National Survey of Student Engagement
The College Student Report

NSSE 2001 Overview

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Introduction

This "Overview" summarizes important information about the spring 2001 administration of the National Survey of Student Engagement (NSSE). The NSSE project annually surveys undergraduates at four-year colleges and universities to assess the extent to which they engage in a variety of good educational practices. The project is supported by a grant from The Pew Charitable Trusts and cosponsored by The Carnegie Foundation for the Advancement of Teaching and The Pew Forum for Undergraduate Learning.

The presentation is divided into four parts. First, we compare the characteristics of participating institutions and students with institutional and national profiles and provide some information about overall response rates. We then present selected findings including descriptive information about the students who completed the survey and some preliminary analyses of the patterns of engagement of various groups of students. Third, we provide some suggestions for interpreting the data presented in this report. Finally, we provide some examples for how colleges and universities are putting their NSSE results to good use.

Later this fall you'll receive the national benchmarks of effective educational practice as well as the benchmarks for your institution. This information will be based on the aggregated data from the 476 different colleges and universities that participated in NSSE 2000 and 2001.

I. NSSE 2001 Institutions and Respondents

The NSSE 2001 sample was comprised of 177,103 first-year and senior students who were randomly selected from electronic data files provided by the 321 participating four-year colleges and universities listed in Appendix A of your institutional report.[1] NSSE sampling procedures call for an equal number of first-year and senior students to be sent the survey with the standard sample size determined by the number of undergraduate students enrolled at the institution. Students at the majority of colleges and universities (n=261) had the option of responding either via a traditional paper questionnaire or via the World Wide Web. Sixty schools opted to be Web-only institutions where students received an introduction letter through the mail and then all follow-up contacts with students were electronic. Students at Web-only schools were required to complete ***The College Student Report*** via the Web.

Tables 1 and 2 on the following pages indicate the degree to which NSSE 2001 participating institutions and respondents approximate the characteristics of students enrolled at the participating schools as well as the national profile of all four-year colleges and universities. The source of the comparative data is the 1998-1999 IPEDS database, the most recent complete data file available. However, the IPEDS data are two years old so the comparisons may not accurately reflect certain of your institutional and student characteristics for the 2000-2001 academic year.

Table 1
Comparison of NSSE 2001 Institutions And All Four-Year Colleges and Universities

	NSSE 2001	National
Carnegie Classification		
Doc/Res – Ext	16%	11%
Doc/Res – Int	10%	8%
Master's I & II	42%	43%
Bac – Liberal Arts	21%	16%
Bac – General	11%	23%
Sector		
Public 4-year	48%	36%
Private 4-year	52%	64%
Region		
Far West	9%	10%
Great Lakes	20%	16%
Mideast	19%	19%
New England	9%	9%
Plains	8%	11%
Rocky Mountains	3%	3%
Southeast	22%	26%
Southwest	9%	7%
Location		
Large city (>250,000)	20%	19%
Mid-size city (<250,000)	32%	29%
Urban fringe large city	17%	17%
Urban fringe small city	7%	8%
Large town (>25,000)	5%	4%
Small town (~5,000)	13%	17%
Rural	5%	6%

Source: 1998-1999 IPEDS Data File

Profile of NSSE 2001 Institutions

Table 1 shows that NSSE 2001 schools mirror the national profile of four-year colleges and universities in terms of region of the country and location. However, NSSE 2001 institutions included more Doctoral/Research Universities and Baccalaureate Colleges—Liberal Arts and fewer Baccalaureate Colleges—General as defined by the 2000 Carnegie Classification of Institutions of Higher Education. Doctoral/Research Universities and Master's Colleges and Universities enroll more than three-quarters of all undergraduates. At the same time, ample numbers of smaller, independent colleges also took part in NSSE 2001, insuring that the results would reflect the experiences of a broad cross-section of students attending four-year colleges and universities from both the public and private sector, from all regions of the country and from different types of settings.

Profile of NSSE 2001 Respondents

Table 2 on the following page shows selected respondent characteristics. The first column represents NSSE 2001 respondents, the second column shows the characteristics of students at the four-year schools that participated in NSSE 2001 as reflected by 1998-1999 IPEDS data, and the third column represents the national profile of students at four-year colleges and universities from IPEDS data.

Class

Of the 71,425 respondents, 47% were students in their first-year of college and 53% were seniors.

