

National Survey of Student Engagement

Spring 2003



University of Southern Indiana Summary Report

**Office of Institutional Research
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Introduction

Since 2000, the National Survey of Student Engagement (NSSE) has collected information from undergraduate students at four-year colleges and universities to assess the frequency with which students participate in activities that represent effective educational practices. The NSSE was developed by the Indiana University Center for Postsecondary Research, Policy and Planning and is cosponsored by the Carnegie Foundation for the Advancement of Teaching and the Pew Forum on Undergraduate Learning.

The NSSE 2003 survey instrument, *The College Student Report*, consists of fifteen demographic items and 79 engagement items in the areas of: academic and intellectual experiences, mental activities, reading and writing, examinations, homework, enriching educational experiences, quality of relationships, time usage, institutional environment, educational and personal growth, academic advising, and satisfaction. The NSSE has evolved over time, yet 49 of the original engagement items remain unchanged in 2003.

About 348,000 first-year (FY) and senior (SR) students were included in the NSSE sample for 2003. These students were randomly selected from data files provided by 437 participating four-year institutions. For the 2000 NSSE the sample was 151,910 students randomly selected from 276 schools.

Participation

The National Survey of Student Engagement (NSSE) was administered to 325 first-year (FY) and 341 senior (SR) students of the University of Southern Indiana during the spring semester of 2003. Spring 2000 was the last time USI had participated in the NSSE. The overall USI response rate for NSSE 2003 was 41 percent, with 125 FY (38%) and 147 SR (43%) students responding. This was the same as the NSSE 2000 overall response rate of 41 percent. In terms of participation, USI compared favorably with other schools. The overall average NSSE 2003 response rate for colleges and universities in our Carnegie Classification (Master's) was 42 percent and for all participating institutions (National Sample) was 43 percent. Nationwide there were 63,383 NSSE respondents from 276 four-year institutions in 2000, compared to over 130,000 students from 437 schools in 2003.

The NSSE instrument, *The College Student Report*, was available in both paper and Web versions. Most of the SR students (79%) completed the paper version, while less than half (47%) of the FY students responded using the paper version. For the NSSE 2000, 87 percent of USI students completed the paper survey. This reflects a positive shift to the use of the Web by USI students since spring 2000.

Response to the NSSE 2003 was fairly representative of USI student body characteristics in gender, race/ethnicity, and enrollment status. By gender, USI is 61 percent female, 39 percent male. The gender response ratio was approximately 70 percent female to 30 percent male for both USI and the Master's level institutions. The undergraduate students at USI are approximately 94 percent Caucasian/White and 87 percent full-time. The USI respondents for the NSSE 2003 were 92 percent Caucasian/White compared to 78 percent for the Master's and national samples. Almost all the USI FY respondents (98%) were full-time and 78 percent of the SR respondents were full-time, for an overall USI respondent average of 87 percent full-time. Forty eight percent of the FY respondents lived off the USI campus compared to 87 percent for the seniors.

Means Comparison

The College Student Report included 79 items divided into thirteen areas of student engagement (see table on pages 1 – 7 of the Means Comparison section). The NSSE 2003 study examined these 79 engagement variables and reported many statistically significant differences between the mean ratings of USI students and the mean ratings of the Master's and National comparison groups. Mean differences that are larger than would be expected by chance alone are referred to as being statistically significant. The NSSE report cautions that “the statistical difference does not guarantee that the result is substantive or important.” Findings with statistically significant negative mean differences suggest that the student behavior or institutional practices represented by those items require closer examination. Any interpretation of these finding must be made in the context of the defining characteristics of USI (mission, population, geographic location, facilities, campus culture, etc.).

There were a few positive statistically significant differences between USI students and the students in the comparison groups, meaning that USI students were above the average. The FY students from USI had statistically significant higher ratings on five variables compared to both the Master's and National groups. The average ratings for first-year USI students were above the norm in:

- Academic and Intellectual Experiences- Preparing two or more drafts of a paper or assignment before turning it in.
- Reading and Writing - Number of written papers or reports of fewer than 5 pages.
- Problem Sets- Number of problem sets that take you less than an hour to complete.
- Time Usage - Working for pay off campus.
- Time Usage – Commuting to class (driving, walking, etc.).

