



Institutional Research Reports

University of Kentucky

National Survey of Student Engagement

December 2001

Each year, to the frustration of many in the higher education community, *U.S. News and World Report* publishes its annual rankings of American colleges and universities. The magazine's evaluation criteria address a wide range of factors, such as student selectivity, financial resources, faculty credentials, graduation rates, and alumni giving. Academic reputation, a key factor in the rankings, accounts for 25 percent of an institution's score. Yet the rankings contain little information that is helpful to an institution trying to improve the quality of its educational programs. Perhaps the most serious shortcoming of the magazine's comparisons is the lack of attention given to what students actually gain from attending a particular college. Efforts to assess the quality of undergraduate education must look beyond an institution's resources toward its strategies for enriching the academic and social lives of its students.

National Survey of Student Engagement

This edition of *Institutional Research Reports* spotlights a far more promising attempt to gauge the quality of undergraduate education. The National Survey of Student Engagement (NSSE), an initiative of The Pew Charitable Trusts, was designed to address the weaknesses inherent in other assessment efforts. The NSSE was developed by a team of nationally renowned educators and researchers: Alexander Astin, Gary Barnes, Arthur Chickering, Peter Ewell, John Gardner, George Kuh, Richard Light, and Ted Marchese—with guidance from C. Robert Pace. The developers of the new survey note that the institutional accreditation process revolves mainly around resource and process measures, notwithstanding recent efforts to assess student-learning outcomes. State government agencies devote most of their quality control efforts to the program review process and regulatory oversight. And media rankings emphasize an array of input and output measures largely unrelated to students' classroom experiences. Dr. George Kuh, Director of the NSSE and Chancellor's Professor at

Indiana University, offers a compelling rationale for developing a new assessment tool:

"What counts most in terms of desired outcomes of college is what students **do** during college, not who they are or even where they go to college. . . . The implication for estimating collegiate quality is clear. Those institutions that more fully engage their students in the variety of activities that contribute to valued outcomes of college can claim to be of higher quality in comparison with similar types of colleges and universities."

Research on student development reveals that certain types of classroom practices produce students who are engaged in their studies and eager to learn. We know, for example, that students benefit greatly from increased contact with faculty, prompt feedback on tests and papers, more time on task, and a high degree of challenge.¹ Viewed in this light, institutions of superior quality encourage students to focus their energies on activities that promote critical thinking, well-developed written and oral communication skills, proficiency with advanced technology, and the like. Our best institutions establish high expectations and cultivate academic and social environments that respect the diverse learning styles and intellectual needs of students.

NSSE 2001: Selected Findings

Over 300 colleges and universities, including UK, took part in NSSE 2001 during its second year of full-scale operation. Kentucky's eight public universities participated in this year's survey as part of a consortium led by the Council on Postsecondary Education. Researchers at the Indiana University Center for Postsecondary Research and Planning administered the survey last spring to more than 177,000 first-year and senior students ran-

¹ Chickering, A. W., and Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin* 39(7): 3-7.

domly chosen from electronic data files furnished by participating institutions.² Most students had the option of completing either a standard paper survey or a Web-based version. The administration of the survey by a credible, ‘third-party’ survey organization is one of the strong points of this nationwide research project.

A brief report, *NSSE 2001 Institutional Benchmark Report: University of Kentucky* appears in the survey section of the Assessment and Institutional Research office’s website: <http://www.uky.edu/LexCampus>. A complete set of tables containing the *NSSE 2001 Means Summary Report* can also be viewed and downloaded from the office website. Graphs and selected data from the NSSE report are reproduced below.

The Five Benchmarks of Good Practice

Forty-one items on the NSSE survey were clustered into five benchmarks of effective educational practices: 1) level of academic challenge, 2) active and collaborative learning, 3) student interactions with faculty members, 4) enriching educational experiences, and 5) supportive collaborative learning. Each benchmark was converted to a 100-point scale to make it simpler for institutions to compare themselves to other similar institutions and to the entire sample. The benchmark analysis on the following pages combined results from surveys administered in the spring of 2000 and 2001.

To make it easier to interpret the performance of UK students in relation to students at the 73 participating doctoral/research extensive institutions, raw scores on the five benchmarks were converted to ranges of percentile scores. The percentile rank of a score denotes the percentage of institutions in the comparison group who earn lower scores. Thus, a score at the 40th percentile is higher than scores earned by 40 percent of the institutions in the comparison group.

