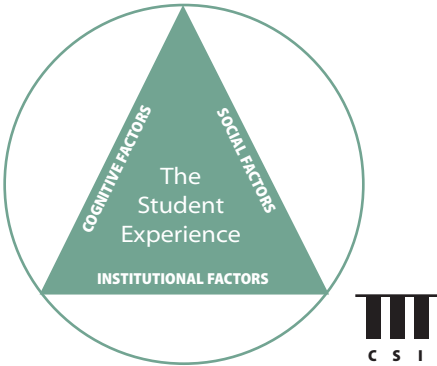
A. The Perfect Polygon. The three forces exert essentially the same presence or level of force, such that the cognitive and social attributes of the student are supported equally by the institution.

B. Socially Strong/Academically Weak. In this scenario, the student has weak cognitive/academic skills, but very strong social skills. The institution must match the academic needs of the student in order to achieve equilibrium.

C. Cognitively Strong/Socially Weak. The student has very strong cognitive/academic skills, but is low on the social scale. Thus, the institution must provide social stimulation and situations to integrate the student into the campus community.

D. Socially and Cognitively Strong. This student is gifted in academics and social skills. In some ways, the institution just needs to "be there," and not get in the way. Only a catastrophic event will push this student off the completion track.

Source: Watson S., Redd, Kenneth, and Perna, Laura (2003). *Retaining Minority Students in Higher Education*. An ASHE-ERIC Reader. San Francisco. CA: Jossey-Bass.

Illustration C represents a student with high cognitive resources and low social resources. The cognitive ability of the student is so strong that even the institutional forces are below average level. A person who may fit this model could be the stereotypical brilliant thinker whose social skills leave something to be desired. In most cases, we would think that this type of student will persist to graduation. However, because the college experience is about more than completion, and about developing the individual to their full social and academic potential, it is important for the institution to consider interventions to help that student develop social skills that will be beneficial throughout his or her life.

If the institution is able to harness the information about their students' cognitive and social backgrounds, it can then realistically match student needs with institutional practices.

The last example, Illustration D, illustrates a student with extremely high cognitive and social ability, therefore negating much of the need for institutional support beyond those related to basic instruction and financial support. In fact, it is likely that the institution acts more as a barrier than a conduit to goal attainment for students fitting this mold. With such strong academic and social skills, plus related resources, these students probably tear through the curriculum (the classic distance education student).

This discussion is ultimately academic for an institution until it uses its available data to define who their students are. If the institution is able to harness the information about their students' cognitive and social backgrounds, it can then realistically match student needs with institutional practices. As stated earlier in the introduction, institutions often provide the right interventions; it is the process of getting those interventions to needy students that ultimately matters. If that doesn't happen, then this truly is an academic discussion.

When institutions take Swail's model and use it to help faculty and staff understand the process of student success, changes can be made to ensure that the institution meshes with students.

◂ Planning for Success

In general, postsecondary institutions provide about 95 percent of the types of interventions and strategies needed to support student success. But it is what they don't do that tends to matter the most. For instance, institutions with retention challenges typically (a) don't ensure that their services are provided at a high quality; and (b) get these services to the students that need them the most. Hanging out a sign that says "academic advising" doesn't do the job. Institutions must work to identify students who can benefit from the available high-quality services.

In general, postsecondary institutions provide about 95 percent of the types of interventions and strategies needed to support student success. But it is what they don't do that tends to matter the most.

Therefore, institutions have the following responsibilities:

- Determine who needs assistance on campus, either academically, socially, or financially, and target them
  for services;
- Review current services on campus and determine how their effectiveness and efficiency. Just because an institution provides them doesn't mean they are any good; "being there" doesn't count;
- Improve services so they matter;
- Find out what other institutions are doing and "borrow" as much as possible to build a better college or university.

There are many things an institution can do to improve student success and ultimately help students graduate. In each of the areas identified in the model — *financial aid, student services, academic services, curriculum and instruction, and recruitment and admissions* — there are a variety of actions an institution can take to improve the success rates of students. For the purpose of this book , we have chosen three areas in particular, each supported in the literature, in which institutions can focus to make a difference in the lives of their students and the future of the institution.

These are the focus of the remainder of this book.

Engaging Faculty and Staff

◂ Defining the Role of Faculty and Staff

One of the best resources for increasing the engagement, retention, and likelihood of student loan repayment is the faculty of a postsecondary institution. The relationships formed through faculty-student engagement foster student involvement in the institution, increasing the probability of success in the program, and in turn decreasing the chances that a student will default on their educational debt.

A report in the NASFAA [National Association of Student Financial Aid Administrators] Journal of Student Financial Aid placed low levels of student persistence, student success, and program completion among the strongest predictors of loan default (Herr and Burt, 2005). Other studies find success or failure to complete a program by college students is the best predictor of loan default (Woo, 2002; Knapp and Seaks, 1992; Volkwein and Cabrera, 1995). As mentioned in the introduction, only 2 percent of B.A. completers defaulted on their student loans compared with 22 percent of dropouts (Gladieux and Perna, 2005). Similarly, students at a Texas university who completed their programs had only a 2 percent default rate, compared to a 14 percent default rate of those who did not (Steiner and Teszler, 2003). Students engaged in school, both academically and socially, are more likely to have positive student outcomes which lead to an increase in the likelihood of student loan repayment (Swail, Redd, and Perna, 2003).

A major influence on a student's involvement in school is the interaction that he or she has with professors and other faculty. As Austin (1993) explains, increasing student and faculty interaction, both inside and outside of the classroom, fosters student development and increases the likelihood that students will be satisfied

with their experience at the institution. Kuh and Hu (2001) found that student-faculty engagement encourages students to devote greater effort to other educationally-purposeful activities. Similar studies (Volkwein, King and Terenzini, 1986; Salter and Persaud, 2003) show that faculty contact is directly and positively related to a student's academic performance.

> *A major influence on a student's involvement in school is the interaction that he or she has with professors and other faculty.*

According to Kezar and Kinzie, "The result is usually that faculty become role models, mentors, and guides for continuous life-long learning" (2006, p. 151).

In the 20 years since Chickering and Gamson's (1987) landmark *Seven Principles for Good Practice in Undergraduate Education* was published, higher education administrators have been striving to measure up to these principles in practice. The very first in the list, faculty-student contact, poses continuous challenges in light of the ever-changing characteristics of the undergraduate student population.

Exhibit 1: Chickering and Gamson's Seven Principles for Good Practice in Undergraduate Education (1987)

1. **Encourages Contact Between Students and Faculty.** Frequent student-faculty contact in and out of classes is the most important factor in student motivation and involvement. Faculty concern helps students get through rough times and keep on working. Knowing a few faculty members well enhances students' intellectual commitment and encourages them to think about their own values and future plans.

2. **Develops Reciprocity and Cooperation among Students.** Learning is enhanced when it is more like a team effort that a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's own ideas and responding to others' reactions sharpens thinking and deepens understanding.

3. **Encourages Active Learning.** Learning is not a spectator sport. Students do not learn much just by sitting in classes listening to

teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences and apply it to their daily lives. They must make what they learn part of themselves.

4. **Gives Prompt Feedback.** Knowing what you know and don't know focuses learning. Students need appropriate feedback on performance to benefit from courses. When getting started, students need help in assessing existing knowledge and competence. In classes, students need frequent opportunities to perform and receive suggestions for improvement. At various points during college, and at the end, students need chances to reflect on what they have learned, what they still need to know, and how to assess themselves.

5. **Emphasizes Time on Task.** Time plus energy equals learning. There is no substitute for time on task. Learning to use one's time well is critical for students and professionals alike. Students need help in learning effective time management. Allocating realistic amounts of time means effective learning for students and effective teaching for faculty. How an institution defines time expectations for students, faculty, administrators, and other professional staff can establish the basis of high performance for all.

6. **Communicates High Expectations.** Expect more and you will get more. High expectations are important for everyone — for the poorly prepared, for those unwilling to exert themselves, and for the bright and well motivated. Expecting students to perform well becomes a self-fulfilling prophecy when teachers and institutions hold high expectations for themselves and make extra efforts.

7. **Respects Diverse Talents and Ways of Learning.** There are many roads to learning. People bring different talents and styles of learning to college. Brilliant students in the seminar room may be all thumbs in the lab or art studio. Students rich in hands-on experience may not do so well with theory. Students need the opportunity to show their talents and learn in ways that work for them. Then they can be pushed to learn in new ways that do not come so easily.

Source: Chickering, A.W, and Gamson, Z.F. *Seven Principles for Good Practice in Undergraduate Education*. AAHE Bulletin, 1987, 39(7), 3-7.

According to Koljatic and Kuh (2001), faculty-student engagement remained unchanged nationally from 1983 to 1997, 10 years after the introduction of the seven principles. While engagement did not improve during this period, it did not worsen, a feat considering both the rapid increase in enrollment and the drop in college readiness of incoming students during this time.

Faculty behaviors are greatly influenced by the reward structures of the university, and that time spent with students outside of the classroom often goes unrewarded. Thus, structuring curricula to encourage greater interaction or creating rewards for faculty who interact with students outside of the classroom would go a long way in creating a bonding environment for faculty and students (Weaver and Qi, 2005).

Structuring curricula to encourage greater interaction in the classroom is essential to all students. To students who also work full-time or are single parents, however, it is even more important (Swail, 2007). For these busy students, often enrolled at two-year institutions, the weekly scheduled classes represent the only time they will spend in contact with any member of the college staff. The professor, then, comes to represent the university and its staff at-large. For faculty members with students such as full-time workers or single parents, transmitting all essential college information in the classroom setting becomes another function of their roles in the interaction process (Swail 2007).

◀ Faculty Student Interaction in the Classroom: Active and Seamless Learning

The ability to engage students in the classroom is important to the success of those students. As the primary place of interaction between the student and the school, a student's interaction within the classroom has great influence over his or her level of engagement with the greater institution. "This includes not only the extent of a student's participation in the peer culture, but also the frequency and quality of his or her interaction with faculty (Pascarella, Terenzini, and Hibel, 1978)." Two ways in which faculty members can increase interaction in the classroom are techniques called "Active Learning" and "Seamless Learning."

Active Learning

Active learning can be defined as "any class activity that 'involves students in doing things and thinking about the things they are doing'" (Braxton et. al. 2000, p. 571). More specifically, active learning involves using teaching methods that alter the traditional lecture and exam the format in which students play only a passive role. These activities can include things as out-of-the-box as role playing and as basic as questions asked by professors on exams and in class to which students must actively respond. The key with active learning is student participation and interaction.

The active learning technique is based on Tinto's argument that the classroom is the only place in which most students enrolled in college courses can interact with each other and the material being taught.

Whereas higher education was once thought of as primarily a process of transmission (i.e., pouring knowledge into empty vessels), a growing body of research has made it clear that the overall quality of teaching and learning is improved when students have ample opportunities to clarify, question, apply, and consolidate new knowledge.

The active learning technique is based on Tinto's argument that the classroom is the only place in which most students enrolled in college courses can interact with each other and the material being taught (Tinto, 1997, p. 601). Tinto believed that because the traditional classroom hasn't properly facilitated this interaction between students and their peers and course concepts, most students become alienated from other students and course material while they are involved in college education. In his study, Tinto found that students who are involved in a curriculum that facilitates active interaction with course concepts tend to report higher levels of "developmental gain and involvement with academic and social opportunities on campus" (p. 606). Students who reaped the benefits of this type of classroom were also retained through the next two semesters at a significantly higher rate than those who applied more traditional, non-active techniques. Braxton, Milem, and Sullivan (2000) believe that these students are retained at higher levels due to the belief instilled by active learning practices that they are becoming more knowledgeable about course topics, and because of this, are more likely to think of their time in college as personally rewarding. Braxton et. al. also

found that active learning gives students more time to spend in social interaction due to their perceived heightened levels of understanding while in class, in turn facilitating the creation of social groups with peers during in-class activities. According to Braxton et al., this process directly influences social integration and increases institutional commitment and student departure decisions (p. 572).

Seamless Learning

A more specific form of active learning is called "seamless learning," a specific form of active learning which takes the outside experiences of the students involved in the class and integrates them into the classroom setting to maximize comprehension of class materials.

In a study of former college graduates, Seidman and Brown (2006) found that students mentioned one of four themes important to classroom learning: critical thinking and problem solving; outside activities; holding a part-time job (as opposed to full time); and experiences shared with professors and friends. According to the study, professors often discount these outside-class experiences in favor of more traditional in-class experiences involving lectures and exams. This is unfortunate, because these experiences are often very valuable and act as potentially strong learning tools which can be effectively incorporated into the classroom.

