

Year-End Results of the Freshman Survey Program

Institutions across the country are increasingly engaged in efforts to understand the attitudes and abilities of their newest students. There is growing recognition that programs designed to help students should be based on solid data rather than upon well-intended guesses about students' needs and expectations. The higher education community is gradually learning that efforts to boost retention rates can be misguided when they fail to address the 'fit' between the campus environment and students' social and academic needs.

Last spring, *UK Institutional Research Reports* presented selected findings from our New Freshman Survey administered during the first week of the fall 2001 semester. Students were asked to report: impressions of their senior year in high school, coursework taken in school, participation in activities in and outside of the classroom, perceived gains in skills and knowledge during their senior year, personal feelings and life-shaping experiences, academic and social expectations for their first year in college, and important demographic information not contained in their application file.

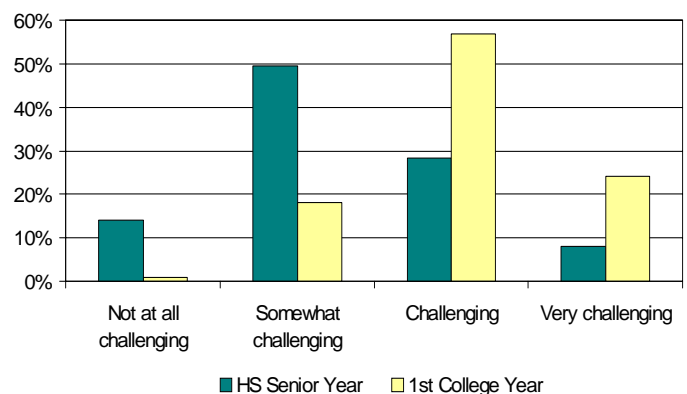
This edition of the newsletter reports the results of a follow-up survey administered mid-way through the Spring 2002 semester. The findings were compiled from the responses of 1,150 students who completed both the fall and the spring freshman surveys.¹ The overlap in the content of the two surveys enables us to study changes in students' attitudes, expectations, and self-reported behaviors from their senior year through the better part of their freshman year. This issue discusses some of these important changes and identifies factors contributing to the satisfaction and academic success of first-year students.

¹The sample constitutes 37% of the freshman class of 2001. The margin of error for both the fall and spring surveys is plus or minus 2%.

Re-visiting Perceptions of College Readiness

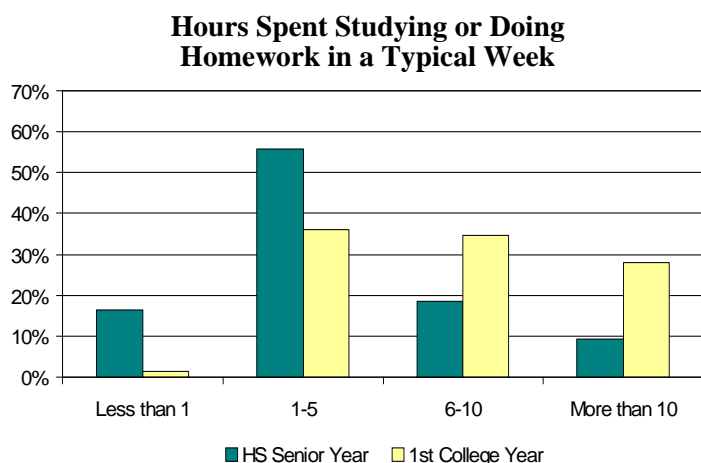
First-year students evaluate the academic challenge of their schooling in fairly predictable ways over the course of their first year. The accompanying graph displays how students assessed the academic challenge of their senior year in high school compared to their freshman year at UK. Nearly two-thirds (64%) indicated that their senior year was either "somewhat challenging" or "not at all challenging." However, eight of ten (81%) students reported that their first year at UK was either "challenging" or "very challenging."

Perceived Academic Challenge of High School and College



The dramatic shift in students' evaluations is a warning signal to all who are interested in the academic success of recent high school graduates. Clearly, the difficulties of university life come as a rude awakening to many of our students during their first year. These statistics bolster the claims of many educators concerned about the lack of academic rigor and productivity during the senior year. The higher education community and parents of high school students may need to be more forceful in demanding that the senior year of high school not be time wasted. Institutional data compiled from first-year students suggest that taking a fourth year of math or an additional foreign language course would be a productive use of students' time.