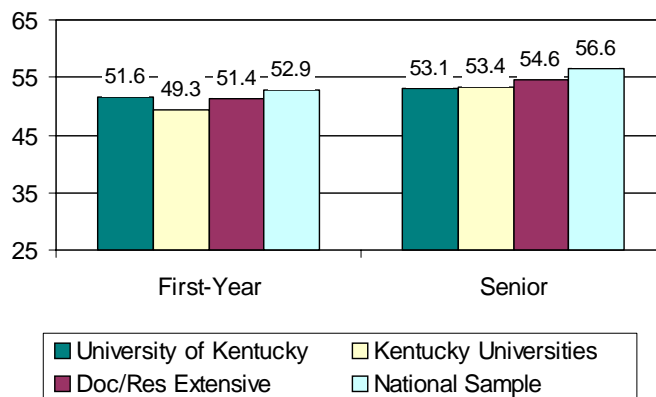
²From a demographic standpoint, the national sample and the UK sample (n = 341) are fairly representative of the student populations from which they were drawn. However, both samples contain a somewhat greater proportion of female students than would be expected. Response rates for NSSE 2001 were 42% for the overall sample, 40% for UK students, and 33% for the consortium of eight public universities from Kentucky. The survey’s margin of error was $\pm 7.7\%$ for our first-year students, $\pm 7.1\%$ for seniors, and $\pm 5.2\%$ for the entire UK sample.

It is important to note that the graphs on the following pages depict the raw scores for each benchmark. Percentile rankings mentioned in the text refer to the performance of UK students relative to their counterparts at doctoral/research extensive universities.

Benchmark #1: Level of Academic Challenge

The Academic Challenge benchmark consists of 11 items that measure the degree to which students report expending academic effort and meeting high expectations in their coursework. The indicator focuses on students’ level of preparation for class (studying, reading, writing, etc.), the number of assigned books, the number of written papers or reports of varying length, and the types of cognitive demands emphasized by their coursework.

Level of Academic Challenge



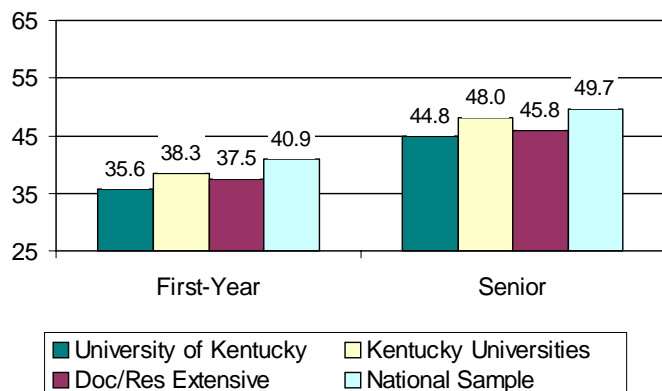
On the academic challenge benchmark, UK’s first-year students scored higher than their counterparts at the other seven universities in Kentucky and a slightly higher (between the 50th and 60th percentiles) than students from the other doctoral/research extensive institutions. UK seniors, on the other hand, scored slightly below their Kentucky counterparts and students from research universities (between the 20th and 30th percentiles). Our freshmen reported spending less time preparing for class than students at similar institutions from around the country. Relative to their in-state peers, however, UK first-year students reported writing significantly more short and mid-length papers or reports.

Benchmark #2: Active and Collaborative Learning

Seven items assessing students’ level of involvement in their education comprise this benchmark. Examples of questions from the Active and Collaborative Learning benchmark include reported contributions to class dis-

cussions, class presentations, work with other students on projects, and the frequency with which students discuss ideas from readings outside of class.

Active and Collaborative Learning

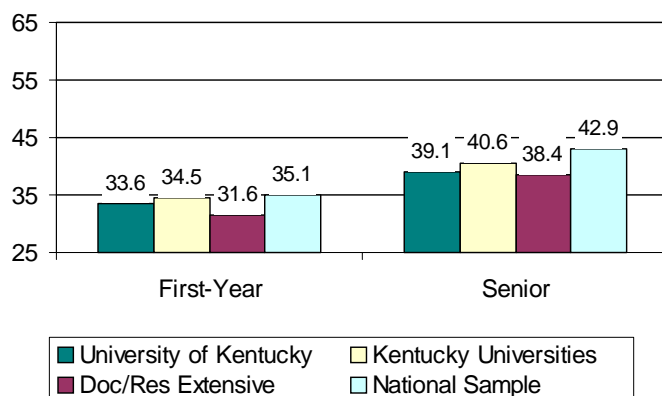


UK freshmen and seniors scored below the Kentucky consortium and the average for doctoral/research extensive institutions on this benchmark. Compared to their peers at other research institutions, our freshmen scored at the 20th percentile and seniors scored between the 30th and 40th percentiles. A few items accounted for UK's relatively low standing on this benchmark. UK freshmen reported making fewer class presentations than their peers at other public universities in Kentucky. Our seniors reported that they were less likely than other Kentucky students to discuss ideas from readings or classes with others outside of class.