Seidman and Brown (2006) agreed with the findings of Braxton et. al. (2000) that the use of active learning made a statistically significant impact on student retention, with the use of active learning resulting in students more likely to stay in their chosen institution of higher education. Seidman and Brown also expressed agreement with referenced findings that seamless learning displayed positive outcomes in freshmen students, but that students who were unsatisfied with the learning environment they found themselves in tended to leave school early regardless of the fact that their experiences in school met their goals. They believe that these findings point to seamless learning as a solid way to raise retention rates among students who would otherwise be vulnerable to attrition by making educational experiences more comprehensible and rewarding (2006).

◂ Using Active and/or Seamless Learning in the Classroom

Active Learning

The fundamental basis of active learning consists of the following five components: talking; listening; writing; reading; and reflecting. The goals of using activities in the classroom which promote the five components of active learning are to increase motivation to master material, foster communication and interpersonal skills, and improve critical thinking skills. Some examples of active learning activities include: student debates, journaling, having class somewhere other than the typical scheduled time and place, allowing students to create exam questions and submit them for your approval, mixing two different classes together to create a bigger and richer learning community, or adapting a game to course materials (Poindexter, 2006).

Illinois State University Teaching Resources cautions some students may be resistant to participating in active learning techniques in the classroom after getting used to exclusively traditional methods of learning. Thus, instructors must be prepared to work with students to make them understand the benefits and goals of the new technique. Finding effective active learning activities for a particular class is, to a degree, a matter of trial and error. Asking for students' feedback on which activities work and which need to be altered or discontinued can both help the instructor's planning efforts and the students' level or comfort with the new teaching style.

The University of California Problem-Based Learning Institute

The University of California, Irvine established the *Problem-Based Learning Institute* in 2000. The focus of the institute is to increase faculty-student engagement using a kind of active learning that is familiar to the faculty: problem-based learning. Faculty members are familiar with this technique because they use similar approaches in conducting their own research. The Institute works with faculty to create real-world problems/challenges within the discipline or major. The Problem-Based Learning Institute engages students in the classroom by:

- Inviting students to help create class policy or plans;
- Discussing various points of view on a topic;

- Forming smaller work groups within larger classes;

- Asking analytical, not factual questions;

- Calling on students when they volunteer, and calling on them by name;

- Providing positive feedback and encouragement;

- Using essays or research papers (when appropriate) instead of objective tests; and

- Giving feedback in a timely manner.

Bellevue Community College

Bellevue Community College in Bellevue, Washington, uses active learning principles in their "learning community" (Bellevue Community College Interdisciplinary Studies) program. A learning community in the Bellevue view is a group of two or three courses organized and taught around one particular theme. There are two types of learning communities at Bellevue: paired classes and coordinated studies.

In a **paired classes** model, two courses from different disciplines are taught using a common theme. Faculty members involved in the classes work together before and during the semester to coordinate their syllabi and assignments. They then teach each other's respective class independently of the other. An example of paired classes at Bellevue is their pairing of an English class and astronomy class under the theme, "The Galactic Village."

A **coordinated studies** model involves three or more courses which often form a full semester course-load. The teaching of these classes is team taught, meaning that all faculty members involved in the coordinated study must be present at all meetings for every course in the study. Faculty members are also required to learn along with the students in courses not in their areas of expertise. Students enrolling in the coordinated study must sign up for all classes in order to participate in the program. An example of a coordinated studies program at Bellevue is their integration of their general biology, introduction to chemistry, and learning strategies courses under the theme, "Of Mice and Matter: A Successful Journey through the Scientific Maze."

These ways of structuring classes allows faculty members and students involved to engage the material from the perspectives of many different disciplines and gain deeper understandings of the concepts under discussion (Bellevue Community College Interdisciplinary Studies).

◀ Seamless Learning

As described, some active learning techniques can be tweaked to become seamless learning activities. In seamless learning, however, there are four specific out-of-class experiences to be utilized in order to facilitate learning, so not all active learning techniques will qualify. The four categories of outside experiences to be used in active learning are, as described earlier in the piece, "critical thinking and problem solving, outside activities, holding a part-time job, and experiences shared with professors and friends" (Seidman and Brown, 2006, p. 109). Seidman and Brown give three recommendations for how these can be used to promote seamless learning:

1. **Class Clubs.** Since college students enjoy extracurricular activities such as academic and social clubs, creating a "club" within the classroom structure can facilitate a deeper understanding of course material (Seidman and Brown, 2006). All students involved in the class elect officers and use a certain portion of class time to hold meetings. In these meetings, teachers find issues which are relevant to concepts and other materials discussed in the course for student discussion. This set up makes use of three of the four seamless learning activities (critical thinking and problem solving, outside activities, and experiences shared with professors and friends). Together, these activities can facilitate a deeper understanding of course information so that students can easily relate to it personally.

2. **Part-time Jobs.** Seidman and Brown assert that "with the rising cost of many college tuitions, working a part-time or full-time job while in college has become a necessity" (2006, p. 111). Because so many college students are now a part of a situation in which they are both full-time students and workers, using the experiences related to student employment can be an effective way to facilitate class objectives. An example of this technique would be for a teacher to ask a course material-related question such as how they [students] would respond to a certain theory or situation.

3. **Recreational Activities.** Outside activities, such as clubs and sports, can be valuable learning situations. Instructional staff can incorporate these types of activities into learning activities. Educational activities of this type, such as a scavenger hunt, are "experiences shared with professors and friends" which promote "critical thinking and problem solving." Students may only move onto the next clue once they have acquired the skills to solve the clue before it. Conducting these types of activities with peers and teaching faculty in an unorthodox setting can increase the value of the learning situation.

The Implications of Active Learning's and Seamless Learning's Roles in Increasing Faculty-Staff Interaction

According to Weaver and Qi (2005), both the formal and informal structure of the classroom influences faculty-student engagement. Formal classroom structures, such as large classes, lecture-only teaching, and closed book exams, create an environment that segregates faculty from students and students from one another. Informally, Weaver and Qi report that fear of criticism from professors and peers often keep classroom engagement down, and suggest that out-of-class engagement along with the deconstruction of the all-knowing professor would encourage interpersonal interaction between students and also professors.

> *Moving from a "sage-on-the-stage" approach to a "guide-on-the-side" has much more potential for student learning.*

Auster and Macrone (1994) explored the notion of this all-knowing-professor, finding that this is a major factor in the lack of classroom participation. If the student body views a faculty member in this way, distance is created and students fear the criticism that an imperfect response might draw, in turn discouraging classroom participation. Therefore, moving from a "sage-on-the-stage" approach to a "guide-on-the-side" has much more potential for student learning.

Faculty may increase engagement through actions that invite the students to move beyond the formal structure that classroom implies. Any action taken that encourages a student to participate in the classroom is communicating to that student that the professor is interested in his or her thoughts. In addition, any action that relates course content to outside issues such as current social problems communicates to the student that he or she is open to discussion of the

topic in a way that may be more relative to him or her (Wilson, Woods, and Gaff, 1974).

Active learning and seamless learning, then, do not only serve the academic purpose of increasing college students' concept retention and material engagement; they create a learning environment which breaks down the barriers between students and instructional faculty, allowing for increased levels of student-to-student and student-to-faculty interaction. This ability to positively interact with professors and other students increases students' satisfaction with their college experience, leading to greater engagement and retention in the institution.

> *Any action taken that encourages a student to participate in the classroom is communicating to that student that the professor is interested in his or her thoughts.*

◄ Faculty Student Interaction Outside the Classroom: Examples and Themes

Nurturing faculty-student interactions in an out-of-class setting can go a long way to further involve the students with their institution. "Personal interactions with faculty members outside the classroom contribute to students' intellectual congruence within the institution, a key factor in student persistence" (Cox and Orehovec, 2007). A direct relationship has been established between the number of informal interactions faculty have with students discussing course related matters and the student's achievement (Pascarella, Terenzini, and Hibel, 1978).

Cox and Orehovec (2007) further explore various circumstances for interaction between faculty and students of a postsecondary institution, concluding that "even the most fleeting out-of-class interactions with faculty members (i.e., incidental contact) can help students overcome the professional distance implicit in a class room setting."

University of Arizona

The need for interaction between faculty and students outside of the classroom setting has been met by different institutions in different ways. The University of Arizona, for example, created the *Building Academic Community Initiative (BACI)*. The BACI, which has won a significant amount of recognition and awards since it

was first implemented in 1999, is a three-pronged system devoted to student-faculty interaction and operated by the University's Dean of Students office. The first of three branches of the BACI system is the *Faculty Fellows* program. More than 30 members of the University of Arizona's faculty provide office hours for students in atypical places such as student dorms, Greek houses, athletic facilities, and cultural centers on campus so that students at the University have an unprecedented amount of access to their professors.

The second branch is the *Student-Faculty Interaction Grants* program. The program provides funding for professors at the University of Arizona to create activities with students outside of the classroom setting. According to the university, this allows participants to "interact in a more social setting and thereby reducing students' feelings of intimidation" (University of Arizona Dean of Students, 2007).

The third and final branch of the BACI system is the *Speaker Series* program. This branch involves the scheduling of professors and other speakers on a monthly basis to address and discuss important current issues with students. Topics discussed in these monthly lectures are selected in accordance with a previously decided upon theme. In a recent program session, the University of Arizona held a discussion on the issue of "inclusion."

The Massachusetts Institute of Technology

The Massachusetts Institute of Technology (MIT) believes that research supports its view that interaction between students and faculty, both formal and informal, helps students learn good citizenship, hone communication and leadership skills, and gain self-mastery. It is therefore important to bring students and faculty together both inside and outside the classroom. True to their beliefs, MIT provides an extensive list of opportunities for student-faculty extra-class interaction. These opportunities range from simple suggestions to structured programs designed specifically for student-faculty interaction. Some programs to note include:

The House Fellows program. A House Fellow is a faculty member who provides and participates in structured social, cultural, and intellectual activities with the students of a particular residence hall. MIT does not assign faculty to these positions, but rather uses faculty volunteers to fill them.

Fraternity, Sorority, and Independent Living Group (FSILG) Faculty Advising. This program's goal is to put a member of the faculty into contact with each fraternity, sorority, or other independent living group on campus. Once assigned as a volunteer advisor to one of these groups, the FSILG advisor's job is to become a mentor for that group of students. The FSILG advisor is also that fraternity, sorority, or other group's liaison to other areas of the campus community.

Discipline System Advising. At MIT, students involved in the disciplinary system are given the opportunity to have a faculty advisor help them as they go through the processes involved in discipline and conflict resolution. This program allows faculty members to volunteer to be an advisor in this capacity for students who would like to have a discipline system advisor, but do not have a faculty member in mind for this position.

Cheer on the Team! MIT encourages all faculty and staff to attend athletic games to deepen their interactions with students. Also related to this suggestion is Intramural Sports, which encourages faculty to join the students by participating on intramural sports teams. These teams are open to everyone on campus.

SUNY Brockport

The Brockport campus of the State University of New York (SUNY) has two programs in particular that encourage faculty-student interaction. The first of these is the *Faculty Staff Student Interaction Program*. The program is a system by which faculty and staff members can obtain funding for activities and events they plan outside of the classroom. The funding committee openly prefers residence halls as the settings for these activities and events. The student interaction program has helped support activities such as creative programs designed by faculty members, discussions, seminars, field trips, dinners with visiting lecturers, and other educational activities.

The second program that encourages faculty-student interaction is the *Faculty in Residence Program*. In this program, a faculty member lives in an apartment in each residence hall. That faculty member then works in conjunction with the residence hall's residence life staff to develop community in that hall. The goal of this program is to make sure that the academic community needs of residents are met.

Duke University

Duke University also has two programs that increase faculty-student interaction. The first is the *Faculty in Residence Program*, which is similar to the *Faculty in Residence Program* employed by SUNY Brockport. Like the program at SUNY Brockport, Duke's *Faculty in Residence Program* places a faculty member in each residence hall to live among the students and develop community within that residence hall. Duke's program is unique, however, in that it specifically targets freshman students.

The second program employed by Duke is the *Faculty Athletics Associates Program*. In the wake of the university's lacrosse scandal, Duke looked for ways to deal with what they perceived as a disconnect between athletics and academics in their institution. The *Faculty Athletics Associates Program* was their answer to that problem. In the *Faculty Athletics Associates Program*, professors volunteer to be assigned to different Duke sports teams with the job of attending practice, traveling with the assigned team, and getting to know players and coaches to increase dialog between the academic and the athletic sectors. The hope is that, through connecting faculty members to sports teams, Duke's faculty will better understand the structures of the athletic arena and will therefore be more supportive of the type of learning that goes on in them. Faculty members are not responsible for reporting or "tattling" on the squads they are assigned to, and faculty members are rotated regularly to ensure that they do not become specific advocates for their assigned team.

