



UK Institutional Research Brief:

Results of the 2012 National Survey of Student Engagement: A Comparison with Carnegie Peer Institutions

November 2012

The National Survey of Student Engagement (NSSE) has been administered annually to first-year students and seniors at over 1,500 colleges and universities since it was piloted in 2000. The survey questions are derived from the student development literature and speak to best practices associated with student involvement and learning. NSSE Items gauge the amount of time students spend on “educationally effective educational practices” and assess a range of academic support programs.

The University of Kentucky participated biennially in this research project from 2001 to 2009 before switching to a three-year administration cycle beginning in spring 2012. Each participating institution prepares a population file listing the email addresses for all freshmen and seniors. NSSE survey administrators at the Indiana University Center for Postsecondary Research and Planning then select random samples of students who will be invited to complete the survey.

A total of 1,176 UK students responded to the online questionnaire between February and April of 2012. The sampling errors for UK’s first-year and graduating senior students were plus or minus 3.2 percent and plus or minus 2.7 percent, respectively. UK’s response rate of 21 percent was well below the mark of 38 percent achieved three years ago. However, the response rate for our Carnegie peers institutions also dropped, from 29 percent in 2009 to 20 percent in 2012. At UK, the public relations campaign to encourage student participation in spring 2012 was identical to the one carried out in 2009. While there is no direct evidence to explain the decline in response rate, a reasonable hypothesis is the wide-spread use of online survey software and the proliferation of surveys students are asked to complete.

Benchmarks of Effective Educational Practice

NSSE researchers identified five benchmarks of effective educational practice using 42-items including: 1) level of academic challenge, 2) active and collaborative learning, 3) student-faculty interaction, 4) enriching educational experiences, and 5) supportive campus environment. Mean scores for UK first-year and graduating senior students are compared to mean scores of our Carnegie research-university peers. In the tables below, a statistically non-significant difference between UK students and their counterparts is signified by a level, two-directional arrow (\leftrightarrow). When UK students achieved benchmark scores significantly above their peers at the $p < .05$ level or beyond, their performance was signified by an upward arrow (\uparrow). When UK students achieved benchmark scores significantly below their peers at the $p < .05$ level or beyond, their performance was signified by a downward arrow (\downarrow).

Benchmark I: Level of Academic Challenge

The “Level of Academic Challenge” cluster consists of 11 items that measure the degree to which students report the experience of high expectations and academic effort. The indicator examines a variety of activities and conditions, including:

- Students’ level of preparation for class (studying, reading, writing, etc.)
- The number of assigned books and written papers or reports of varying length
- The different levels of learning experienced (analysis to synthesis to application)

Table 1
Level of Academic Challenge:
Comparison with Carnegie Peers

Class	2005	2007	2009	2012
First-year Students	↔	↔	↔	↑
Seniors	↔	↔	↓	↓

↔ No significant difference between UK and its peers

↑ UK students surpassed its Carnegie peers at the $p < .05$ level

↓ UK students underperformed in relation to its Carnegie peers at the $p < .05$ level

For the first time during the last four administrations of NSSE, UK first-year students outscored their Carnegie peers in their reported levels of academic challenge. Seniors scored significantly lower than their counterparts on this benchmark for the second year in a row.

First-year students' mean scores were significantly higher on the following items:

- Hours spent preparing for class (studying, reading, writing, doing homework or lab work, etc.)
- *Applying* theories or concepts to practical problems or in new situations
- Number of written papers or reports between 5 and 19 pages
- Spending significant amounts of time studying and on academic work

Seniors' mean scores were significantly lower on the following items:

- Hours spent preparing for class (studying, reading, writing, doing homework or lab work, etc.)
- *Synthesizing* and organizing ideas, information, or experiences into new, more complex interpretations and relationships
- Worked harder than you thought you could to meet an instructor's standards or expectations

Benchmark II: Active and Collaborative Learning

This benchmark consists of seven items and was designed to assess the level of involvement of students with others in their learning activities. Active and collaborative learning helps prepare students for success in the 21st century workplace and greater civic engagement. Examples of questions from this benchmark include the frequency of:

- Participation in class discussions
- Work with other students on class projects
- Discussions about readings with others outside of class

Table 2
Active and Collaborative Learning:
Comparison with Carnegie Peers

Class	2005	2007	2009	2012
First-year Students	↓	↓	↔	↑
Seniors	↔	↔	↔	↔

↔ No significant difference between UK and its peers

↑ UK students surpassed its Carnegie peers at the $p < .05$ level

↓ UK students underperformed in relation to its Carnegie peers at the $p < .05$ level

For the first time, UK first-year students scored higher than their Carnegie peers on active and collaborative learning, while seniors responded similarly to their counterparts at doctoral research institutions.