Benchmark #3: Interaction with Faculty Members

This benchmark of effective educational practice is based on six items that tap students' involvement with faculty in and outside of the classroom. Questions on this indicator ask students to report the frequency of their discussions with faculty on such varied topics as grades or

Student Interaction with Faculty Members



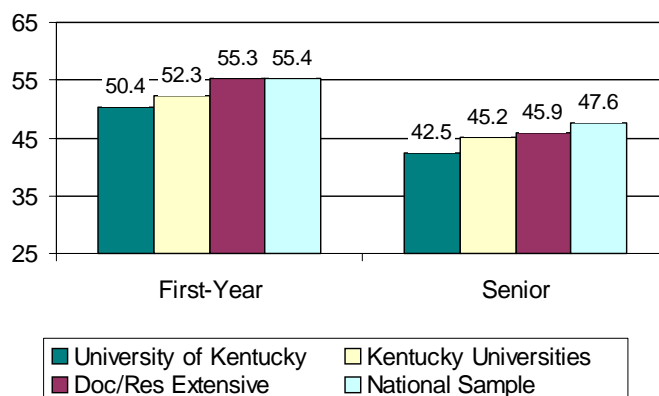
assignments, career plans, and ideas from their readings. Other items assess the frequency of prompt feedback from faculty and participation in research projects outside of course or program requirements.

Our first-year students and seniors reported somewhat less involvement with faculty than their counterparts at the other Kentucky universities. This is understandable in view of the fact that students at smaller, comprehensive universities generally report higher levels of faculty interaction. UK faculty members will be pleased to learn that our students scored relatively high on this benchmark compared to students attending doctoral/research extensive institutions. First-year students scored in the 70th percentile, and seniors scored between the 60th and 70th percentiles on this performance indicator.

Benchmark #4: Enriching Educational Experiences

This benchmark is based on 10 items that measure students' reported involvement and exposure to enriching experiences. For example, students were asked whether they took part in co-curricular activities, engaged in community service, participated in internships or co-op experiences, enrolled in capstone courses, and studied abroad. Other items assessing this benchmark called for students to indicate the frequency of serious conversations with students from different backgrounds and use of electronic technology.

Enriching Educational Experiences

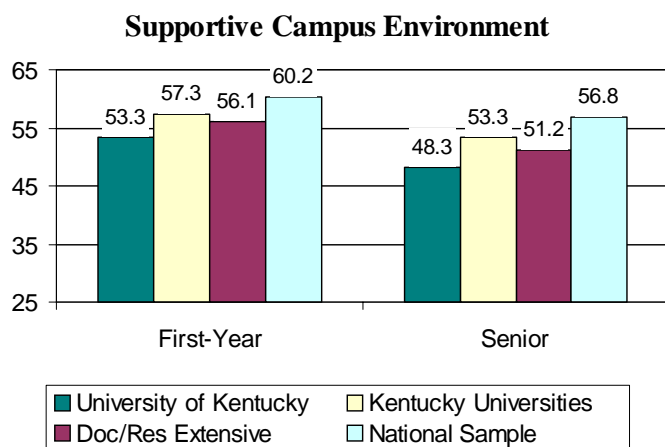


Our first-year students and seniors scored well below their counterparts in Kentucky and at other doctoral/research extensive institutions on this benchmark. Compared to students from research institutions, UK freshmen scored between the 10th and 20th percentiles and seniors scored at the 20th percentile. Our students' evalu-

ations of two items on this benchmark are especially worth noting. First, relative to both of our comparison groups, UK freshmen and seniors reported that their institution placed less emphasis on encouraging contact among students from different economic, social, and racial or ethnic backgrounds. Moreover, our students reported that they were less likely to hold serious conversations with students of a different race or ethnicity than students attending other doctoral/research institutions in the sample. On a more positive note, UK freshmen and seniors were more apt to use an electronic medium to discuss or complete an assignment and were more likely to communicate with an instructor by email than students at other Kentucky institutions.

Benchmark #5: Supportive Campus Environment

The final benchmark measures students' perceptions regarding their institution's support for their academic and social concerns. The six items in this cluster assess several dimensions of support provided by the campus environment and measure the perceived quality of relationships with other students, faculty members, and administrative personnel.