◂ Themes

The schools mentioned all have established programs in place to foster higher levels of student-faculty interaction. While all of these programs have their unique qualities, two themes provide guidelines for institutions wishing to implement their own programs to increase student retention through greater out-of-class student-faculty engagement. The first theme is **residences**. Every school mentioned had a program which involved faculty members targeting students where those students lived. The practice of seeking relationships with students in what serves as their "home" environment is a sound one, because it takes the burden of making an effort off of the students and places it squarely in the hands

of the professors. The students involved in this kind of program don't have to leave their homes, taking away a main excuse not to participate, and the faculty member's special effort to make personal contact with the students makes those students feel valued and important (Cox and Orehovec, 2007).

The second theme that can be observed from the example universities is the theme of **sports** as a catalyst for student-faculty interaction. This theme is supported by the Team Identification-Social Psychological Health Model, which states that "team identification facilitates well-being by increasing social connections for the fan" (Wann, 2006). Wann's model supports the idea that people can make both temporary and lasting connections with other fans of their chosen sports team. For the purposes of the theme, this model supports the idea that a faculty member publicly supporting or even advising a sports team at his or her university opens up another avenue for interpersonal connection between students and staff members.

◀ Summary

It is important for faculty members to engage students both in and out of the classroom. Engagement with faculty causes students to feel more satisfied with their college experiences, and because of that satisfaction, causes them to be less likely to leave school early.

In the classroom, this engagement can be fostered through active learning techniques. **Active learning** involves using non-traditional teaching methods to help students engage the course material, the faculty member, and the students' peers. **Seamless learning** is a more specific form of active learning in which students' experiences outside of academics are incorporated into classroom active learning activities to integrate learning outside of the classroom and learning inside of the classroom.

Outside of the classroom, this engagement can be fostered through faculty taking time to go and meet their students where those students are. This involves faculty going to student dormitories, cafeterias, athletic games, and clubs to develop appropriate relationships with students. The personal connection developed between students and faculty members outside of class contributes to the students' satisfaction with their college experiences.

◄ Key Concepts

- Interaction between faculty members and students is key in lowering student attrition rates.

- Interaction both inside and outside of the classroom is necessary for success.

- Active learning is a technique by which faculty members engage students through non-traditional teaching techniques.

- Universities use a variety of methods to engage students outside of class.

◄ Action Strategies

- Work with academic affairs and faculty members to discuss teaching and learning activities, within and beyond the classroom.

- Provide professional development activities for faculty to learn about teaching pedagogies and new ways to engage students in the classroom.

- Utilize the strength of real-world activities to engage students and faculty.

- Find natural affiliations on campus where faculty can engage students in an informal setting (e.g., fraternities, clubs, etc.).

IV

Student Advising

Student advising is being recognized as a tool to decrease student attrition in colleges and universities. Traditionally, advising structures within institutions of higher education vary greatly by institution, school, colleges, and departments. Research tells us that students often receive limited counseling on their academic pathways and future college opportunities during the high school years, a trend that does not appear to improve during college. In fact, according to the 2005-2006 National Student Satisfaction Report, there has been no real improvement in the quality of academic advising over the past five years. Incongruously, the same report finds that academic advising ranks second in importance to student satisfaction (Rinck, 2006).

Institutions, it seems, assume that students are well counseled about careers, financial issues, and academic pathways. For entering freshman, institutions are better served by assuming that students have had minimal if any counseling in those three areas.

As a number of studies illustrate, students desire better advising in academic affairs and faculty also recognize the importance that advising services provide (Wlodkowski, et al, 2002; Wilder, 1981). A review of relevant literature reveals that linking these services often adds to the success of their delivery. A one-stop shopping model makes each of these services more attractive to students, increases the likelihood that students will get the help

> *Institutions must determine the needs of their students, with regard to counseling efforts, and determine the most effective way to deliver these services to those who need them most.*

they need, and, in turn, increases the likelihood that students will complete their programs and graduate from their institution (Purnell and Blank, 2004).

Advising services, such as financial, academic, and career advising, are often connected to an institution's student services efforts and may be housed in that department. However, institutions of higher education incorporate these activities in a variety of methods and through a variety of departments and schools. Institutions must determine the needs of their students, with regard to counseling efforts, and determine the most effective way to deliver these services to those who need them most.

◀ Types of Advising on College Campuses

Financial

There are several ways in which students and their families can pay for a postsecondary education, including gift aid such as grants and scholarships, Federal Work-Study, and loans. Because other forms of payment are rewarded based on merit or need, loans have become the most universal way to pay for college. Loans are different from other means of financing postsecondary education because educational financing drawn from loans must be repaid (Oliverez and Tierney, 2005).

The literature finds that college students consistently report that financial issues are among their biggest concerns (Noel-Levitz, Inc, 2006; Matus-Grossman and Gooden, 2002), and more financial advising is needed to help them navigate the complexity of the student financial aid system (Li and Killian, 1999). Indeed, according to Noel-Levitz, 28 percent of incoming college freshmen reported serious financial problems which would distract them from their schoolwork (Noel-Levitz, Inc, 2006). When these financial concerns are tended to, students are more likely to excel and less likely to drop out (Srivene and Pih, 2007).

A financial aid advisor is a trained professional whose job is to help students with all aspects of the college funding process. These advisors maximize a student's financial aid opportunities by counseling them on the various financial options available to them. Good financial advising promotes smart borrowing, which consists of (1) knowing the cost of one's education, (2) borrowing only what they need, (3) setting a budget, and (4) having a plan for repaying their loans (HESE, 2007). Successful financial advising promotes the student's knowledge of

managing credit and debt, the responsibilities of loans and investments, how to budget, and how to save (Georgia Student Finance Commission, 2007).

The Case for Financial Advising: Financial Literacy

It is never too early to begin educating students about financial responsibility. Good saving and spending habits should be taught at an early age and enforced by both by parents and educators. According to Natalie Hart, the senior advisor for economic success at The Ohio State University, students should begin thinking about finances and college as early as the fourth grade. "I work with students and their parents to remove financial questions so they can focus on academic issues instead of seeing that dollar sign as a stoplight," said Hart. Despite what parents may think their child knows; a recent study shows that graduating high school seniors averaged a failing grade of 52 percent in personal finance knowledge. This means that many college freshmen are beginning their college careers with no idea as to how to survive financially on their own.

> *"I work with students and their parents to remove financial questions so they can focus on academic issues instead of seeing that dollar sign as a stoplight."*
>
> *—Natalie Hart, The Ohio State University*

Several state and national campaigns exist to make understanding finances easier for the entire family, such as Financial Literacy 2010 and the Jump $tart Coalition. These organizations offer extensive research for educators, parents and students with the goal of providing solid knowledge that will lead to a better academic career and lifestyle for the student.

An Institutional Model

One of the best institutional models in the country for socioeconomic access and financial literacy can be found at The Ohio State University (OSU). Programs at OSU are spearheaded by the university's senior advisor of economic success, Tally Hart, who is the mastermind behind offering more competitive financial aid packages. Hart is an advocate for aggressively recruiting low-income and minority students who may be easily dissuaded by the college price tag. OSU takes great pains not only to offer aid and assistance, but to help students avoid the

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possibility of going into debt. To do this, Ohio State has shortened the wait time for receiving financial aid, guided students away from high-interest loans, and pushed them to fill more on-campus jobs. The university also began an initiative called the OSU Land Grant Opportunity Scholarship which provides full scholarships to at least one student from each of Ohio's 88 counties with a family income of less than $40,000. The initiative aims to keep higher education accessible to Ohio citizens, and offers scholarships to high-ability, low-income students. Interested students need only apply to the university and fill out the Free Application for Federal Student Aid (FAFSA) form by February 1 of each year.

In addition to offering aid and guidance, OSU strives to educate families with children about the types of classes and tests that may give them an edge above other students when it comes to being accepted into college. After attracting and admitting qualified students, OSU continues their efforts with freshman seminars, which allow students a chance to work closely with a distinguished senior faculty member in any number of areas, earning one or two credits towards their degree. With more than 300 seminars to choose from, these classes give students the opportunity to decide if they like a subject enough to use it towards their degree, without the commitment of a three-credit course.

More Programs That Work

College staff members can also learn from programs targeted toward high school students. For example, **Financial Literacy 2010** (FL2010) is a free, national campaign that aims to increase the average high school student's financial knowledge. The FL2010 strives to educate youth about savings, investing, personal finance, and economics by acting as a resource for teaching professionals. FL2010 is nearly a decade old and is a joint project of each state's securities agency, the nonprofit Investor Protection Trust, the North American Securities Administrators Association, and the National Association of Securities Dealers.

The campaign hosts teacher training sessions and compiles a free newsletter, "Financial Literacy News," for teachers. FL2010's web site offers teachers tools to assist them in preparing their students for finances in the real world. The site features two teaching guides, "Basics of Savings and Investing" and "Personal Finance for the Economics Classroom," that can be downloaded and customized by state, as well as a list of "Two Dozen Ways to Make Savings/Investing Fun," which offers interactive ways to teach kids about financing options. FL2010 also has a contact list of financial experts available to speak with high school students; the list is divided into states for easy access and browsing. Once a user registers and customizes the site to his or her location he or she has access to dozens of state-specific references to laws, cities, and companies. This information is useful to teachers and parents in their quests to improve the financial knowledge of students and children. FL2010 targets teachers who are interested in changing the financial knowledge of the next generation.

More than a decade old, the **Jump $tart Coalition** promotes curriculum improvement to ensure that basic financial knowledge is provided to K-12 students in school, after school, and through community involvement. Jump $tart gathers high-quality materials suitable for teachers of all backgrounds that can be obtained by those interested through their clearinghouse. The clearinghouse offers ordering information for a variety of books, pamphlets, workbooks, interactive games, and guides, both in print and electronic format, many of which are low cost or free. The clearinghouse is a listing of materials, not a distribution center. The clearinghouse allows users to search, browse, provide feedback, and submit materials, as well as review a list of free books and guides. Jump $tart's web site also offers a list of related sites that may be of use to teaching professionals.

Jump $tart's site features a survey designed to give students a "Reality Check." This survey is designed to show students how much money they need to make an hour in order to support their current lifestyle. The survey explains what type of degree is needed in order to earn the appropriate hourly wage that fits their lifestyle criteria. This survey can be used as a wake up call for students who have no concept of money, where it comes from, and what it is worth.

Jump $tart recently announced its Third Edition of National Standards in K-12 Personal Finance Education. Portions of these standards are listed on the Jump $tart web site. The standards provide guidelines for the ideal personal finance

curriculum and overall competency of financial responsibility, which include the topics of: decision making, income and careers, planning, money management, credit and debt, risk management and insurance, and savings and investing. The standards offer specific benchmarks as to how knowledgeable students should be by the fourth, eighth and 12th grades. Portions of this material may not be appropriate for some instructors or students, depending on where they are in the curriculum. Jump $tart also offers guidelines as to how to select the best practices, which can be useful for teachers who want to align a particular objective with the materials.

Forty-seven states are affiliated with the Jump $tart Coalition. Although the mission is the same across the board, states vary on methods of projecting their vision. Some states host events for students, and have youth advisory boards that speak as the voice of students. Most states hold teacher training conferences, semi-annual member meetings, and inform state politicians and policymakers.

Aside from organizations providing materials and events to teaching professionals, the next step is to get the higher education institutions more involved. In 2004, the Jump $tart Coalition reported that 52.3 percent of teens surveyed failed a financial literacy test. This means that universities need to prepare a financial literacy curriculum to help incoming freshmen learn what they were not taught in K-12. The answer to this problem could be as simple as offering a class in financial literacy, perhaps for credit; or perhaps even going so far as to imbed this course into the freshman curriculum, as many institutions do with First Year Experience courses. Still another possibility could be providing a mandatory presentation on financial literacy for all students receiving financial aid, or encouraging students to have on-campus jobs. Institutions could utilize orientation time to host expert guest speakers, or requiring residence assistants to host a program on financial literacy.

Though different in their general makeup, OSU, FL2010, and Jump $tart all have the same goal in mind when it comes to financial literacy: to educate students about their financial options. The execution of their mission and the ways they attack the financial literacy problems also differ. Many parents may assume that their children understand the basic idea of what a credit card is, how to balance a checkbook, how to prepare a budget, or pay bills, but this is not always the case. In reality, only 26 percent of parents feel adequately prepared to educate their children about financial literacy. There exists a shocking lack of parental

involvement, and in essence a pawning off of the problem onto teachers. Obviously, the need for the type of work done by OSU, FL2010, and Jump $tart still exists due to undereducated parents and students.