The lack of challenge in the high school curriculum is related to the number of hours students prepare for class. The graph below shows that seven of ten students (72%) reported spending five or fewer hours on “studying/homework” during a typical week as seniors. Approaching the end of their first year in college, students claim they spend far more time preparing for classes. But it is difficult to find encouragement in the extra amount of time students devote to homework as freshmen. More than one-third (37%) of the freshman class reports spending five or fewer hours on homework in a typical week! Seven of ten (72%) students indicate studying 10 or fewer hours per week. And, on the “high end,” only one in four (28%) students reports studying more than 10 hours per week.



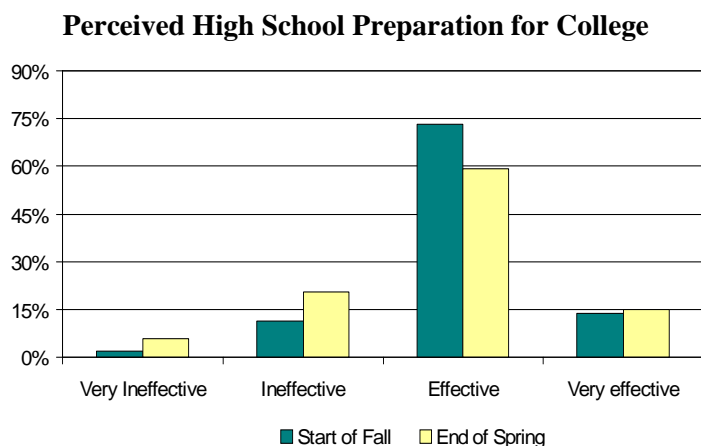
These survey results echo one of the disappointing findings that emerged from UK’s participation in the National Survey of Student Engagement in 2001². UK freshmen reported spending significantly less time pre-

paring for class (i.e., studying, reading, writing, rehearsing, and other activities related to the academic program) than first-year students at other doctoral/research intensive institutions. More than half (55%) of UK freshman reported spending 10 or fewer hours preparing for their classes, compared to less than half (44%) of the first-year students at the other research institutions. Instilling higher standards in a university’s academic culture is arguably more difficult than turning around a battleship. Survey results such as these indicate that it may be time for the university community to lean hard on the rudder!

Last spring, we noted that the lack of challenge and minimal homework demands associated with the senior year appear not to figure into students’ evaluations of their college readiness. The graph at the bottom of the page presents first-year students’ ratings of their high school preparation for college. A large majority—87% of all freshmen—rated their high school preparation for college as “effective” or “very effective” when they entered UK. Mid-way through the Spring Semester, students’ evaluations of their academic preparation for college declined somewhat. Nearly three-quarters (74%) of freshmen rated their high school preparation as “effective” or “very effective,” a decline of 13 percentage points. A major challenge facing advisors is getting students to engage in a more realistic appraisal of what they know and can do when they arrive at UK.

Understanding Satisfaction with the First College Year

Increasing our collective understanding of student satisfaction is a worthwhile task for any institutional research office. Our staff developed a statistical model³ to predict why some students are pleased with their first year in college and others are not. Students’ level of satisfaction was measured by their responses to three items: 1) the extent to which the first year of college fulfilled their expectations; 2) their overall satisfaction or dissatisfaction with the freshman year; and 3) the likelihood



² Results of the National Survey of Student Engagement (2001) are summarized in a newsletter (www.uky.edu/IR/dsi/indicators/nsse.pdf). More detailed information on the survey may be found elsewhere on our website (www.uky.edu/IR/survey.html).

³ Information on the parameters of this and other regression analyses, including scale items and their reliability, can be found on our office website at: www.uky.edu/IR/freshmanregression.html

that they would enroll at UK, if given the opportunity to start college again. Our model accounts for 40 percent of the variance in students' satisfaction ratings.