First-year students' mean scores were significantly *higher* on the following items:

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects *during class*
- Worked with other students on projects *outside of class*
- Participated in a community-based project as part of a regular class

Benchmark III: Student-Faculty Interaction

Student-faculty interaction score is assessed using six items about the relationship between the student and faculty members inside and outside of the classroom. Students are asked about the frequency of discussions or interactions with faculty, including:

- Grades or assignments
- Career plans
- Involvement in activities other than coursework
- Involvement in a research project outside of requirements

Table 3
Student-Faculty Interaction:
Comparison with Carnegie Peers

Class	2005	2007	2009	2012
First-year Students	↔	↔	↑	↑
Seniors	↔	↔	↑	↔

↔ No significant difference between UK and its peers

↑ UK students surpassed its Carnegie peers at the $p < .05$ level

↓ UK students underperformed in relation to its Carnegie peers at the $p < .05$ level

For the second straight year, UK first-year students reported more interaction with faculty than students at similar institutions. However, seniors did not differ significantly from their peers at like institutions.

First-year students' mean scores were significantly *higher* on the following items:

- Discussed grades or assignments with an instructor
- Talked about career plans with a faculty member
- Worked with faculty members on activities other than coursework
- Received prompt or oral feedback from faculty on your academic performance

Benchmark IV: Enriching Educational Experiences

This 12-item benchmark measures the frequency with which students experience a variety of activities encountered outside of the classroom. Several items focus on students' experiences with diversity. Students reported their involvement in activities outside of the regular classroom, including:

- Community service or volunteer work
- Internships, practica, study abroad, field experience, and independent studies
- Co-curricular activities, such as student government, sports and organizations
- Interactions with diverse groups of students

Table 4
Enriching Educational Experiences:
Comparison with Carnegie Peers

Class	2005	2007	2009	2012
First-year Students	↓	↓	↓	↓
Seniors	↔	↓	↓	↓

↔ No significant difference between UK and its peers

↑ UK students surpassed its Carnegie peers at the $p < .05$ level

↓ UK students underperformed in relation to its Carnegie peers at the $p < .05$ level

UK first-year students reported significantly fewer enriching educational experiences than their counterparts at similar institutions for the past four administrations of NSSE. UK seniors reported significantly fewer enriching educational experiences than their comparison group on the last three surveys. The relatively poor performance of our first-year students and seniors on this benchmark can be attributed largely to their answers on several diversity-related items. Relative to their comparison groups, freshmen and seniors reported significantly *less frequent*:

- Serious conversations with students of a different race or ethnicity than your own
- Serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values

In addition, freshman reported that they were less likely than their Carnegie peers to plan to do the following enriching educational experiences: a practicum, internship or coop; foreign language coursework; independent study or self-designed major; and study abroad.

Seniors reported less institutional encouragement “for contact among students from different economic, social, and racial or ethnic backgrounds”. Seniors also indicated that they spent less time participating in co-curricular activities, such as organizations, campus publications, and student government.

Benchmark V: Supportive Campus Environment

Six items assessed students’ perceptions of the academic and social support provided in the campus environment. This final benchmark helps faculty and administrators understand students’ perceptions of their relationships with others in the university community and support services provided on campus. Examples of these items are:

- Campus environment provides support to succeed academically, thrive socially, and cope with non-academic responsibilities (work, family, etc.)
- Quality of relationships with other students, faculty, and administration

Table 5
Supportive Campus Environment:
Comparison with Carnegie Peers

Class	2005	2007	2009	2012
First-year Students	↓	↓	↔	↑
Seniors	↔	↓	↓	↓

↔ No significant difference between UK and its peers

↑ UK students surpassed its Carnegie peers at the $p < .05$ level

↓ UK students underperformed in relation to its Carnegie peers at the $p < .05$ level

In 2012, UK first-year students' evaluations of campus support were significantly higher than their counterparts at comparable institutions. Seniors gave significantly poorer evaluations on this benchmark for the third straight year.

First-year students' means were higher than the comparison group on the following items:

- Quality of relationship with administrative personnel and offices
- Providing the support you need to help you succeed academically
- Helping you cope with your non-academic responsibilities

Seniors reported significantly lower scores than their Carnegie peers on the following questions:

- Providing the support you need to help you succeed academically
- Helping you cope with your non-academic responsibilities
- Providing the support you need to thrive socially

Other Results of Interest to the UK Community

Advising

Each student is asked to rate on a four-point scale the quality of academic advising received during their time at UK. In 2009 and 2012, first-year students rated the quality of advising significantly higher than students at peer institutions. In 2009, seniors rated the quality significantly lower than their peers, but did not differ in their evaluation of advising in 2012.

Overall Student Satisfaction

The NSSE questionnaire asks students, "How would you evaluate your entire educational experience at this institution?" UK freshmen and seniors expressed significantly less satisfaction than their Carnegie peers in 2007 and 2009. However, in 2012 first-year students reported greater satisfaction than their counterparts at like institutions, while seniors reported significantly less satisfaction with their entire educational experience. Clearly, we need to make improvements that will boost students' satisfaction ratings. But one should not conclude from answers to the overall satisfaction item that students are dissatisfied with how their time has been spent at UK. Ninety-two percent of first-years students and 84 percent of seniors rated their educational experience at UK as *good or excellent*.