The Importance of Good Customer Service

Good customer service should be the goal of every financial aid office. Providing good customer service means assisting students through the process of assessing which financial aid options are best and assisting them through the process of applying. It is the job of the financial aid office to make attending school affordable for students, and to see students through to graduation and work in the field (NASFAA, 2006).

NASFAA has established a set of principles of Customer Service in Financial Aid:

- **Information.** Financial aid advisors must give precise information to students and parents. In order to do this, they must be cognizant of all related policies.

- **Listen.** Advisors must also listen to what student's concerns are in order to serve them fully, and then respond to their concerns promptly.

- **Follow Through.** Financial advisors must follow through with issues that arise with students, and do this by offering accessible and flexible services.

- **Advocate.** A good financial aid advisor must be an advocate for the student; not the financial aid system.

The financial aid professional must maintain a positive attitude in order to provide good customer service for the student. When advisers personalize their services for each student's needs, students get what they need and develop a better understanding of the expectations and requirements for financial aid, as well as the responsibilities that come after college. Finally, it is important that financial advisors work as a team with each other and other departments on campus (NASFAA).

Career

Career counseling assists students and adults in career planning and provides the foundation for acquiring the knowledge, skills, and attitudes that enable students to make a successful transition from school to the world of employment. (California Department of Education, 2007).

Studies have found that there is a great need for career counseling, specifically on community college campuses, due to the high attrition rates found at these institutions. Lower income and minority students attend these institutions at a much higher rate than other groups, and only 59 percent of these students persist through graduation. It is believed that quality career counseling can raise persistence rates by fulfilling the need for information about desired careers and what it takes to succeed in them (Purnell and Blank, 2004). Studies also suggest that career counseling services should be offered in coordination with academic advising (Damminger, 2001). Contrary to popular belief, college students are highly interested in career counseling (Noel-Levitz Inc, 2006) and report that they are least satisfied with the quality of career advising they have encountered at their schools (CCSSE, 2003).

Appropriate career advising should help the students identify their interests, competencies, values, and personal characteristics in order to make good career choices. Good advising should guide the student's understanding of his or her academic planning within the world of work. The student may then, with the help of advising, select suitable academic opportunities that optimize future educational and employment opportunities (NACE, 2006).

Career advising should also help students gain knowledge about themselves and potential careers through such interactive experiences as: on-campus activities, employment, community service, internships, and cooperative education opportunities. Career advising can provide students opportunities to participate in the development of professional interests and competencies by linking them with alumni, employers, or professional organizations (NACE, 2006).

With the help of career advising, a student should be prepared to make career decisions regarding employment, graduate school, and job-search competencies. Students should have effective job-searching skills, candidate presentation skills, and an understanding of fit between their competencies and the requirements of a perspective job. Ultimately, students should be prepared to manage their careers after graduation.

Academic

The formal process of advising students on academic matters came to be an important part of college life when university systems began to allow students to choose their majors rather than making the majority of students follow the same course of study. Academic advising came to be of the utmost importance due to the many choices suddenly being granted to students in higher education with regard to course selection and career decisions. Today, academic advising allows students to personalize their education, and match it to their career and personal goals.

The National Academic Advising Association (NACADA) has constructed a multifaceted goal for academic advising: that students should be able to use academic advising to create an educational plan based on their abilities, aspirations, interests, and values. Good advising empowers students to set and achieve appropriate academic goals, foster the development of positive intellectual habits, and encourage their involvement in the broader world. Academic advising should also facilitate student achievement of academic requirements and become more aware of the intent of an institution's curriculum (NACADA, 2006).

Swanson (2006) has compiled the ideas of previous works to develop seven models of academic advising:

- **The Faculty Only model** uses faculty members to directly advise students;
- **The Satellite model** organizes advisors into offices that are maintained and controlled by individual academic programs;
- **The Self-Contained model** coordinates all advising activity into a centralized office that has no interaction with faculty;
- **The Shared-Supplementary model** uses faculty as the primary form of advising with assistance from a central office;
- **The Shared-Split model** allows students to graduate to different levels of advising according to their academic progress;
- **The Shared-Dual model** assigns students to both a faculty member and a professional advisor, who then share responsibility for advising those students; and
- **The Total Intake model** assigns all incoming students to a centralized advising office until the completion of their first year. After the first year students are assigned to faculty advisors, who will be responsible for the duration of those students' college advising.

These seven advising models follow broader organizing categories developed by Pardee (2004): centralized, decentralized, and shared. The organizational structures are based on the balance created between the use of faculty or a centralized advising office. When deciding which is better, Pardee advises, "if the organizational structure is not a good fit for the institution or its students and faculty, the advising program's effectiveness could be limited and student satisfaction with the service could be adversely affected."

◀ Personalizing the Advising Process

Many studies (Metzner, 1989; Habley and McClanhan, 2004; Chaney et. al., 1997) have found that the quality of advising has an inverse relationship with student attrition at colleges and universities, meaning that as the quality of advising goes up, attrition in the corresponding school goes down. Matus-Grossman and Gooden (2002) find that students see faculty advisors as the front line of their school experience.

Relationships between advisors and students play an important role in the effectiveness of the advising process. The Opening Doors Qualitative Study (Gardenhire-Crooks, Collado, and Ray, 2006) found that students receiving regular and individualized academic advice avoided the pitfalls experienced by some of the students in the comparison group who did not. The best results tend to come from advising situations in which students and advisors meet regularly to discuss the progress being made on a set education plan (Purnell and Blank, 2004).

A study by Smith (2005) found that personalized relationships between students and their advisors have a positive impact on the advising process. Smith developed nine steps to personalize the advising process:

1. **Prepping**—Get to know the student by reviewing records prior to the meeting;
2. **Attending**—Non-verbal behaviors showing care or concern, such as smiling;
3. **Bonding**—Conversing about nonacademic issues;
4. **Disclosing**—Sharing things about yourself;
5. **Laughing**—Using humor;
6. **Counseling**—Listening and validating the student's concerns;

7. **Normalizing**—Letting the student know that what they are feeling is okay;

8. **Coaching**—Maximizing the student's self-understanding and growth; and

9. **Continuing**—Promoting an ongoing relationship by asking for a return visit.

CASE STUDY I

University of Wisconsin - La Crosse: Combining Professional, Student, and Faculty Advising

To address problems surrounding academic advising, the University of Wisconsin - La Crosse established the Academic Advising Centre (AAC) to complement the already present faculty advising system. The center works primarily with students who are undecided about which major to pursue, but is open to all students. Working with the faculty, the center established goals and objectives for the practice of advising. The center also worked to foster engagement between the students, the faculty, and the center itself through such programs as a freshman level course, faculty awards and training programs (Swanson, 2006).

In 1995, the university's chancellor put together a blue ribbon exploratory committee to look at student needs with regards to advising. The conclusion of the committee was that students needed a place to explore academic majors, do graduate school searches and job searches. This process resulted in the development of the Academic Discovery Lab. Three years later, the student government asked university administration for additional advising options. The Advising Center was built in response, using grants and money raised from student fees. Soon after, the Advising Center and Academic Discovery Lab merged to create the Academic Advising Center (Brunk, personal communication, September 10, 2007).

All students are welcome to use the center to discuss immediate concerns about classes and programs, regardless of their academic status. The center's primary functions are to work with undeclared students and to help facilitate a faculty-student advising relationship for these students with a dedicated course of study. The center works with students to choose a field of study or career that is a natural match for them, and advisors often help students choose classes or assist them is navigating drop/add issues. Advisors must also become experts on policies concerning student academic choice.

The Academic Advising Center first comes in contact with students during freshman orientation. All freshman students must use the AAC since advising is required before registration. The center sends letters out to encourage freshman to attend a group advising. Students who still have questions or students who didn't attend group advising session must attend an individual advising session.

From the beginning of the advising relationship, the AAC is focused on helping students find a field of study that will lead them to a well suited occupation for them. The center will do this by helping the student develop a list of occupations to explore. The center has an array of video and print media materials focusing on more than 500 occupations. Students can also be referred for vocational testing to answer questions about workplace skills. The center will also help any student choose a graduate school that best suits their interests (UWL Academic Advising Center).

The center uses a variety of resources to assist in the advising process. The Student Notification of Academic Progress tracks the courses a student has taken as well as the courses a student needs to complete their degree. The Discover Program is a computer-based guidance system that assesses a student's interests, abilities, experiences, and values in order to help the student identify desired occupations and the majors related to these occupations. Advisors often assist the student in using Discover and other assessment programs.

Once a student declares a major, they are assigned to a faculty member for academic advising. The role of the center is now to foster the relationship between the student and a faculty member within the student's field of study. The Academic Advising Center provides resources for the faculty advisors and is available to help work through any problems that may arise. The center recommends that students and faculty advisors meet at least once a semester.

Professional advisors concentrate on educating students on how to work within the system, and they advise students about college in general. It is the advising philosophy that faculty members are more knowledgeable about respective programs, so for the most part, the faculty advises students independently, without the help of AAC. However, each year two faculty advisors, with permission from their department chair(s), come to work in the AAC. The faculty members are trained and learn more about advising and work a few hours a week in the AAC.

When the student government wanted additional academic advising, the funding allotted for advising wasn't enough. In order to meet these demands, the

Academic Advising Center supplemented professional advisors with students. This part of the advising program was established to provide a student-to-student component for the advising system already in place at UWL. The role of the Peer Advisor is to aid students in getting answers to questions they have about the registration process, as well as academic, career, and personal concerns. Peer Advisors aid faculty advisors by providing an alternative view to the academic process. The Peer Advisors are hired in the spring for the fall semester. Once the students arrive for the fall semester they go through a week of training with four to six weeks of follow up mentoring. Graduate students also work in AAC, and may assist with peer advising. Much of the graduate student's time is consumed by questions which come in through the email advising service offered by the AAC.

The professional advisors at the Academic Advising Center provide general advising in any of the many areas of study, and specialize in one particular college or program. The advisor knows the specifics of the program in which they specialize and acts as a liaison to that program in order to maintain communication with the faculty and support staff about issues of student advising. As liaisons, professional advisors attend staff meetings and represent the AAC in advisory issues. Liaisons may also help resolve issues between the student and their faculty advisor.

Professional advisors must have a master's degree in counseling or a human service related field, with experience in higher education being a major plus. Most of all, an ability to connect with students is a requirement. After they are hired, new advisors enter a week-long training process where they learn about policies and resources.

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CASE STUDY II

University of Florida: Multiple College-Based Advising Styles

Upon entry into the University of Florida, all incoming freshmen must attend a two-day orientation program called Preview, which takes place in either the summer or fall semester. During the orientation, trained faculty members lead a group discussion about a variety of issues faced by freshman and transfer students, such as what is expected of them and what it is like to transition to a college setting. The

faculty members then meet individually with their group members to review each student's schedule, his or her admission status, and to address any problems or concerns that may arise. The orientation ends with class registration.

Students at the University of Florida are offered major and degree-specific advising through advisers in their 21 colleges. Each college has its own advising office that handles students who have declared or are considering a major within that college. Some colleges have professional advisors, while others use faculty who work specifically with students of a particular major. Undecided students are assigned to a major based on their interest or major that they intend on following.

Advisors help students with such things as managing degree requirements, proper placements or prerequisites for courses, and registration. Advisors are also able to help find answers to questions about academic policies procedures, and requirements of majors. Advisors help students develop academic plans that meet the school's academic requirements and their own career goals. Academic advisors are also good points of reference for finding out about other kinds of resources in the university. Students and advisors alike are encouraged to utilize the university's universal tracking system that lays out what a student in a particular major has taken and what he or she needs to take in order to complete their desired program.

Since each University of Florida college is in charge of its own advising program, there are a variety of advising styles on campus. According to their size, some colleges use existing faculty and staff to fill the advising need, while others use professional advisors. The College of Agricultural and Life Sciences uses an all-faculty advising staff; each major has a head advisor in charge of other faculty advisors. The College of Engineering uses a small team of faculty and staff to handle advising students for each of its degree programs. All freshmen and sophomores in the College of Journalism and Communication are advised by a small group of advisors, and then transferred to an individual faculty member for their junior and senior year, according to their specific program. The College of Liberal Arts and Science, one of the larger schools on campus, uses a team of 13 professional advisors that advise students according to their program affiliation. In order to manage the large numbers of students that the college must serve, the advising team uses phone and email advising as well as serving students on a walk-in basis. The College of Public Health and Health Professions, another large

college on campus, also offers advising services which are provided by a small group of advisors.