UK students' evaluations placed them below their counterparts in the state and at the doctoral/research extensive institutions on this benchmark. First-year students and seniors scored between the 20th and 30th percentiles. Item analysis revealed several significant differences between the responses of our students and the comparison groups. Compared to the national sample, UK first-year students and seniors reported relatively less support to help them succeed academically, thrive socially, and cope with non-academic responsibilities (work, family, etc.).

Other Findings of Interest to the UK Community

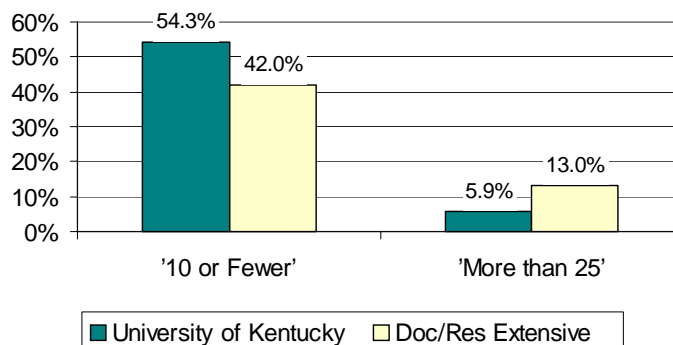
How students choose to use their time reflects their level of academic engagement, their involvement in social activities on campus, and the expectations that have been established within the academic culture. Compared to their peers at Kentucky's other public universities . . .

- UK freshmen report spending less time working off campus.
- UK seniors report more time relaxing and socializing.
- UK freshmen and seniors report less time caring for dependents that live with them.

Time Spent Studying

Arguably, the most important use of a student's time revolves around studying, reading, writing, and rehearsing for class. The time devoted to classroom preparation is positively correlated with measures of academic engagement and students' evaluations of their educational and personal growth. UK freshmen report spending less time preparing for class (e.g., studying, reading, writing, rehearsing) than first-year students attending other doctoral/research institutions. The graph shows the hours students devote to classroom preparation. Over half (54.3%) of UK freshmen report spending 10 or fewer hours per week getting ready for class compared to 42% of their peers at like institutions. Only 5.9% of our first-year students indicate that they devote 25 or more hours per week to academic activities compared to 13% of freshmen attending other doctoral/research universities.

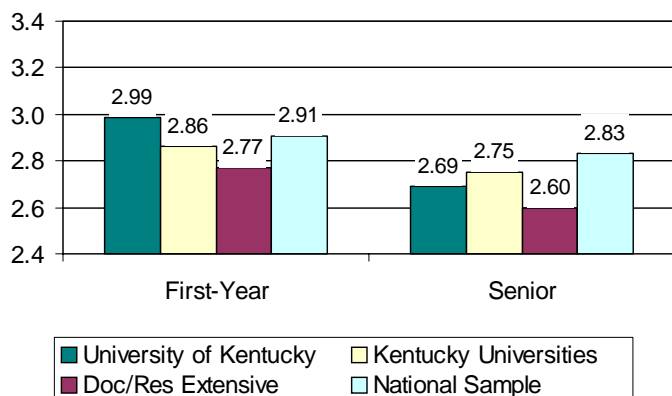
Self-Reported Hours Per Week Freshmen Spend Preparing for Class



Advising

Advising plays an important role in helping students make wise decisions about courses to take and support services to use. The survey asks students, “Overall, how would you evaluate the quality of academic advising you have received at your institution?” Students evaluated the item on a four-point scale ranging from ‘poor’ to ‘excellent.’ The results for this item are depicted in the graph below.

Quality of Academic Advising



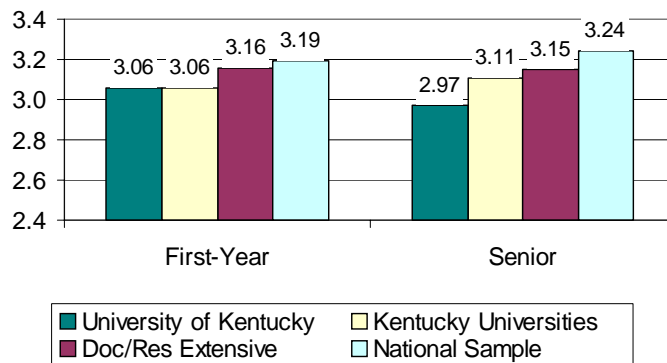
First-year students at this university gave significantly higher marks to the quality of advising than their counterparts at the other doctoral/research extensive institutions. Seniors at the University of Kentucky and the other participating institutions gave somewhat lower ratings to the quality of advising they received. The ratings of UK seniors did not differ significantly from those made by students from the other comparison groups.