Two Important Findings about Undergraduate Education at UK

In 2005, UK freshmen reported being less engaged than their Carnegie peers on three of the five NSSE benchmarks: Active and Collaborative Learning, Enriching Educational Experiences, and Supportive Campus Environment. Our first-year students did not differ in their levels of engagement on the two remaining benchmarks, Academic Challenge and Student-Faculty Interaction. Seven years later, UK freshmen reported greater engagement than their doctoral research counterparts on four of the five benchmarks. (The only benchmark where first-year students reported less engagement was the cluster of items involving Enriching Educational Experiences.) First-year students gave higher marks than their Carnegie peers to the quality of advising and reported greater satisfaction with their entire educational experience.

The NSSE 2012 results for freshmen point to a major turn-around in the perceived quality of the first-year experience at UK. The very positive findings are probably attributable to a wide range of initiatives, including: K Week activities, UK Fusion, mid-term grades, the early alert system, the Academic Preparation

Program, Living Learning Communities, the academic support programs and services carried out by Academic Enhancement and CARES, and enrollment management. Some of these programs and services for first-year students were either not provided back in 2005 or they have been substantially improved in recent years.

While the survey results for first-year students are a cause for celebration, the findings for our seniors are cause for concern and reflection. Seniors reported being less engaged than students at comparison institutions on three of the five benchmarks—Academic Challenge, Enriching Educational Experiences, and Supportive Campus environment. Seniors did not differ from their peers on the remaining two benchmarks. These findings suggest we need to re-examine our strategic planning efforts directed at improving the experience of students after their freshman year.

Next Steps

Three years ago, colleges were asked to develop objectives and metrics that support the University's Strategic Plan for 2009 – 2014. In areas of student preparation and promotion of diversity, UK's success in meeting several objectives and strategies in the Plan can be measured, in part, by students' NSSE responses.¹

Strategic Planning Efforts

The Office of Institutional Research has taken the raw survey data, disaggregated the results for each undergraduate college, and soon will distribute the results to each dean. Listed below are three relevant metrics from the Strategic Plan for 2009-2014 that could be used by colleges as a starting point in the development of their own plans:

Metric 1-4 Increase the number of high impact co-curricular activities that support the student's classroom experience in the areas of research, community service, leadership development, internationalization, and inclusion.

Metric 4-1 Ensure that all educational and administrative units implement strategies to achieve inclusive excellence.

Metric 4-5 Improve student ratings of curricular and co-curricular effectiveness in promoting diversity and inclusion, according to results of a university-wide survey

Since UK students first took NSSE in 2001, the results have repeatedly shown that our freshmen and seniors report lower levels of engagement on the Enriching Educational Experiences benchmark than students at participating research universities. Our first-year students reported they were less likely than their Carnegie peers to plan to: participate in a practicum, internship or coop; take foreign language coursework; pursue an independent study or self-designed major, and study abroad. Seniors reported that they spent less time participating in co-curricular activities, such as organizations, campus publications, and student government. Compared to students at participating research institutions, UK freshmen and seniors have consistently reported fewer meaningful interactions with students of a different race/ethnicity or demographic background than their own. Colleges may want to reflect on the range of enriching educational experiences available to their students and plan to implement and assess their initiatives accordingly.

¹ The decision to employ a web-based method of administering NSSE and to oversample students yielded fairly large sample sizes in 2007, 2009, and 2012. While the sampling errors for some colleges may be somewhat high, the findings are still informative and could play a role in strategic planning and policy development.

Student Success Task Force

We refer the 2012 NSSE results and this IR Brief to the Student Success Task Force, chaired by the Senior Vice Provost for Student Success. As envisioned here, the task force and its successor work groups would cast a wide net, addressing problems and issues that cut across the academic, co-curricular, and social dimensions of campus life. Studying how other research universities use their NSSE findings for improvement would be a useful step toward developing meaningful changes to programs and services. UK's ability to retain and graduate more students hinges upon its giving students the support needed to succeed academically and feel connected socially.

One of the negative findings from NSSE is the level of disengagement revealed by many seniors. A review of graduating seniors' NSSE responses suggests several areas for consideration that might produce greater engagement in our seniors:

- Conduct a public relations campaign that encourages juniors' and seniors' involvement in co-curricular activities, such as organizations and student government;
- Strengthen academic standards in upper division courses related to the number of hours students are expected to prepare for class through studying, reading and writing;
- Encourage greater involvement with faculty on research projects outside of the classroom;
- Improve seniors' ability to synthesize and organize ideas and experiences into novel and differentiated interpretations by promoting the creation of capstone courses;
- Help upper division students thrive socially by promoting campus-based activities pegged to their needs and interests; and
- Improve the quality of advising for upper division students with emphasis on the importance of graduating in four years.

Ultimately, the Senior Vice Provost for Student Success would determine the next steps to address those areas where UK students perform below their Carnegie peers.