Students at the University of Florida can find career advising through the *Career Resource Center* (*CRC*). The CRC has a staff of professional career advisors assisted by graduate students, and specializes in helping students choose the best-fit career for them and setting goals in their academic life that reflect those career decisions. These goals may include choosing a major, an internship, or exploring graduate schools. Career advisors meet with students an average of three-to-four times to assess interests, values, skills, and other similar factors that affect career decision making. In order to make a proper assessment of the student's skills and interests, the advisor may use an interest inventory test, a personality-type indicator, or an interest and skills survey. Another tool for career advising is the Discover system, a computer software system that allows the user to inventory their interests, explore descriptions of occupations, find an academic major, explore schools, and search for jobs.

The staff of the CRC consists of four teams working under a director. The Career Development Team consists of six advisors who provide students with information about majors, careers, credentialing, and continuing education, as well as working with students on interviewing. The Career Development Team is also charged with maintaining a resource library. The Career Network Team coordinates alumni directories, internship/externship and coop opportunities for students, as well as on-campus events and on-campus interviewing. Most members of these two teams hold a master's or doctoral degree with a couple of exceptions. The final two teams are the Operations Support and Information Systems teams. The Operations Support team handles things such as finances and publications, while the IS team works with developing computer and database strategies.

Group financial advising is offered to students through a "Financial Aid 101" class. This class introduces students to the costs of education and the financial aid process. During the course, students are exposed to lessons about the various aspects of budgeting for their college experience, a step-by-step guide to applying for and receiving financial aid, information on how to track their financial aid, what to expect in loan repayment, and how and when to use the loan deferment system. Additionally, the university offers the required entrance and exit counseling for federal loans. Other services are offered to help students track the status of their financial aid and anything else that may be required.

CASE STUDY III

***Lake Superior College: A Personal Touch for Advising at a
Two-Year College***

Several years ago, Lake Superior College (LSC) had a student retention rate of 30 percent, well below the 44 percent retention average of their peer institutions. Since the adoption of an inclusive advising model, LSC has increased retention 50 percent. The school has also seen an increase in student traffic and student satisfaction (Wielinski, Personal Communication, August 30, 2007).

The school initiated the process by asking the following questions: What are the typical steps to get enrolled at LSC? Who are students interacting with? And how are these interactions taking place? Through this line of questioning, LSC discovered that their admissions advisors and academic advisors had a lot of overlap in their jobs and responsibilities. As a result, LSC combined these two jobs into one.

Later, when the financial aid director became head of all advising, he found that their new online advising system provided seamless services to students with positive results. By pursuing this model of advising, LSC found that by cross-training advisors to work across advising departments allowed for more flexibility in handling the needs of students. The school also discovered that merging the advising roles lessened the work load on the advisors and students.

In 2005, LSC adopted a Student Relationship Management model of advising. This model stresses the relationship between the advisor and the student. In order to insure a bond between student and advisor, LSC has professional advisors provide support in admissions, academics, careers, financial aid, and transfer related issues. The school reasoned that students would receive a more comprehensive kind of advising due to the established relationships.

The school hoped to achieve a strong student/advisor relationship through meeting the criteria outlined by the Convoy Model of Social Attachment Theory. The criteria are: length of the relationship; frequency of interaction; and positive perception of the interaction. In sum, students come to a single advisor for trusted advice for any of their academic, financial, or career needs even before they are enrolled in the school.

Students first come in contact with advisors during the admissions process. All prospective students are encouraged to take advantage of advising. During this time, advisors usually field a variety of questions from students about the school,

the admissions process, academics, and especially financial aid. Students are not assigned to a particular advisor at this stage, but if natural relationships develop, students are encouraged to speak to someone they know. Students are officially assigned to an advisor just before registration.

Once during a semester, students are required to consult with an advisor to decide on courses, check progress towards graduation, and discuss other educational issues. Advisors become the student's first point of contact, addressing 80 percent of the student's concerns, and referring the student to a more knowledgeable party when appropriate. When this is the case, advisors go with the student to meet the person they need to speak with, often sitting in on the conversation. All advisors are required to be knowledgeable of the different aspects of student advising, but many advisors develop specialized knowledge on particular issues.

Students are assigned to advisors based on their course of study. One set of advisors meet with students pursuing the Associate of Arts degree and the Associates of Fine Arts degree. Students who have chosen to enter an occupational program meet with a second group of professional advisors that work in areas of specialization to help provide the most up-to-date information possible.

Students on probation must meet with their advisors before they register for classes. Advisors will help these students with petitions and appeals, but most of all help students create and follow a plan to get back on track.

Professional advisers can take advantage of the *Campus Career Center* when helping a student with career advising. The goal of the center is to measure the student's interests and abilities in order to help the student assess their career goals. The center uses such tools as interest and aptitude tests, as well as career-based personality tests to make assessments.

It is important to note that advisors are not responsible for any paperwork. In order to achieve the advisor's primary goal of serving the student, the advising department uses a clerical staff to process any paperwork.

The state mandates that advisors hold a minimum of a bachelor's degree. An ideal advisor has a master's degree in a service-oriented field. The advisors receive individual training in each of the advising areas, with the most extensive training in the area of financial aid, where the director of financial aid works with each new advisor for six weeks before they are allowed to see a student. During this

time, the new advisor learns about the different aspects of financial aid, the process, and policies involved. The advisor also sees a student financial aid coach where they get a lesson in the basics of financial aid including the timeline and jargon associated with the aid process. New advisors also conduct 30-minute interviews with every individual advisor to better understand the office, the job, and the strengths of their colleagues. Before beginning advising, a new advisor shadows other advisors on the job, and once the new advisor begins seeing students they are shadowed by mentors to improve performance.

LSC values customer service in advising, so it is important that students feel good about coming to the advising office. To ensure good customer service, the advising office holds workshop days where advisors receive training to improve their customer service skills.

Through the recommendation of a reception taskforce, LSC uses the medical model of reception. Students react most favorable to this kind of reception. Rather than the old way of students signing their names to a list and the next available advisor calling "next," students check in with a receptionist and fill out an intake form where they can choose either to see a specific advisor or the next available one. The advisor then arrives, calls them by name and has an idea of why the student is there.

To promote a cohesive work environment, LSC's office of advising has designed an over-arching mission statement, as well as separate mission statements for financial aid advising, career advising, and academic advising. All advisors are encouraged to reflect on the role they play in advising and produce a personalized mission statement.

The advising team is very concerned with building relationships with their students. The LSC advising team believes that building relationships has many positive effects on advising, student retention, and for student satisfaction. Advisors often ask casual questions about the student's academic planning and use the information gained to offer career and financial planning advice. It is through these efforts that they are able to get a holistic picture of their student's needs.

Source: Peter Wielinski, Dean of Student Services and Learning Resources, Lake Superior College, p.wielinski@lsc.edu.

CASE STUDY IV

James Madison University (JMU)

James Madison University's academic and career advising is delivered by their Office of Career and Academic Planning. This office employs 15 advisors who work with students on such career issues as career development, planning, internship search, and job search preparation. Professional advisors also work with students on advising issues such as registration, course adjustment, academic planning, and monitoring of academic progress. Students access the advisors by making an individual appointment with an advisor or by walking into the office's resource center.

The Office of Career and Academic planning has two locations on JMU's campus: a general advising office, located within the resource center, and an office primarily focused on job interviewing readiness. The Resource Center provides an array of publications that students can use to complement their advising experience. These publications provide information on such career related topics as job and career descriptions, internship information, employers, salary information, etiquette, and graduate school.

The Resource Center also employs students to help in the advising process. Peer Educators teach other students on how to find information on career choices, and work with them on implementing strategies toward reaching their career goals. Career Education Officers are student volunteers who present outreach programs to groups of students and assist with special events.

The Office of Career and Academic Planning also offers services that relate to resume building and job search readiness. Students can take a one-credit class or attend workshops that cover resume writing, interviewing, job searching, and career readiness. Students can then have their resume reviewed by one of the advisors before submitting it to an employer for feedback. Employers also participate in mock interviews, offering feedback to students on their performance, as well as an employer-in-residence program, an on-campus interviewing program, and job search workshops.

Online career and academic advising is also offered. JMU's virtual advisor allows a chance to ask an advisor questions related to academic or career issues via online chat or email. Online resume referrals allow students to upload their resumes to

an online database which employers can view. Students may also take advantage of FOCUS Online, a career-planning program. This service provides interactive self-assessment tools that help students choose a career path that best suits them.

Students access advising services through one of 11 liaisons assigned to the student according to their major. Liaisons collect information about their respective majors and related career options in order to most effectively inform their students. In some instances students may also have liaisons through their chosen minor or if they are participating in a pre-professional program.

JMU's Office of Financial Aid offers several forms of financial advising. The office offers financial literature on their web site, and most of their hands-on advising is done through workshops and a three-credit course on loans and financial literacy. Students taking the course are offered lessons on how to save, how to build a budget, how to get out of debt, the role insurance and other financial products can serve, how your value system and relationships affect money, and how to plan for retirement. The Office of Financial Aid also offers a workshop and individual advising on these topics.

Source: Dr. Lee Ward, Director of Career and Academic Planning, James Madison University, wardwl@jmu.edu. Office of Financial Aid, James Madison University, fin_aid@jmu.edu.

CASE STUDY V

San Jose State University

While some institutions are striving to unite their student services, SJSU has separated their advising into specialized sectors. Advising at San Jose State University begins at freshman orientation, where incoming freshmen are given an overview of the academic advising system. The system consists of five branches: academic advising, career advising, financial advising, educational counseling, and personal counseling. Each one of these services has a distinct role and operates independent of one another with the exception of the education and personal counseling.

The educational and personal counseling work to ensure that students have the necessary skills to reach their educational goals. While the personal counselors work to help students with personal or mental health related issues, educational

counselors work with students to help them understand and navigate the educational process and ensure that they have the academic skills they need, such as note taking or studying. Education counselors often work with probationary students to help them adjust to the university environment and academic expectations. When not working with students on remediation issues, education counselors help students better understand the university's policies and procedures, teach time management skills, and guide students in choosing an appropriate major for their long-term goals. The Department of Counseling employs eight full-time personal counselors, including one psychologist and three full-time educational councilors, assisted by eight masters or doctoral level students. All full-time councilors must have at least a master's degree in higher education or a service related field.

Academic advising at SJSU is divided into two divisions. Once enrolled in school, academic advising is offered on a first-come, first-serve basis to students by full-time professional advisors at the campus *Student Advising Center*. Advisors assist undecided students in navigating the general education system at the university. One of the first tasks for an advisor and student in the Student Advising Center is to create a four-semester academic plan. The purpose of this plan is to compel the student to focus on setting and achieving academic goals. Once students choose a major, they move from the general advising staff to a faculty advisor within their chosen field of study.

Career advising at SJSU takes place in a mostly self-directed program through the Career Center and its associated web site. The Career Center is primarily a place for students to assess their interests using mainly personality, value, and interest self-assessment software. The center also offers resource lab where students can find publications and a directory of potential employers. The Career Center can also assist students with interviewing, networking, and job searching skills. The center has liaisons that work with faculty academic advisors to meet the needs of students. The center also has specialized services available for students with disabilities. Workshops are offered on choosing a major and selecting the right career.

Financial advising occurs through the Office of Financial Aid. Advising services include advising based around entrance loan counseling, exit loan counseling, and loan consolidation. The Department of Counseling offers a money

management workshop where students can learn the skills needed to manage their loans and other money to effectively pay for tuition, books, housing, and other expenses.

Source: Deanna Peck, Coordinator for Educational Programs, San Jose State University, Deanna.Peck@sjsu.edu.

CASE STUDY VI

Indiana University of Purdue-University Indianapolis (IUPUI)

Indiana University of Purdue-University Indianapolis use an advising model that combines career and academic advising at the college level. Each of the schools within the university organizes its own career/academic advising models using a university-wide career center as a resource.

The university contains 20 schools with a variety of advising models. The School of Liberal Arts uses a combination of faculty advisors and self-help resources, and believes that the faculty are experts in navigating students through the program, and that student-faculty interactions are invaluable. The school offers several resources to the students, including a course checklist so that students will know where they are in the process and what they need to accomplish; an advising handbook so that students know what to expect from themselves and their advisor in the relationship; course descriptions; and a course list that allows students to see what courses will be offered in the coming five years.

The Herron School of Art and Design at IUPUI assigns students to a faculty advisor when they are accepted to the program. The students also have access to academic and career advising from the staff of the school's Student Services Department during their first year of acceptance into the school. The school also offers career counseling from trained staff and faculty members.

The IUPUI School of Education offers advising from a team of professional advisors. Students are assigned to an advisor based on their interests and program being pursued. The School of Education's advising team supplies its students with an advising sheet that students can use to track their academic progress.

The School of Journalism takes a very different approach to advising. It charges its students with the responsibility of planning their own programs while meeting all of the graduation requirements. Students are required to be familiar with degree,

major, and course requirements, as well as academic regulations and their academic standing. Students must also be aware of deadlines and plan to meet with the school's single academic advisor in a timely fashion. Students may meet with the advisor as many times as they need to, but are required to meet at least once before each registration session in order to review their academic plan.