Student Satisfaction

The NSSE questionnaire asks students, “How would you evaluate your entire educational experience at this institution?” Judgments are made on a four-point scale ranging from ‘poor’ to ‘excellent.’ The accompanying graph compares the average ratings of UK freshmen and seniors with their peers from Kentucky, other doctoral/research institutions, and the complete NSSE sample. Our first-year students’ evaluations do not differ significantly from those made by other freshmen in the survey. But UK seniors assign significantly lower ratings to their education experience than their peers at doctoral/research institutions and the NSSE sample.

Students were also asked, “If you could start over again, would you go to the same institution you are now attending?” Eighty-two percent of our freshmen and 75

Satisfaction with One’s Entire Educational Experience



percent of seniors answered ‘probably yes’ or ‘definitely yes’ to this question. The responses of UK students did not differ significantly from the other comparison groups.

Where do we go from here?

The UK community will likely be pleased with several of the findings from this important survey. Our first-year students give high marks to the quality of advising and appear to be challenged academically. UK freshmen and seniors report more interaction with faculty than students from other doctoral research universities. Students attending this university are also more likely than their peers around the state to use an electronic medium to complete an assignment and communicate with their instructors.

The NSSE also confirms several of our concerns about the experiences our first-year students and seniors are having at the University of Kentucky. We now have a better grasp of a few areas where strategic improvements are needed. The survey results suggest that we need to do a more effective job enriching students’ experiences both in and outside of the classroom. Offering capstone courses that require seniors to integrate and use the knowledge and skills that they’ve previously been taught in their majors is a common strategy that is underutilized at UK. And we may want to encourage more of our students to study abroad and immerse themselves in another culture.

UK has already implemented several initiatives to enrich students’ academic experiences that were probably not reflected in the perceptions of our seniors last spring.

For several years, the University has offered Discovery Seminars to our freshmen, as a way of giving our newest students a more intimate educational experience than the one they receive in large lecture halls. And we have a program to involve undergraduate students in the research interests of our faculty.

Our participation in this survey has shown us that we need to help students become more actively involved in their learning experiences. We must encourage students to collaborate with their peers on class projects, make more class presentations, and engage in more discussions about their readings with others outside of class. Research shows that students benefit greatly when they spend more time on task and are challenged to meet high standards.

The NSSE findings also point to the need for a more supportive campus environment that helps meet students' academic and social needs. The best institutions respect the diverse learning styles of their students and provide them with the support they need to succeed. For many years, institutional research has shown that the students most likely to graduate are not only engaged in their studies but also involved in social activities on campus. Much needs to be done, and UK has already initiated several new interventions. A program that furnishes tutors to students is now being piloted in the residence halls. We plan to evaluate the success of this new program, and may want to expand it if it is found to be successful. We can help students have a fulfilling college experience and keep them on a trajectory toward graduation by enriching the social environment at our university.

The survey results suggest that we need to be concerned about the experiences of our seniors. Students in their senior year frequently show greater degrees of engagement than those in their first year. That's true at UK and at other colleges and universities. But the gap in the level of engagement between UK students and their counterparts at other institutions is often greater for our seniors than for our first-year students on the benchmarks and several key survey items. We need to find out why seniors at this institution are not as engaged as we would expect them to be after several years of college-level study.

This survey deals primarily with students' perceptions. Clearly, we need to take those perceptions very seriously. But perceptions can be as much a product of one's expectations as objective reality. We may need to look more closely at our new students' expectations before they walk through our doors each fall. Some preliminary data on our first-year students reveal that many have unrealistic expectations regarding the amount of time they need to study and prepare for class in order to be successful. Over half of our freshmen report spending less than 10 hours each week preparing for classes. Changing academic expectations on any college campus is not an easy task, but it is an area of strategic importance that should probably be addressed in the near future.

The NSSE promises to be a very useful assessment tool. Research has shown that the benchmarks of effective educational practice are correlated with student satisfaction and a variety of achievement measures. UK has much to learn from the profiles of freshmen and seniors based on the five benchmarks. However, we should acknowledge that the NSSE is limited somewhat by its reliance on *indirect* measures of educational quality. UK must step up its efforts to articulate student learning outcomes and assess the effectiveness of its curricula. Improving the quality of the undergraduate experience rests largely upon our ability to assess the gains students have made in their cognitive and personal development.



Assessment and Institutional Research

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