Whether or not these ratings represent strengths for USI is subject to interpretation. For example, is it a good institutional practice for the education of our first-year students to require multiple drafts, shorter written papers, or smaller problem sets in quantities greater than the norm? Is it an effective use of time for our first-year students to spend more time working for pay off campus or having longer commuting times to class than the norm? What does it suggest to us that our FY students also report spending less time working for pay on campus than their peers nationwide?

The USI seniors had higher mean ratings on seven engagement items compared to the Master's group and on six items for the National Sample. They were as follows:

- Academic and Intellectual Experiences – Worked with other students on projects during class.
- Academic and Intellectual Experiences – Used an electronic medium (list-serv, chat group, Internet, etc.) to discuss or complete an assignment.
- (Master's only) Academic and Intellectual Experiences – Used e-mail to communicate with an instructor.
- Reading and Writing - Number of written papers or reports of fewer than 5 pages.
- Problem Sets- Number of problem sets that take you less than an hour to complete.
- Enriching Educational Experiences – Culminating senior experience (comprehensive exam, capstone course, thesis, project, etc.).
- Educational and Personal Growth – Using computing and information technology.

These items reflect some of the strengths of USI. Most educators (nowadays) would agree that it is a very positive indicator for an institution to have cooperative learning, increased use of technology, and a culminating senior experience. The above average ratings in Reading and Writing and Problem Sets are subject to interpretation.

The first-year students had many more negative significant differences in mean ratings, indicating that they lagged behind the comparison groups. The USI FY students had statistically significant lower mean ratings than the Master's group on 46 of the 79 variables, and on 43 of the variables when compared to the National Sample. The USI senior students did much better than the FY students, with only eleven and fourteen of the 79 variables having a statistically significant negative difference from the Master's and the National Sample groups respectively.

Some of the items that warrant attention (reported as having negative statistically significant mean differences from the norms for both the FY and SR students) were:

- Academic and Intellectual Experiences – Discussed ideas from your readings or classes with others outside of class (students, family members, coworkers, etc.).
- Enriching Educational Experiences – Foreign language coursework.
- Enriching Educational Experiences – Study abroad
- Institutional Environment- Encouraging contact among students from different economic, social, and racial or ethnic backgrounds.
- Educational and Personal Growth – Understanding people of other racial and ethnic backgrounds.
- Satisfaction – How would you evaluate your entire educational experience at this institution?

Taken in context, most of these negative ratings are to be expected. The average satisfaction ratings, though significantly lower than the norms, were around “3” (with 1 = poor, 2 = fair, 3 = good, and 4 = excellent).

In terms of the first-year experience, the NSSE 2003 results call our attention to numerous student engagement items (in addition to the ones above) that had negative

statistically significant mean differences from the norms. Again, subject to interpretation, the following items (listed by area of student engagement) not only alert us to possible issues, but also suggest ways of improving institutional practices and student behaviors:

- Academic and Intellectual Experiences – Worked on a paper or project that required integrating ideas or information from various sources. Worked with classmates outside of class to prepare class assignments. Participated in community-based projects as part of a regular course. Used e-mail to communicate with an instructor. Discussed grades or assignments with an instructor. Discussed ideas from your readings or classes with faculty members outside of class. Received prompt feedback from faculty on your academic performance (written or oral). Worked harder than you thought you could to meet an instructor's standards or expectations.
- Mental Activities – Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components.
- Reading and Writing – Number of assigned textbooks, books, or book-length packs of course readings. Number of written papers or reports between 5 and 19 pages.
- Enriching Educational Experiences – Community service or volunteer work. Work on a research project with a faculty member outside of course or program requirements. (Plan to do before graduating) culminating senior experience (comprehensive exam, capstone course, thesis, project, etc.).
- Quality of Relationships – Relationships with faculty members. Relationships with administrative personnel and offices.
- Time Usage – Working for pay on campus.
- Institutional Environment – Spending significant amounts of time studying and on academic work. Providing the support you need to help you succeed academically. Providing the support you need to thrive socially. Attending campus events and activities (special speakers, cultural performances, athletic events, etc.). Using computers in academic work.
- Educational and Personal Growth – Acquiring a broad general education. Acquiring job or work-related knowledge and skills. Thinking critically and analytically. Using computing and information technology. Working effectively with others. Voting in local, state or national elections. Learning effectively on your own. Contributing to the welfare of your family.
- Academic Advising – Overall, how would you evaluate the quality of academic advising you have received at your institution?