IUPUI's University College is the school's general college and has the most extensive advising system. This system combines academic and career advising in order to help students choose a major that is best for them. Students are encouraged to meet with a professional advisor at their convenience or take advantage of the virtual advising system. University College advisors are also trained to handle basic financial advising.

The university also offers an online advising system to complement the face-to-face advising process. Using this system, students and advisors can check the student's progress toward their intended degree.

The Career Center is run by the University College, but is open to all IUPUI students. The center offers career and self assessment inventories to help students in deciding their career goals. With the help of a staff member students can use assessment tools such as Discover, Myers-Briggs Type Indicator, Strong Interest Inventory, and the Self-Directed Search to assess their career interests. The center also connects alumni to students looking for jobs, mentoring or networking opportunities.

The center contains a resource library containing information on careers associated with different majors, as well as resources on resume development, interviewing, and job searching. IUPUI offers financial advising around the completion of the Free Application for Federal Student Aid (FASFA) and other financial aid processes. The Department of Financial Aid also supports advisors on campus by giving them information on loans, scholarships, and grants. An online tutorial is available to coach students on the hazards of borrowing.

◄ Summary

Quality advising in the career, financial, and academic areas helps students navigate the college system, which raises their level of satisfaction. That satisfaction, in turn, increases retention. Three types of advising are necessary to promote student success: financial, career, and academic. Financial advising involves educating underprepared students and parents on the natures of financial aid and personal finance so that concerns about money do not cause students to terminate their education. Career advising involves providing information and guidance regarding desired career goals and the steps required to achieve them. Academic advising involves helping students personalize their education and match it with their career and personal goals.

◄ Key Concepts

- Quality student advising is key to lowering attrition rates.
- Three types of advising are necessary for higher levels of student success: financial, career, and academic.
- Universities use different methods of delivering counseling services.
- Good customer service is important regardless of what method is used to deliver advising services.

◄ Action Strategies

- Work with current advising department to develop any aspects of advising (financial, career, or academic) which may be lacking or is not in existence in the institution.
- Provide detailed financial aid and personal financing materials to all students and parents through a method that works for the individual institution while not sacrificing client knowledge.
- Consider bundling advising services together under one department to facilitate easy access.
- Provide customer service training to all staff members involved in the advising process.

Early Warning Systems

The early warning system is an academic oversight tool used by academic advisors and faculty at schools to communicate observance of students who may be at risk of academic failure. It is used to identify students who are at risk of failure in their academic program of choice, and through a process of meetings and referrals, is used to create a plan that will allow those students to achieve overall improvement in their work and acclimate to life at the university. The early warning systems in place at more than 14 two-year, four-year, and career schools were reviewed and compared. The University of Alabama, Adelphi University, Coastline Community College, University at Albany, State University of New York, John Jay College of Criminal Justice, Texas State University, and the University of North Carolina-Charlotte were a part of the study. At every institution with the exception of one, there is an online system used by the Office of Advising, Academic Support, Student Services, and the university's course management system. The online system allows professors to track students' progress in their course, take note of those students struggling, and recommend actions that can allow the students to improve in the course.

Colleges and universities already employing an early warning system include the notable indicators of students at risk of academic failure: attendance (frequent absence or lateness), difficulty understanding course material, failure to submit assignments, low class participation, and failure to pass exams (Pfleging, 2002). Once it is noticed that a student is having difficulties in a course, steps are taken to help the student improve performance. Depending on the system in place, an early warning system can be 'activated' as early as the third week of class or as late as mid-term exams (Rudmann, 1992).

In order to know when a student is at-risk, institutions need to be able to determine how students are doing in their classes, especially during their first year of postsecondary study. A student's first semester sets the bar for his or her academic standing, and often determines whether or not that student remains in the program. As noted in every model of the early warning system reviewed, the most easily recognizable indicator of a student's performance is course attendance. It is easily understood that a student must attend class in order to learn. This includes their registered courses and any freshman seminars or workshops that the university may offer to new students. A second important predictor of success is a student's various background indicators, including academic history (high school), family and home life, and other factors gleaned from an entrance application that could affect their ability to learn and succeed in their courses.

◀ Attendance Matters

Attendance is the simplest gauge of a student's progress. Early in the academic year, particularly in courses where attendance is mandatory, instructors are able to tell which students are taking their courses seriously. This is measured in part by continuous class attendance; compared to students who infrequently attend classes. This is not to say that the latter students cannot succeed; but their ability to succeed is certainly more limited than the more conscientious students.

Within the first two-to-three weeks of a semester, an instructor can make note of students who are chronically absent and speak with those students to determine why they have been absent. Of course, this can only happen if the instructor has knowledge of the absences. Instructors who capture this information are also more likely to look at their students' academic work than those who do not. If an instructor discovers that course work is also poor, he or she can choose to place an early alert into that student's file and seek improvement through the early alert process. In all of the studies reviewed, it was noted that students who attended all of their courses and/or missed less than three classes did significantly better than students with more irregular records (Geltner, 2000).

In a study conducted by the Office of the President at the University of North Carolina-Charlotte (UNC-Charlotte) that reviewed which university resources enable student success, it was noted that participation in freshmen orientation

courses and freshmen activities significantly helped students acclimate to university life, do better in their coursework, and socialize more within the campus community (UNCC, 2005). At UNC-Charlotte, attendance at the Student Orientation Advising and Registration (SOAR) program not only helped strengthen the adjustment to university life, but also contributed to success in other classes. The study found that even though attendance of the SOAR program was voluntary, freshman and transfer students who chose to utilize the program and its services were among those that the University retained after the first year. Further, students who attended SOAR were more aware of campus resources and had a greater familiarity with the advising and registration process (UNCC, 2005).

◀ Academic Progress

A review of student progress in freshmen seminars can also provide an indication of how students are performing academically. Fidler & Stanley (1993) observed that student mid-term grades in freshman seminars were potential early identifiers of those students possibly at-risk of attrition. This supposition was supported through data gathered at the University of South Carolina (Cueso, 2004) which suggested that a failing grade at the university's first-year seminar could serve as a warning signal for detecting students experiencing academic problems and therefore possibly at-risk of attrition. Further research conducted on four consecutive cohorts of first-year students at the Massachusetts College of Liberal Arts by Barefoot, B.O., Warnock, C.L., Dickinson, M.P., Richardson, S.E., & Roberts, M.R. (1998) revealed that first-year seminar grades could predict students' overall first-year academic performance better than high school grades or college-entry SAT/ACT scores. This is a conclusion that continues to support the theory that freshman seminars and orientations can be used by universities as accurate diagnostic tools in identifying students within their first term that may be academically at-risk, in need of academic assistance or psychosocial intervention.

First-term students receiving mid-term grades below a certain cutoff point in the seminar could be contacted for consultation and possible intervention. To determine this cutoff point, research could be conducted on grade distributions in the first-year seminar to identify the grade below which a relationship begins to emerge between poor performance in the first-year seminar and first-year

academic problems or student attrition (Cueso, 2004). For instance, students at the Massachusetts College of Liberal Arts who earned a grade of C+ or lower in the seminar had a significantly higher rate of first-year attrition (p<.001) than students who earned a grade of B- or higher in the course (Barefoot, et al., 1998).

Students who do poorly at the mid-term stage are quite possibly performing poorly before that point. Given that most mid-terms are seven or eight weeks into the semester, it is prudent of the institution to look at academic progress as early as two or three weeks into the semester to determine if certain deficiencies are apparent.

◀ Knowing What and When

There are instances when knowing the biographical information of students can be worthwhile in pinpointing any difficulties that the student may have in adjusting to and succeeding in their postsecondary studies. The University of Alabama (UA), in conjunction with SAS, a statistical software company, created regression models that allowed UA an in-depth identification of at-risk students as a precursor to their early warning system. This identification process was developed through an initial program at the UA's School of Business to allow students to use real world data in solving problems. SAS was then contracted by the Enrollment and Management Services office to further analyze resolutions from the business school model that showed an ability to accurately identify at-risk students upon their entrance to the university. In reviewing entrance applications, the following factors were considered: SAT/ACT scores, college majors, parents' educational levels, geographic location (large city, small town, urban area), family structure, level of English course in which students enrolled (e.g., standard, remedial, advanced), choice in mathematics courses, course outcomes/grades, the total number of credit hours earned, and the distance from their home to the campus (Davis, 2005). The initial results from the 2002 data showed that students ACT scores (86 percent of UA enrollees prefer this exam over the SAT) and their Grade Point Averages (GPA's) after the first fall semester were major deciding factors in student achievement at UA (Davis, 2005).

Once students were identified as at-risk, a list was sent to the respective colleges in which the students had enrolled. A cutoff point was created by separating students who had at least an 80 percent chance of returning to the university being considered "safe," and those under that level being identified as being "at

risk." Other information sent to advisors included basic entrance information, intended major, the rank that UA held among their list of potential schools, and the student's degree goal. The enrollment office did not specify the content that the meetings needed to have or the format that the meetings needed to take, such as individual or group meetings. It was only emphasized that advisors not inform the student that they were identified as being as at-risk, but were to instead, "soft sell" the meeting as an informational session to see how they were doing. Interestingly enough, once the names were received, several advisors responded that they had already flagged many of these students as at-risk through tracking attendance in some of their courses.

In the 2002 study, the above information was submitted to the advisors in the first week in January and if the student had changed colleges (e.g., engineering to nursing); their information was also forwarded to the appropriate college advisor. Students were encouraged to meet with their advisor before registration and if that was not possible to meet before the new add/drop period ended. Unfortunately, by the time their fall GPAs were available, many students had already gone home for the holiday break, never to return to campus.

Because of this and related issues, UA decided to identify students earlier, choosing to do so around mid-term exams. During the first cycle there was such a positive response from the faculty and staff that they wanted to see if students could be identified even earlier. The university's response to the results of the studies and the information continuously provided by SAS resulted in a 40 percent increase in the size of the freshman class over three years (2002-2005), and student retention in general increased from 82 percent to 85 percent (Davis, 2005). This led to the permanent creation of the University of Alabama's early warning system, which requires mandatory participation of faculty and staff. It is a system that allows the university to identify students within the first six weeks of the semester and to reach out to them to encourage their involvement in the campus community. High-risk freshmen meet with academic advisors who keep in constant contact throughout that first year to ensure that they adjust successfully.

Other indicators worth observing include a students placement with regard to family life, their familial obligations or responsibilities, whether they work full or part time, family income (and individual income for independent students), and especially ethnic group and gender (Pfleging, 2002).

In a study of students placed in the early warning system at Santa Monica College in California, Peter Geltner (2001) found that an overwhelming number of students of color seemed to have issues with core courses such as English, mathematics, and the social sciences. Geltners' results revealed that the probability of passing any of these courses with an A or B for students whose names were placed within the early alert system at Santa Monica College and had received an alert notice was a possibility of 12 percent compared to 36 percent for the rest of the student population. Earning a C was comparable between the two groups. However students who received alert notices failed or withdrew from the course at higher rates (24 percent and 47 percent, respectively) than the general student population. Within ethnic groups, Black (37 percent), American Indian (36 percent), and Latino (33 percent) students had a higher likelihood of being placed on alert than Asian (32 percent) and White (25 percent) students. Geltner also reported that males were more often identified as early alert students across all ethnicities except Latinos.

◀ The Early Warning System

The template of an early warning system, at its simplest, is one that can be applied to any two- to four-year college/university or career school. It is a matter of an instructor noticing that a student is struggling in the course by looking at various indicators, making note of the student's hardships, and forwarding this information to his or her academic advisor so that the advisor is aware of the situation and can schedule a meeting to assist the student.

The system is voluntary at most schools, with its use strongly encouraged by the Offices of Admissions and Academic Support Services. However, as previously mentioned with the University of Alabama, and in now referring to the formats used at Adelphi University and Coastline Community College, having a mandatory implementation of an early warning system is more effective. With the mandatory format, there is a deadline by which professors **must** submit a list of students struggling in their classes. In the case of Adelphi and Coastline, this must be done by the third week of the semester. At Adelphi, where the program has been in place since 1998, the system became a mandatory aspect of the advising program after reviews of the system showed that it was most effective when faculty input was higher. By setting up an online system with 24-hour access, professors were

given more flexibility to make their notations of students at any point during their day on the computer. The system opens on the first day of classes and remains in operation until one week before the last day to withdraw from classes (about the seventh week). If a professor doesn't have any students that are at-risk, then they simply submit a form stating "no early warnings". However, if the deadline has passed, then professors receive email messages from the Office of Academic Services and Retention requesting that forms be submitted stating that students in their classes are performing acceptably, or that a list of at-risk students be sent as soon as possible. During this open period, printouts of early warning reports are run once a week and students' names are continuously forwarded to their advisors.

