Retention of college students from their freshman to sophomore year is a challenge facing higher education in general and Florida Tech in particular. Despite significant research, specific and effective interventions remain elusive. We know that the majority of students who drop out, indicate that the reasons are “personal,” “financial,” or “academic”. We also know that those reasons are the most acceptable, and so generally they give us little insight into the real reasons that students leave.

We know that many students withdraw because their grade point average is too low to sustain their financial aid. We also know that the academic deficiencies, which lead to financial problems, are only the tip of the iceberg. In fact, it is frequently the non-academic factors that contribute significantly to academic failure. These include emotional and psychological issues, deficient study skills, procrastination and time management issues, internet addictions, social support and social involvement factors. The myth that students fail to persist at Florida Tech because they are not “high quality students” simply does not hold up in reviewing the retention data from the past. The SAT scores are not statistically different between those who persist at Florida Tech and those who do not. In fact, in reviewing CAPS clients who are struggling academically, it is not uncommon to find that many of these students enter the university with SAT scores over 1300, expecting to succeed by studying nine (9) hours per week, and exhibiting severely deficient study skills. In addition, previous retention data indicates that approximately 15% of the students that withdraw from Florida Tech have a GPA greater than 3.0 and approximately 26% have a GPA over 2.0. If we are to have a better understanding of why our students persist at a lower level than is desirable, it is important to review some of the major national research findings regarding this topic. Below are some of the major findings:

- A recent ACT Policy Report (2004) on “The Role of Academic and Non-Academic Factors in Improving College Retention” warns that many retention programs rely too heavily on academic factors such as high school GPA and ACT scores as predictors, and that simply examining these factors may seriously limit retention understanding and intervention success.

- One of the more prominent and frequently cited and researched retention theories is Vincent Tinto’s “Theory of Student Departure” (1975). Tinto describes the interactional
effects that occur when the student, academic, and social variables meet to create a climate of academic success or failure. Those variables include:

- The students’ individual characteristics (i.e., gender, ethnic background, academic abilities, prior academic preparation, parental education, socioeconomic status)
- The students’ initial and subsequent commitment to the college
- The students’ initial and subsequent commitment to graduating
- The students ability to become integrated academically
- The students ability to become integrated socially

In 2005, Braxton and Lee identified thirteen testable assumptions from Tinto’s theory and reviewed the literature to determine which assumptions were supported by “reliable knowledge.” Reliable knowledge refers to the consistency in the measurement of variables and replication of these results. The standards that Braxton and Lee required in their analysis “raised the bar” significantly as it relates to retention research, as they required 70% of ten or more empirically rigorous studies to exist in order to draw any “reliable” conclusions.

Braxton and Lee identified only three propositions from Tinto’s theory that were supported and relevant for residential universities similar to Florida Tech:

- The greater the degree of social integration, the greater the level of subsequent commitment to the institution.
- This initial level of commitment to the institution affects the student’s subsequent commitment to the institution.
- The subsequent commitment to the institution positively affects the likelihood of student persistence.

These interlocking relationships exceed the reliability of 80%. Clearly, the role of social integration appears to be the factor that “energizes” the commitment to the institution, which results in higher persistence. Interestingly, only about a third of the studies that were reviewed supported the assumption that student entry characteristics (grade point average, SAT or ACT scores) directly affected the student’s likelihood of persistence in college.

