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PROMOTING STUDENT SUCCESS AND RETENTION  
A Summary of What Works  

Abstract  

There are two primary sources of information and knowledge about college student success and the conditions that foster it. The first source is the practices of other campuses, and the second is the student outcomes research literature. These two sources, especially in recent years, have reached largely similar conclusions about what works. The most important ingredients are faculty quality and effort combined with student quality and effort. The institutions that have the greatest impact on students are ones that intermingle the academic and residential experience.
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THE PRACTICE MODEL

For most of this century, the model for successful practice in the USA has been the Harvard Residential System -- based largely on the British model of a faculty/student, living/learning community, and now widely copied by other private and public institutions alike. The key ingredient that they all have in common is a residentially based student peer group that lasts throughout the undergraduate years, combined with the stimulation of an attentive faculty presence and academic support services that blur the distinction between academic and residential life.

The Harvard Model

All Freshmen (about 1600) are housed on Harvard Yard in a way that ensures diversity; they eat meals together in the Freshman Union; and they receive orientation and academic advisement from a staff of "proctors." Proctors are graduate students who live in the freshman residences on the Yard and who are trained and supervised by a Freshman Dean whose office is located there. The Residential Proctors' top priority is academic advisement, and they provide the point of entry not only into the General Education Core, but also into the system of academic support services for those who need them.

After the Freshman Year, students enter a lottery to select one of the "Houses" where they spend their remaining three years. Each House has its own personality that seems to endure (despite administrative attempts at leveling), and each has a "Faculty Master" who resides (usually with family) in an apartment in the House. Other faculty are "affiliated" with the House but do not live there. The Faculty Master and Affiliated Faculty are financially encouraged to join the students during meals in the house dining hall and to take modest responsibility for enriching the combined academic and social experiences of the students. (Each House has its own dining hall, meeting rooms, and library.)
University of California, Santa Cruz
The Santa Cruz campus was perhaps the first public university to be constructed on the British model. While enrollment growth, student diversity, and faculty preferences have substantially modified the original residential plan, most freshmen and sophomores still reside in one of eight "theme" colleges that reflect their academic and social interests, and they retain their affiliation with that college even after they move off-campus and graduate. (Most colleges at Santa Cruz house about 40% of their students.) Each college has an interdisciplinary core course, consistent with the college theme, that all frosh are required to take (examples include self and society, history of the arts, values and change in society, world cultures, environmental studies, and ideas and imagination in the context of western culture). Other theme related interdisciplinary courses are offered by affiliated faculty as electives.

Each residential college provides academic advisement, and facilities include classrooms, faculty offices, and dining (although some colleges share a dining hall). Six to ten faculty apartments were designed into each college, but they are now occupied mostly by professional residence directors/advisors.

University of Michigan
The University of Michigan also was an early pioneer in this area, and currently has two types of residentially based academic programs within the larger undergraduate College of Literature, Science, and the Arts. First, a residential arrangement (called "The Pilot Program") at Alice Lloyd Hall is designed as a lower division "living-learning" community where students live in residence with Teaching Fellows and take general education and orientation courses together. The facility contains classrooms, offices, library, computer room, and dining hall.

Second, "Residential College," a separate structure of 850 undergraduates (although most elect to live off-campus after the sophomore year), features an interdisciplinary curriculum (although students can major in any of the LSA departments), a separate faculty (although most have joint LSA appointments and some live in the college), and a variety of facilities (including classrooms, faculty and administrative offices, art studios, music rooms, and an auditorium). This college within a college has about 40 faculty members associated with it, about ten professional staff, an admissions office, and even its own alumni group.

The common element that merges the academic and student life cultures on these campuses is that most freshman share at least one course and receive their academic advisement in the residential location, especially in the general education core. There are two variations on these themes that have been implemented by a large number of institutions. First, according to the resource center at the University of South Carolina, there are over 50 universities that have established non-residential "Freshman Colleges" or "University Colleges" that deliver general education courses and/or academic advisement and learning services. Second, another variation practiced by 700 campuses according to a recent survey, is a freshman seminar or orientation course that students share for a semester or a year.
RESEARCH MODELS

The research and scholarship that examines student success generally falls into two rough categories: those studies that examine academic performance (including academic dismissal) and those studies that examine other outcomes (such as voluntary attrition/persistence, student development, and satisfaction). The studies of academic performance indicate that pre-college variables are strongly predictive, while the studies of student satisfaction and voluntary departure indicate that pre-college characteristics are not predictive.

Academic Performance Models

Research studies demonstrate that college student academic performance is significantly (though far from entirely) predicted by previous academic performance. SAT scores, parent's education, and socio-economic status also are significant, but are less robust as predictors than high school grades. Multiple correlation coefficients between these predictors and college GPA range between .30 and .60. One reason why these coefficients are not higher may be that the more talented students tend to enter the more demanding institutions; and within each institution, the better students tend to undertake the more challenging majors.