The above items provide a window on the USI first-year experience from the perspective of the FY student. As would be expected, the NSSE 2003 ratings of the SR students were consistently better than those of the first-year students, representing typical student growth over time. Of course faculty, administrators, staff and other student groups may view USI differently, but these data provide the basis for ongoing conversations among members of the USI community about teaching and learning and future improvement and innovation at USI.

NSSE 2003 to NSSE 2000 Comparisons

Although the NSSE has evolved over time, 49 of the original engagement items remained unchanged for 2003 (see pages 1 – 7 of the Means Comparison section). To examine the change at USI from the NSSE 2000 to NSSE 2003 these 49 items were compared by subtracting the 2000 from the 2003 mean scores. The average magnitude of change was greater for the positive items (FY = 0.1995, SR = 0.1971) than for the negative items (FY = -0.1223, SR = -0.1288), indicating that most of the change, though slight, was in the positive direction. For first-year students, the items reflecting negative or less desirable change outnumbered the positive 30 to 19, as compared to 17 to 32 for the seniors. In other words, the SR students mean scores reflected slightly more positive change from 2000 to 2003 than that of the first-year students.

Overall, the items with the greatest positive improvement since NSSE 2000 were in the areas of quality of relationships and in the use of technology. The items indicating the largest undesired change for both FY and SR students were scattered throughout the various areas of the NSSE.

The top five items of positive change for the USI FY students were:

- Used an electronic medium (list-serv, chat group, Internet, etc.) to discuss or complete an assignment (0.58)
- Relationships with administrative personnel and offices (0.41)
- Relationships with faculty members (0.38)
- Prepared two or more drafts of a paper or assignment before turning it in (0.37)
- Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions (0.31)

The top five positive change items for the USI SR students were:

- Relationships with administrative personnel and offices (0.66)
- Used an electronic medium (list-serv, chat group, Internet, etc.) to discuss or complete an assignment (0.63)
- Prepared two or more drafts of a paper or assignment before turning it in (0.56)
- Relationships with faculty members (0.39)
- Using computing and information technology (0.35)

In addition to the lists of the bottom five items reflecting negative change, there was an item with positive change that reflected undesirable behavior--Come to class without completing readings or assignments (FY = 0.32, SR = 0.27).

The bottom five negative items for USI first-year students were:

- Understanding yourself (-0.31)
- Providing the support you need to help you succeed academically (-0.27)
- Learning effectively on your own -0.23)
- Understanding people of other racial and ethnic backgrounds (-0.19)
- Acquiring a broad general education (-0.19)

For the USI SR students, the bottom five negative change items were:

- Understanding yourself (-0.32)
- Understanding people of other racial and ethnic backgrounds (-0.23)
- Participated in a community-based project as part of a regular course (-0.19)
- Learning effectively on your own (-0.18)
- Encouraging contact among students from different economic, social, and racial or ethnic backgrounds (-0.14)

NSSE 2000 Follow-up

An effort was made to over sample USI seniors in NSSE 2003 to collect follow-up data for matched-pairs analysis on USI students who participated in the NSSE 2000 administration as FY students. Of the 112 FY students in NSSE 2000, 70 students were enrolled at USI during the spring 2003 semester, but many had not yet attained senior standing. Of those 70 students, 36 returned the NSSE 2003, for a 51 percent response rate. Given that the NSSE 2000 to 2003 follow-up response rate was 32 percent, but actually represented less than 9 percent of the sampled first-year population, it was determined that a separate analysis and reporting of the matched-pairs follow-up data would be inappropriate.

As an alternative analysis, a group means comparison between NSSE 2000 first-year students and the NSSE 2003 senior students was conducted (see pages 8 – 12 of the Means Comparison section).

There were only 12 items that were indicators of undesirable change as compared to 36 positive growth items. One item showed no change from NSSE FY 2000 to NSSE SR 2003, and that was--How would you evaluate your entire educational experience at this institution? The average for the negative change items was -0.1826 and for the positive items was 0.4002. In general, this internal comparison would reflect substantial growth in engagement at USI from 2000 to 2003. However, since we know that only 70 students from the NSSE 2000 administration were enrolled at USI in Spring 2003, and only 36 responded to NSSE 2003, we cannot be certain that the remaining 111 respondents had their first-year experience during NSSE 2000.