Relative to their dissatisfied peers, students pleased with their freshman year are more likely to:

- Give high ratings to the quality of instruction, advising, and non-instructional services (i.e., availability of computing resources and the quality of library services)
- Be socially engaged—as indicated by more time devoted to 'socializing/partying' and greater self-reported success in developing close friendships
- Have earned relatively high grade point averages
- Report gains in self-understanding over the last year
- Be white
- Have placed high importance on college as a 'stepping stone' to a better job

Satisfied first-year students were less likely to feel:

- Lonely, isolated from others, and worried about meeting new people
- Unmotivated, lacking in energy, and 'stressed out'

Correlates of Academic Success

The Office of Institutional Research (OIR) also developed a model to predict students' cumulative grade point averages for their freshman year. The model accounts for 25 percent of the variance in grades earned by first-year students.

Relative to their less academically successful peers, students with high freshman-year GPAs are more likely to:

- Have rated their first year as highly satisfying
- Have earned a high score on the ACT Assessment
- Be academically engaged—including more self-reported time devoted to homework, asking questions in class, discussing readings outside of class, etc.
- Have earned a high grade point average in high school
- Be female
- Have reported being academically challenged by their senior year in high school

Academically successful students were less likely to:

- Report high levels of social activity (i.e., social en-

gagement)

- Work for pay off campus
- Score high on a 'stress index' consisting of six traumatic life events (e.g., serious financial difficulties, serious illness or injury, 'break-up' with romantic partner)

Factors Predicting Student Retention

Institutional research staff developed a final model to identify factors correlated with student retention. The analysis accounts for 29 percent of the variance in retention. While it explains less than one-third of the variance in students' fall enrollment behavior, our regression analysis is fairly comparable to other institutions' efforts to develop a statistical model of retention.

Compared to students who did not come back to UK this fall, returning students were more likely to:

- Have earned a relatively high first-year GPA
- Have been satisfied with the advising they received
- Have rated their chances of success at UK higher in the spring than the previous fall
- Have planned on funding their college education with personal savings

Moreover, students who were members of a fraternity or sorority were more likely than their non-Greek peers to return for a second year of college.

OIR has analyzed retention behavior in several different ways. In other models, satisfaction with the first-year experience emerged as a powerful predictor of whether students returned to UK for a second year. Our staff continues to test the validity of other factors that may shed light on students' decisions to continue their education at UK or pursue other life options.

What We've Learned about the Freshman Experience

Several results derived from the UK Freshman Survey Program align with well-established findings in the institutional research literature on retention and academic success. Our research reveals that both the academic and social dimensions of college life are critical to a rewarding first-year experience. Academic success, as measured by students' cumulative GPA, is associated with students' overall satisfaction and the likelihood of their return in the fall. Likewise, students who are socially engaged in campus life are

more satisfied with their freshman year than students who are relatively uninvolved with their classmates. Members of fraternities and sororities, for example, are more apt to come back to UK in the fall than students who are not involved in Greek organizations.

Unfortunately, our findings also reveal a downside to high levels of social engagement. The social environment on most campuses offers a wide range of rewarding experiences that make a university an exciting place to be. As common sense would predict, students who spend a relatively high proportion of their time partying, attending extra-curricular activities, and establishing a network of friends are more likely to earn poor grades. This presents a very real challenge to university personnel who focus on freshman needs and services. The UK community needs to stress the importance of a well-rounded college experience, of “playing hard and working hard!”

Where do we go from here?

As with most research, new questions have emerged from our initial efforts to study the first-year experience of UK students. Our staff has refined the questionnaire administered last fall by dropping several items and including several new measures. Based largely upon the suggestions of others, we have added questions to assess the number of Advanced Placement courses and exams students take in high school. And we have included items to probe students’ perceptions of their academic ability, drive to achieve, and self-confidence. We hope these and other revisions will help us to understand better why some students are more successful than their peers during their first year at UK.

Another priority for the upcoming year is to refine our construct of social engagement by developing a cluster of items that address students’ collaboration on academic projects. It is clear that certain types of social activity, such as frequent partying, are negatively correlated with academic success. However, other forms of social activity, such as discussing readings with friends over a cup of coffee, may be positively associated with various measures of academic performance. Identifying and measuring beneficial forms of collaborative social behavior may offer a rewarding line of research.

Finally, we are focusing our efforts on the development of an “early-warning identification system” for academically at-risk students. A key to increasing our retention rates is to identify students who may eventually become disengaged --both academically and socially--from the campus community. By recognizing students who display certain warning signs, we may be in a position to deliver effective advising and other services that may help turn around someone’s academic career.



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