Assuming that these findings are applicable to retention and persistence issues at Florida Tech, then some specific suggestions for programs or interventions are indicated:

- Multiple opportunities for social integration should exist on campus not only outside of class but also in the classroom. The University Experience (UE) class provides a good opportunity to address social integration and non-academic issues that are relevant to freshman success. In the past, students who were enrolled and did not drop the UE class were more likely to persist. Unfortunately, approximately 25% of the freshman students drop this course. Requiring this course in the future for all students and modifying the length and instructional materials might be useful.
Mentoring programs provided by staff, faculty, and alumni as well as upperclassmen peers could be an effective tool for increasing social integration. We have implemented such programs with positive results over the past few years via staff and faculty mentoring programs; however, these programs have been offered inconsistently. The mentoring program in 2003 at CAPS was comprised of 50 volunteer staff/faculty mentors who worked with freshman identified as “high dropout prone” based on a retention inventory called the College Student Inventory (CSI). Seventy-six percent of the students identified in this manner who participated with a mentor returned to Florida Tech the following year versus 37% who were also identified as “high dropout prone" but were not provided a mentor.

It is important to offer multiple and diverse activities to engage students in social interaction. These can include both purely social events (trips, concerts) or academic “challenges,” or departmental picnics. In addition, participation in intercollegiate, intramural, or recreational athletics clearly enhances social interaction.

We know that many students will at some point need professional assistance to address mental health issues. Counseling and Psychological Services (CAPS) offers these services to our students, and the following outcomes indicate the significance of that interaction:

- 51% (N=460) of the class that entered the university in 1998 graduated in five years.
- 86% of the class of 1998 who received treatment at CAPS (N=91 or 1 out of 5 students) graduated in five years.
- 60% of the class of 1998 who received academic accommodations for a learning disability graduated in five years.

Continued support of mental health services and learning disability services is clearly indicated. Additionally, opportunities to reduce the stigma towards seeking such assistance, as well as the implementation of therapeutic tools such as biofeedback that would be more accepted by our “technically” oriented students would be useful.

A common theme in all retention research indicates that students who work on campus are more likely to persist. This is another effective form of social interaction that also provides financial assistance to needy students.

Florida Tech currently has an institutional policy requiring first-year students to reside in residence halls. This requirement results in multiple opportunities to interact with peers and establish friendships, and it also provides a safety net from the residence life staff. Many institutions require students to reside on campus for the first two years, and a few of the select institutions require a four-year residency. If Florida Tech could increase the number of residence hall rooms, it would be important to consider increasing the residency requirement to include the sophomore year.
• Clubs and professional organizations also provide a high degree of social integration. Currently we have over 109 such organizations at Florida Tech ranging from social fraternities and sororities, to honor societies, to Anime, to Ultimate Frisbee.

• Academic advising is a valuable tool for retention programs. However, recent research conducted by the National Academic Advising Association (NACADA) indicates that many universities underutilize advisement programs and fail to provide specific training for faculty to identify and address issues that impact retention. In the future, workshops could be held to address these issues.

If we are to continue to make progress toward increased persistence among our students it will be important to:

• Increase research and collect survey data from our students that will help us design strategies to increase social integration on campus. Additionally, this research would be beneficial in evaluating the current and future programs and activities from a cost effective perspective as it relates to retention benefits.

• Continue to participate in nationally normed research instruments such as the National Student Integration Survey, to evaluate how we are performing relative to the national norms.

• Continue and increase efforts to partner between student affairs and academic programs to address retention issues. Research suggests that retention efforts that integrate academic and non-academic factors result in better retention outcomes than either alone.

In the next issue of Beyond the Classroom “Utilizing Seidman’s Formula to Guide Faculty /Staff in Implementing Retention Programs.” Seidman’s retention formula is:

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	ext{RET} = E + (E + I + C)
\]

\[
\text{ID} + \text{IV}
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that is \text{RETention} = \text{Early IDENTification + (Early + Intensive + Continuous) Intervention}

References:


National Academic Advising Association (2004). The Status of Academic Advising: Findings from the ACT Sixth National Survey


Previous Beyond the Classrooms including Recognizing Students At Risk, Alcohol and College Life, Suicide and College Students, and Managing Disruptive Student Behavior on Campus are available at the CAPS website www.fit.edu/caps/

Beyond the Classroom is a joint effort of Counseling and Psychological Services (CAPS) and the Office of Student Affairs

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