Despite public claims to the contrary, the research evidence suggests that faculty, over time, "dummy-down" the curriculum to match the student clientele, and that more selective colleges demand higher performance from students in the classroom than less selective colleges do.

In the aggregate, the more selective colleges and universities have greater levels of student retention and persistence to graduation. Depending on institution type, the correlation coefficients between the percent of freshman applicants admitted and the retention and graduation rates are in the -.61 to -.75 range (the lower the proportion admitted, the higher the graduation rate). These correlations with average SAT scores are even higher (in the .71 to .85 range). Therefore, maintaining selective admissions standards is a viable enrollment management strategy since it produces higher persistence and graduation rates.

Poor academic performance is the number one reason for student departure, and a stimulating classroom experience is the number one reason why students stay. In both cases, the faculty role is crucial. While investing in various academic support services is a valuable, even necessary, strategy for combating and correcting poor academic performance, the collective actions by faculty to improve learning climates, both inside and outside the classroom, have the greatest impact on student success.
Research on Persistence, Satisfaction and Growth

The higher education literature on student outcomes has devoted considerable attention to within-college retention and persistence. Since most persistence studies have been carried out on first-time, full-time freshmen, the generalizations discussed below are most appropriate for this particular population. However, evidence from studies on other populations suggests that the factors leading to success among first-time full-time students apply generally, if not precisely, to other populations such as commuting, adult, transfer, and minority students.

The most complete and integrated model of college student persistence is the scholarship by Albany's Alberto Cabrera, Maria Castaneda, and their colleague Amaury Nora who have merged and elaborated upon the work of Alexander Astin, John Bean, Ernest Pascarella, Patrick Terenzini, Vincent Tinto, and other leading scholars. This theoretical model, supported by empirical research at Albany and at other universities, contains the following major elements as important factors in student success:

1. **Academic integration** of the student into the educational structures of the institution:
   Research conducted at Albany and elsewhere shows that the vitality of the classroom experience is the single most influential variable in explaining student persistence and growth. Other important aspects of student academic success include good study habits and effort, faculty-student contact outside the classroom, academic support services for disadvantaged minorities, and effective faculty advisement systems for all students.

2. **Social integration** of the student into the life of the institution:
   Good peer networks and close friendships have strong and consistent influences on student retention and growth. Involvement in student activities, athletics, fraternities, and social events also have positive effects. Student employment on-campus appears to have a beneficial influence on student integration, but employment off-campus has a negative influence. Cabrera's recent research has additionally explored perceptions of prejudice and racial disharmony, and it appears that these exert small but significant negative effects.

3. **Adequate financial support**:
   Research consistently demonstrates that unmet financial need and student perceptions and fears about financial difficulty have negative influences on retention and performance, especially when accompanied by off-campus employment.

4. **Support of family and friends** for attending college in general, and this institution in particular. Current students are our best ambassadors. High school guidance counselors are less important, but not to be ignored, especially since they may influence the perceptions of friends and family.
5. **Goal clarity and institutional commitment:**

Having clear goals and purposes for being in college, for majoring in a particular discipline, and for entering a particular career have generally, though not consistently, been associated in the literature with retention and persistence to graduation.

Regarding outcomes like student development, satisfaction, and persistence, what happens to students after they arrive on campus has a much greater influence than the characteristics students bring with them. Studies consistently show that variables like age, race, sex, socio-economic status, SAT scores, high school grades, and other pre-college characteristics are relatively unimportant in explaining these outcomes. For example, the closest thing to a significant pre-college measure in the Cabrera Model is encouragement by family and friends—encouragement that takes place during college, as well as before. The research literature shows strong multiple connections among encouragement by family and friends, academic integration, social integration, and the student's commitment to the institution and persistence to graduation. Thus, these student outcomes are products of the interrelated academic and residential experiences that students seek and receive during their undergraduate years. Financial aid and effective academic and social support systems appear to be the great equalizers for students from variable backgrounds.

Thus, the outcomes research models, like the practice models, indicate that student success and persistence to graduation is the cumulative result of a set of interrelated experiences sustained over an extended period of time. While academic experiences appear to be the most influential, the collective impact of particular student experiences in the classroom, the residence hall, the library, and the student organization are not discrete, but mutually supporting. The evidence from public and private universities alike demonstrates that living-learning centers, are highly effective. Moreover, the distinction between academic affairs and student affairs is perhaps artificial because their impact on the student is quite interdependent. The institutions that have the greatest impact on students are ones that intermingle the academic and residential experience.
Interacting Factors that Influence Academic and Instructional Excellence

- Faculty Quality & Effort
- Student Quality & Effort
- Enrollment & Class Size
- Tuition & Fees
- Admissions Marketing
- Financial Aid
- Athletic Programs
- Resources & Facilities
- Quality of Campus Life
- Alumni Giving & Endowment
- Academic Reputation
- Student & Faculty Retention

Learning Outcomes