The template of an early warning system, at its simplest, is one that can be applied to any two- to four-year college/university or career school.

Coastline Community College uses this process and also employs a system of active engagement with their professors in ensuring that their early warning system is used to the fullest advantage . Reviews of the system in its earliest stages revealed to university researchers that having a report date before mid-term exams allowed ample time for any assistance programs to take place, allowed students to be better prepared for their mid-term exams, and to strengthen their standing in the class throughout the rest of the academic year. As a result, their site opens during the third week of the school year and the first of three early alert reports that are sent out for the semester (six per year) are sent to students and their advisors two weeks later. Similar to the Adelphi format, if there have been no alerts submitted by a professor by the deadline, an inquiry is sent asking that they either submit a list of names or a form stating that there are "no alerts." An incentive unique to Coastline however, is the use of friendly competition to encourage professors to turn in their alert reports early. For the 2006-07 academic year, free university T-shirts were offered to the first 25 instructors who submitted their alerts before the deadline.

If the early warning system is set up as a separate online system through a university office, it most likely takes the shape of an online form that consists of the student's information; the name of the course and professor, and criteria the professor can use to identify in what manner the student is struggling. There are

also suggestions and referral sources that the professor can recommend that the student may choose to take.

Some colleges use forms which include:

- attendance (present, never attends, rarely attends),
- class participation (rarely participates, does not participate), and
- assignments (can be separated into homework, presentations, quizzes that are not turned in, several missing, turned in late or failing the assignments).

When forms allow "specialized issues" to be identified (trouble with writing, math), professors can refer students to specific campus organizations (writing center, math learning center). Also, there are non-academic reasons that can affect a student's work ethic such as illness, work conflicts, internal family issues, behavioral changes (aggression, depression, anxiety), and issues adapting to university life (problems with roommate, homesickness, feeling isolated/unrelated to rest of student body). Space can also be provided to allow professors to state anything else not listed in the above that could be influencing the student's difficulty in the course and any further recommendations that they would suggest to assist in the students improvement.

If set up as a part of a course management system, such as **Blackboard**, early warning systems can be detailed to the individual criteria of each professor. The Blackboard system incorporated a pre-set early warning system program into Application Pack 2 for Academic Suite TM (Release 7) in early 2007 allowing instructors to choose performance indicators that will notify them when students begin to slip in classes. There are three 'rules' to choose from:

- **Grade rule** identifies when a student's performance on an assignment, assessment, or manually graded item is below a certain level, such as a professor setting the passing grade at a 70 and a student scoring a 55, with an alert then being sent to the instructor.
- **Due Date rule** identifies when a student does not complete course work when due. If a student misses an assignment deadline, the professor is alerted. It is noted that this rule can only be used to track an assignment or assessment created through the Blackboard Learning System and not for manually graded items. That information would have to be placed into the students' file by the professor.
- **Last Access rule** identifies the last time a student accessed the course online. It allows the professor to check their students' awareness of

course assignments and class occurrences and leads to what has shown to be a significant early identifier of at-risk students: attendance. If the professor announces in class that a one day assignment has been posted on Blackboard and a student does not complete it, then the professor is aware that they were not present to learn of the work. It can serve as a prompt for the professor to check the rest of the student's files to see if any other alerts have occurred.

Once created, the rules must be continuously checked for the most up to date information. They can be accessed through the Performance Dashboard and/or Gradebook tools on Blackboard, and all notifications initiated by the early warning system are listed on Blackboard's notification log for easy recovery in case of a dispute, or for study or auditing purposes.

In either format, the online system has proven to be the most effective in encouraging faculty participation with its ease of use, straightforward format, and accuracy in tracking students' progress.

As seen from the samples of systems, the main indicators used by instructors in validating their concerns for a student lies in the actions of the students themselves. One's attendance (or lack thereof) in class, class participation, the quality of the assignments turned in, presentations given, group projects, and results on quizzes and exams are all factors that an instructor takes into account before deciding to issue an alert for a student.

There are other instances where certain 'red flags' are used to identify students who may not be struggling in their courses but are not adjusting well to academic life. The most visible is failure to pre-register for the next term's courses. For many current systems in place, these factors are noted by the university and are encouraged to be noted by the faculty in their observance of students and any recommendations for improvement.

Once the form has been submitted, the student's advisor will set up a meeting with the student, informing them of the referral and inquiring if the student has spoken with his or her professor. If not, then a suggestion is made that they do so while thinking of another course of action. If one has already taken place, then the outcome of that meeting and any possible additions to the arrangements in place that will be discussed to allow the student to make academic progress.

As either a separate early warning system or a part of a course management system, professors are encouraged to speak with the student before submitting an early warning notification as it is often possible for the issue to be resolved through an agreement between the teacher and student simply by requiring that the student join that class's tutoring program.

Every early warning system currently in place has similar recommended methods of improvement that are comprised of these options: independent tutoring, joining a study group, attending meetings of interest groups geared towards that discipline (e.g. Poetry Club, and Future Business Leaders of America), join an intramural sports team, and to take lessons on time management and improving study and test-taking skills. With specialized issues such as troubled writing skills or understanding mathematics, professors can refer students to a specific academic assistance center such as the writing center or math learning center. Students are especially encouraged to join interest groups in general. Minority students are at higher risk of dropping out and defaulting on loans out of a sense of disconnectedness with the university or feeling overwhelmed and stressed out by their course load (Gladiuex & Perna, 2005). By encouraging participation in region based groups (e.g. California club) or cultural groups (e.g. Filipino Student Association), students are able to find like-minded students with whom they can build relationships and receive information on study groups that have been formed in the class in which they are struggling. It's been noted by Kinzie (2006) that the level of student engagement and involvement in the campus community strongly influences the decisions of students of color and students of low income backgrounds to continue their education regardless of factors such as poor academic history, working full or part time, and issues of financial aid. A student's engagement also increases the probability of retaining that student for a second year and positively influences the results of their first and last years of study.

Throughout the early warning process, it is encouraged that students also set up periodic meetings with their advisor and professor for updates on how they are doing in the course. In some instances, students are encouraged to either drop the course or take an incomplete and re-take it at a later date. In the recommendation section, the professor has the option of stating that it's possibly best that the student drop/withdraw from the course.

No matter what form is employed, the main purpose of an early warning system is to provide a standard of comparison in the progress of postsecondary students. It

identifies students who are at-risk of failing a course or choosing to leave the university, and provides the student with the resources necessary to improve their grades/scores and to strengthen their academic mentality (strategies, comfort level, participation in campus community).

Once the system is in place, a university should not become discouraged if it does not work perfectly the first time. Though there is a basic format that all schools can follow, no two schools are the same and it is often best that the system be continuously evaluated to discover the strengths and weaknesses of the early alert process as it occurs in a particular school. Such an evaluation of the early alert process was created by Columbia College and Irvine College to gain an idea of the process' effectiveness and how it can be improved as it settles into the university system.

The Columbia College study conducted by Pfleging (2002) was implemented to review a system in place since the mid-1990's to determine the common factors among dropouts and determine how to decrease their numbers. Pfleging first identified common factors in at-risk students such as working full time, attending college part time, having a low high school GPA, having family obligations/financial concerns, being female, and being a member of an ethnic group other than white or Asian. She noted that at community colleges there is a higher risk of attrition among students from families with low socioeconomic status or which considered education to be of low importance, students who registered late for classes, and students who had poor past academic histories (Pfleging, 2002). Pfleging wanted to determine the extent to which identified at-risk students followed through with summons to speak with their advisors, and to investigate the effectiveness of the early detection system for at-risk students.

Her study also aimed to determine how many early alerts were placed each semester, how many faculty members participated in the early alert program, which reasons for alerts were most frequently noted, and what the academic outcomes (final grades) were for early alert students. The at-risk and non-risk students were all enrolled in the same course and were given the same in-class survey about whether or not they had ever received an alert notice, and were asked to detail any subsequent actions they took upon receiving one. The majority of the students who were in the early alert system denied ever receiving a notice and the few who admitted to receiving an alert declined to make use of campus resources.

The study took place over a two-year/four-semester period; with varying numbers of instructor participation: Fall '99 (27 instructors), Spring '00 (39 instructors), Fall '00 (33 instructors), Spring '01 (22 instructors). Instructor participation heavily affects the usefulness of the early warning system. As students are made aware of the system through its use by professors, this low level of participation at Columbia ensured that many at-risk students were never identified or referred. Furthermore, though the system was accurate in identification of at-risk students (the study showed that more than 70 percent of students receiving an alert either withdrew or failed the course), this outcome was not consistent each semester (Pfleging, 2002). There were students alerted who did improve in their courses. In the end, Pfleging acknowledged the necessity of a more in-depth review of the system to better highlight what works and does not work in the system.

Such an assessment was conducted by Dr. Jerry Rudmann (1992) at Irvine College in California to study the effectiveness of early warning systems. He did this by comparing the academic outcome of students placed in three groups: those receiving an early alert letter discussing resources for improvement, those receiving a letter to meet with their advisor about the alert **and** to discuss strategies, and those who were on alert lists but received no contact (the control group). The system was also reviewed to make recommendations for improvements. At Irvine, students were referred to early alert services by scantrons submitted by professors. They were then randomly placed into the three above groups and their responses were observed to record the 'types' of alerts that students would receive (lacking assignments, missing class), how many students would respond to the summons of their academic advisors, and if the student/advisor meeting would have a greater effect on the students' academic performance than those only receiving a letter. Rudmann also wanted to note how many professors would respond with feedback about the mid-semester early alert process.

At the end of the study, it was found that 80 percent of the participating faculty supported the use of an early alert system. Of the three test groups, those who had a meeting with their advisor had a better final academic performance than those who were instructed to use campus resources or were given no instruction at all. In his final comparison, students who received only a letter did significantly better academically than students who received no contact. Many schools implement early warning systems in the same format as Irvine, so it can be noted

from the Irvine assessment that more effective strategies need to be implemented to encourage students to meet with their advisors (Rudmann, 1992). These meetings provide students pertinent information regarding campus resources and options for improving in class.

To look at the early warning system is not enough; one must also take into account its effect on the students involved in it. Factors such as whether or not the student took the alert(s) seriously, if he or she followed through with the indication to meet with their counselor, or took advantage of the services offered should be reviewed. Following the findings of the Irvine College study, Mardy T. Eimer (2000) conducted a survey to answer questions regarding the abovementioned factors and determine if receiving an alert negatively affected students' self-esteem. Previous studies have shown that students appreciate feedback on their progress in courses. However, there is currently no empirical evidence that suggests how much, if any, impact this has on academic improvement (Eimer, 2000). Eimer's intent was to identify how students reacted to an early alert notice, and to substantiate whether or not students who received notices ended with a better show of improvement than those who did not receive notices (control group). Eimer hoped to also note students' reactions to receiving an early alert notice, what behavioral changes would result after receiving a notice, and how their performances in the class would compare to students with similar academic backgrounds who did not receive early alert notification.

Courses with a history of high numbers of students who do not pass or withdraw were the selected focus area. Nineteen faculty instructors teaching such courses (Physics, Calculus, and English) agreed to participate in the study. During the sixth week of classes early alert notices were sent to 816 students with a grade of "C-" or below, informing them of their grades and giving suggestions for improvement in their courses. Four weeks after distributing the notices a web-based survey was sent out to recover student responses. The survey found that 29.5 percent, or 241 out of 816 students responded. Respondents and non-respondents were compared on five levels: gender, ethnicity, course enrolled, student year level, and early notice grade. In four courses in particular, students were broken into two groups; those with early alert notices (139) and the control group (those who did not receive a notice who were struggling in the class [118 students]) to observe final grades as well.

The survey revealed that 219 students acknowledged receiving an alert. Females and African-Americans were more likely to respond than males and other ethnicities. The students' methods of improvement leaned towards studying more, becoming better organized, attending study sessions or group reviews, and talking to their parents and peers versus visiting an assistance center or meeting with their advisors (Eimer, 2000). In the two comparison groups of final grades, there were few differences between students' academic backgrounds. Of those in the control group 57/118 (48 percent) successfully raised their grade by the end of the semester. Of those in the early alert group, 44/139 (32 percent) were as successful. Eimer concluded that students with early alert notices did not do better or improve more than students without notices.

From these results it can be noted that the sending of early alert notices were effective in stimulating most students to some sort of action, though not in a form that the system intended, such as taking advantage of university resources. Further, any early alert system that a school intends to implement must include more than one notification of poor progress or one meeting between student and faculty. Due to the lack of significant difference in academic outcomes in the Eimer study, it is possible that the early alert system in its one-notice form cannot adequately increase academic improvement. Finally the system **must** have more faculty awareness and participation.