There were 17 items with above average (for USI) positive change. The top five were:

- Used an electronic medium (list-serv, chat group, Internet, etc.) to discuss or complete an assignment (1.07)
- Relationships with faculty members (0.90)
- Using computing and information technology (0.71)
- Worked with classmates outside of class to prepare class assignments (0.70)
- Used e-mail to communicate with an instructor (0.68)

In addition to the positive item--Come to class without completing readings or assignments (0.40), there were 12 items indicating undesirable negative change. The items falling below the USI average for negative items were:

- Encouraging contact among students from different economic, social, and racial or ethnic backgrounds (-0.34)
- Providing the support you need to thrive socially (-0.33)
- Helping you cope with non-academic responsibilities (work, family, etc.) (-0.32)
- Memorizing facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form (-0.22)
- Providing the support you need to help you succeed academically (-0.19)
- Understanding yourself (0.18)
- Understanding people of other racial and ethnic backgrounds (-0.17)

The data from the mean comparisons demonstrate that USI compares more favorably internally than to the Master's or national norms.

Benchmarks

Annually, the National Survey of Student Engagement develops an institutional benchmark report as an assessment of the extent to which undergraduate students are involved in educational practices empirically linked to high levels of learning and development. This year's analysis is based on approximately 185,000 students from the 649 four-year colleges and universities who participated in the NSSE in 2001, 2002, and 2003. There are five benchmarks or clusters of items on the survey that are expressed in 100-point scales:

1. Level of academic challenge
2. Active and collaborative learning
3. Student-faculty interactions
4. Enriching educational experiences
5. Supportive campus environments

The report compares USI benchmark scores to Carnegie Classification (Master's) schools and the NSSE national norms and assigns our Institutional Engagement Index (see charts and tables on pages 2 – 7 of the Benchmark section). The Engagement Index analysis (see pages 7 and 8) adjusts for the types of students and for other institutional characteristics generating an expected or predicted score. The difference between the actual and the predicted benchmark score produces a residual score. A positive residual indicates that students were more engaged than expected. A negative residual score means students were doing less than expected. For purposes of comparing the degree to which USI exceeded or fell short of its predicted score, relative to all other NSSE institutions, a standardized residual score is produced.

For first-year students, the USI benchmark scores were below the norms on all five clusters and at or below the 50th percentile on four of the five clusters (Supportive Campus Environment scored 56.7). Engagement Index actual scores fell short of what would have been expected for USI in the areas of Active and Collaborative Learning, Student-Faculty Interaction, and Supportive Campus Environment. In terms of differences between actual and predicted scores (as reflected in the standardized

residuals) USI was fairly close to the other NSSE schools in the areas of Level of Academic Challenge, Active and Collaborative Learning, and Enriching Educational Experiences.

The USI senior students had better benchmark scores than the FY students except in the areas of Enriching Educational Experiences and Supportive Campus Environment. Compared to the other NSSE institutions, USI senior benchmark scores were very close in four of the five areas, the exception being Enriching Educational Experiences. Taking into account the background of USI students and our institutional characteristics, the residual and standardized residual scores of the USI senior students also compared favorably except for Enriching Educational Experiences.

Conclusions

When examining the University of Southern Indiana's NSSE 2003 with NSSE 2000 results, USI compares much more favorably internally than to the Master's or national norms. External comparisons are important. Even though the NSSE 2003 ratings of the senior students were consistently better than those of the first-year students, they represented typical student growth over time as would be expected. In terms of the first-year experience and a four-year path to bachelors degree, the NSSE results call our attention to numerous student engagement items in which USI does not favorably compare to the norms for 4-year colleges and universities. Again, subject to interpretation and taking into account the background of USI students and our institutional characteristics, those items not only alert us to possible issues, but also suggest ways of improving institutional practices and student behaviors. The NSSE results provide a window on the USI experience from the perspective of the FY and SR students. Of course faculty, administrators, staff, students, and other student groups may view USI differently. What is critical is that these data and results are disseminated widely to serve as a stimulus for further conversations among members of the USI community about teaching and learning and future improvement and innovation at USI.

Electronic Attachments

NSSE 2003 Respondent Characteristics



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NSSE 2003 / NSSE 2000 Means Comparisons



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NSSE 2003 Benchmark Report



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