◄ FastTrack

FastTrack is a software program and database used in student advising and early warning systems. It is an important innovation in the early warning systems area because it facilitates the evaluation of student risk factors and perceived needs. At the heart of FastTrack are two surveys, or inventories, to gather necessary data from students.

The first of these inventories is the *Partners in Education Inventory* (PEI). The PEI is administered to students at the beginning of their college experiences, either at orientation or in the first classes of the semester. The inventory asks students to provide details about their strengths and weaknesses in certain areas, their work statuses, and indications of what programs/interventions they believe would be helpful to them during the course of their college experiences. For example, if a student believes that he or she will require tutoring to successfully complete a

particular course, the student would indicate that on the pertinent item of the inventory. This inventory is then used to give students personalized information about services offered at their universities which meet their unique needs.

The second inventory, the *Student Experiences Inventory* (SEI)*,* is administered around the mid-term point of the semester. The SEI is very similar to the PEI in that it asks students to gauge their updated need for support programs and provide the number of hours worked. This inventory acts as a check up on student status so that any support needs that students did not anticipate at the beginning of the semester can be identified and met.

Once data is collected from one of both of the inventories, it is scanned into the FastTrack system for evaluation. Data collected by the university, such as high school standing, college entrance examination data, college mid-term grades, and even class attendance can be added to FastTrack for more comprehensive results. All information in the system is then used to generate personalized reports which can be tailored to each student and provided to faculty members, advisors, and campus specialists and professionals.

A unique component of the FastTrack system is that it can be customized to each institution. Using data from the inventories, FastTrack can automatically send emails to campus personnel with information about students. For instance, the counseling department will receive an email generated by FastTrack listing students that stated that they would benefit from counseling support. The same example exists for tutoring and other professionals, who will be advised which students have requested support. On the other side, each student will also get an email listing areas that may be of help to them in their course work or other areas of their college experience. Students are given contact information and even web links to information on the institution's website.

Some of the reports generated by FastTrack include:

- **Partners in Education Reports.** Includes personalized information on those college services that students would need and access. Information from this report is generated using data supplied on the PEI and can be automated and sent electronically.

- **Advisor Reports.** Supplies information about students' characteristics to their counselors and/or advising staff. More specifically, Advisor Reports

detail which students have concerns about certain skills (e.g., study skills), careers, and financial matters. Once supplied with this information, counselors and advisors can supply the needed assistance.

- **Counseling Report for Student Services.** Provides information on students perceived support needs to Student Services personnel, including estimated hours of part-time work, measures of basic skills, such as reading and basic math, and ranks in high school class and college admission.

- **Student Summary Report.** Provides an overview of all data collected on an individual student in the database.

- **Student List Report.** Provides a customized report which allows the operator of FastTrack to create lists of students who all conform to certain criteria. An example of this is a faculty member in the chemistry department requesting a list of all students in his program who requested tutoring. The faculty member could use the list requested to set up group tutoring sessions with those students.

- **Mid-Term Alert Report.** Provides data on certain attitude changes in students which have been identified as potential precursors for student departure. There are six measures used to identify these attitude changes, each scaled to gauge a student's mindset.

- **Faculty Report.** Presents data to teachers on students' self-perceived need for support services, along with the number of hours per week they intend to work, confidence level, amount of occupational uncertainty, and amount of concern about finances.

FastTrack is licensed by the Educational Policy Institute. Additional information is available at **http://studentretention.org/fasttrack.html**.

◀ Faculty and Staff: What You Can Do

From these findings, it is clear that an early warning system has the potential to be both a help and a hindrance to the university retention process depending on the format in which it is arranged and, especially, the way in which it is introduced to the students. One can also see that in order for the system to be most effective, university faculty and advisors must have criteria they can use to identify students and have a concrete understanding of their role in the early warning process.

Faculty and staff should first make use of the early warning system in place to ensure the success of the program. To create greater student awareness, institutions can implement strategies similar to those employed at Texas State University. The administration can better publicize and encourage the understanding and use of the system by sending letters to new faculty and staff, sending emails to students informing them of the program, and sending monthly emails to faculty and staff reminding them of the existence of the early warning system and encouraging its use (**http://www.vpsa.txstate.edu/retention/retention-plan.html**). Faculty and staff also should take advantage of the guidelines provided by the system that can be used to help students improve their grades. They should also ensure that students are following through with a decided plan of action, monitor the students' progress in the course where the warning was placed and any other courses that may show signs of difficulty, and monitor their students' involvement on campus. In this way, they are able to learn the reasons, other than academics, that a student might be troubled or considering leaving the university, such as an inability to relate to their peers or a lack of connection to the university.

Faculty should acknowledge the importance of the teacher-student relationship not only for success in the classroom but in future career/academic plans of the students as well. The feeling that faculty members have "open door" policies gives the student a higher willingness to come to their instructor when he or she is having problems. Faculty should encourage the use of their office hours, set high expectations for their students, and encourage them to succeed (UNCC, 2005). They should avoid "problematic" teaching practices such as having few exams, infrequent or late feedback that does not give students time to make adjustments before finals, passive activities in the classroom (straight lecture/note-taking sessions every class), and lack of student engagement in class (UNCC, 2005). By having an active and encouraging learning environment, students are prompted to want to do well in the course and are more likely to maintain an interest in the subject matter. Such environments can induce the creation of 'pockets' of study and discussion groups within the class, providing students with a way to learn and work with their peers. Faculty members should also take into account the varying social and developmental characteristics of their students, including but not limited to the person being a first generation student, full-time working adult,

minority, or a product of a low income background (UNCC, 2005). It would be advantageous to their students' academic improvement if instructors integrated learning and study strategies such as note-taking skills, graphic organization, vocabulary acquisition methods, questioning techniques, and test prediction and preparation into their course lectures and assignments (Tinto, 2003). This method could serve as a preemptive solution to student difficulties in a course by allowing the student to learn the necessary tools to pass a class while still attending that class. Additionally, instructors can use team building activities, peer reviews, supplemental instruction/tutoring by peers, and give prompt and frequent feedback to students about their performance and provide strategies/notes for improvement (Lotkowski, Robbins, & Noeth, 2004). By doing all of this, faculty members help themselves be more informed about their students' progress and can more easily determine when students are struggling in class.

Being observant of any indicators of stress in a course other than obvious signs like attendance and poor quality school work can also assist in making a more efficient early warning process. Instructors are aware that course work is not the only reason students struggle in a course or decide to drop out. As noted by Alicia Harvey-Smith (n.d.), 37 percent of students who leave universities do so due to a sense of disconnection to the university or personal issues. There are precursors to be aware of when identifying students who are having problems adjusting to university life.[6] These indicators are separated into three relevant categories:

Academic/Work Indicators
- Deterioration in quality of work
- Missed assignments or appointments
- Repeated absence from class, lab, or work
- Recurring requests for unusual accommodations (extensions for papers, assignments, exams, and change in work hours)
- Essays, papers, or comments that have themes of hopelessness, social isolation, rage or despair
- Lack of engagement in participation-oriented classes, with lab partners, or with co-workers
- Inappropriate disruption or monopolization in class

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[6]See http://mysimmons.edu/services/counseling/guide.html.

ENGAGING FACULTY AND STAFF

Physical or Psychological Indicators

- Deterioration in physical appearance or in personal hygiene

- Excessive fatigue or sleep difficulties

- Visible increase or decrease in weight

Other factors to consider

- Direct statements indicating family problems

- Personal loss such as death in the family, or break up of a relationship

- Expression of concern about student by peers

- Written note or verbal statement that has a sense of hopelessness or finality

- A sense that something is amiss with the student

If any of the indicators, or an unmentioned sign, alerts a faculty member that a student is possibly considering leaving the university or is at risk of failing a class, he or she should insert an early alert into the students file and forward this information to the student's advisor.

Advisors, however, should be proactive by **not waiting** for referrals to be sent about students. They should constantly inquire about their students' progress. An excellent representation of this method is the process employed by Florida Southern College (Pospichal, 2005). This is a year-long process that begins during the first week of school. During that time incoming students are contacted by the Office of Academic Support Services to be informed of the office's existence and the services it offers. This includes tutoring sign-ups, information about the Writing, Reading, Learning, and Mathematics Centers, and counseling options. In the third week of classes, all Freshmen Seminar professors are **required** to send in any referrals based on problems with attendance, performance, and possible difficulties adjusting to college life, and in the fourth week transfer students are contacted and their level of adjustment to the new university is ascertained. With the advent of mid-term exams, typically occurring in the seventh week of instruction, all students receiving two or more D's or F's in first and second year level courses are summoned to the Support Services Office to meet with their advisors. In this meeting the advisors help the transfer students identify strategies that will allow them to improve their grades or to possibly decide to withdraw

from the course. Throughout mid-term exams, there is a mass mailing of postcards with academic tips to improve study and writing habits, advice about preparation for the next term, and information about campus resources (hours, locations, and specifics of the services provided).

A successful model for other universities to follow is the multi-departmental prevention team that Florida Southern College employs in discerning limitations of current enrollment programs and in creating solutions for student issues, student retention, and student success. This group is comprised of members of the Offices of Student Life, Residential Life, the Student Counseling Center, and Campus Safety that meets each Monday during the regular academic year and during the summer as needed.

Advisors should also provide a sounding board for students to come discuss progress in a course as well as students' career plans (internships, volunteer work, and future employment). If a student is struggling in a core course for his or her desired field, it may be necessary for the advisor to provide a bit of realism in suggesting an alternative path within the same field or directing the student into a field where he or she has stronger marks in the requisite courses.

Once a student is placed in the early warning database it should also be the responsibility of the instructor and advisor to keep in contact with the student in order to check his or her progress, to offer alternatives if a set format is not working, and to simply give encouragement that the student not give up and drop the course or quit college. If necessary, a professor should be open to placing more than one alert into a student's file to ensure that attention is given to that student. Advisors should also ensure that their students follow through with meeting their instructors and that the instructors follow up on their student's progress. In an ideal model, faculty and advising staff cooperate in making early warning systems work by carrying out the necessary processes and steps to ensure that there is student improvement which in turn leads to student retention. In essence, faculty and staff are the core/key to the success of early warning system programs.

◂ Summary

The early warning system is a viable method of assisting students in overcoming difficulties in succeeding in their academic agenda. It is especially helpful during a student's first year of study when individuals find it the most challenging to acclimate themselves to a different city/state, social atmosphere, and learning environment. The system provides a form of oversight that allows professors, advisors, and the university as a whole to be more vigilant of its students. It ensures that students are progressing well in their courses, are enjoying their college experience, and will be attending classes for three or more consecutive years. In truth, the early warning system when wielded to its greatest advantage can be an effective tool for colleges and universities in tracking enrollment and increasing retention. The use of an online program has been found to be most successful for an early warning system. It is designed to give easy access to faculty and advisors, and to provide the university with a quick method of disseminating information.

Academic advisors and professors should be observant of academic and non-academic indicators or issues affecting a student's ability to learn. Attendance is a major academic indicator. Others include incomplete assignments, failure of exams, and low class participation. Non-academic indicators include family issues/obligations, work conflict, illness, and behavioral changes (depression, anxiety). If a student appears to be struggling for any reason, their name should be placed in the early warning system. Multiple placements are encouraged to ensure that the student receives the fullest scope of assistance possible.

Once a student is placed into the system, meeting with his or her professor and academic advisor is encouraged. The outcome of these sessions should be a strategy incorporating the use of additional class time on projects, the use of campus assistance centers, and methods of improving the student's management skills (studying, test taking, note taking). Continuous meetings to monitor the students' progress should follow until the professor and/or academic advisor is confident of the students' ability to strengthen their academic progress on their own.

◀ Key Concepts

- An early warning system is most effective when there is mandatory participation. Professors must submit information about a student's progress in their classes and advisors must follow through with meetings. Both (professors and advisors) must follow up with the student and note his or her progress.

- Have a deadline for submission of all alert notices early in the semester. Students have more time to gain feedback if this date is within the first four weeks of the semester.

- Developing a solid faculty/student relationship encourages students to want to approach their professor when they are struggling in a course. If there is a rapport, students are more open to discuss their issues and solutions to their problems with a professor than attempting to resolve them on their own.

◀ Action Strategies

- Form a multi-departmental early alert strategy team. Include members from the Offices of Student Life, Residential Life, Academic Affairs, the Student Counseling Center, and Campus Safety.

- Advertise the availability of campus resources (writing center, tutoring programs, student support services) and their location to students via campus wide emails and notices of interest.

- Create advising sessions that provide personalized, individual contact to students that encourages them to connect to the university and to return the following year.

VI

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