Gender

Women made up almost two-thirds (65%) of the respondents compared with 54% of the students enrolled at NSSE 2001 schools and 56% nationally (Table 2). The larger proportion of women respondents is consistent with the widely reported survey research phenomenon that women are more likely than men to return questionnaires. However, the percentages of women and men responding via the Web (57% women, 43% men) more closely matched the national profile.

Age

Students 19 years of age or younger compose the largest group (42%), reflecting the fact that half the students selected to receive the survey were in their first year of college. Thirty-nine (39%) percent were 20-23, 9% 24-29, and 10% 30 years of age or older.

Profile of NSSE 2001 Respondents - Continued

Race and ethnicity

White students are over-represented and African American students are slightly under-represented (Table 2).

Enrollment status

About 88% of all students were enrolled full-time (Table 2). Approximately 28% of all students had attended one or more other institutions in addition to the one at which they were currently enrolled. Of this group of multiple-institution attenders, 51% had gone to a community college, 34% to another four-year college, 7% to a vocational-technical school, and 8% to some other form of postsecondary education.

Parents' education

Forty percent of all respondents were first generation college students. More than one third (34%) had both parents graduate from college.

Living arrangements

Forty-four percent of all students lived in campus housing (74% first-year students, 20% seniors). The remainder lived within driving distance (41%), within walking distance (13%), or in a fraternity or sorority house (2%).

Fraternity or sorority

About 12% of all students (13% of men and 11% of women) were members of a fraternity or sorority.

Future teachers

About 17% of all students said they intended to teach at some pre-kindergarten through high school level within one to two years of completing their degree. Approximately 92% of seniors majoring in education plan to teach.

Table 2
Characteristics of NSSE 2001 Respondents, Students At NSSE 2001 Institutions, and Students at All Four-Year Institutions

	NSSE Respondents	All NSSE 2001 Schools	National
Gender			
Men	35%	46%	44%
Women	65%	54%	56%
Race/Ethnicity*			
African American/Black	7%	9%	10%
Amer. Indian/Alaska Native	2%	1%	1%
Asian/Pacific Islander	6%	5%	6%
Caucasian/White	80%	75%	70%
Hispanic	7%	7%	6%
Other	.4%	-	-
Multiple	5%	-	-
International	4%	3%	3%
Enrollment Status			
Full-time	88%	83%	79%
Part-time	12%	17%	21%

* Notes: Students could check more than one racial or ethnic group so the percentages exceed 100%. The IPEDS and NSSE categories for race and ethnicity differ. Also, changes were made in the NSSE categories between 2000 and 2001 so use caution in making comparisons across the two years.

Source for All NSSE 2001 Schools and National: 1998-1999 IPEDS Enrollment Data File

Table 3
Primary Major Field of Study
By Class and Gender

	1st Year Students		*Seniors*	
Major	Male	Female	Male	Female
Business	17%	12%	19%	16%
Social sciences	9%	13%	12%	17%
Education	4%	14%	5%	15%
Biological/life sciences	7%	9%	7%	7%
Engineering	14%	2%	14%	2%
Other	7%	7%	6%	7%
Health-related fields	3%	9%	3%	8%
Computer and information sciences	11%	2%	9%	3%
Communications	4%	6%	4%	5%
Visual and performing arts	4%	5%	4%	4%
Humanities	3%	4%	4%	5%
Undecided	6%	8%	-	-
Multiple Primary Major	2%	3%	2%	2%
Physical sciences	3%	2%	4%	2%
Mathematics	2%	1%	2%	1%

Primary Major Field

Table 3 shows the percentages of students majoring in different fields broken down by class and gender.

More men are majoring in business, engineering, computer and information sciences, and physical sciences, while more women are pursuing degrees in education, health-related fields, and the social sciences.

Response Rates

The overall average adjusted institutional response rate for NSSE 2001 was 42%.

The overall average adjusted institutional response rate for NSSE 2001 was 42%.[2] About 58% of the NSSE 2001 respondents completed the paper version of ***The College Student Report*** and approximately 42% completed it using the Web, which is up from 36% in NSSE 2000. The average adjusted institutional response rate for standard schools (institutions where students had the option of completing either the paper or the Web version of ***The Report)*** was 43%, with a range of 20% to 82% across schools. The average adjusted institutional response rate for NSSE 2001 Web-only schools (institutions where students only had the option of completing the survey online) was 41%, up from 39% in NSSE 2000. Additional information about response rates, including the response rate for your institution, is in Table 7 at the end of the "Overview" on page 21.

II. Selected Results

This section is divided into two parts. The first part presents a birds-eye view of the nature and frequency of undergraduate student engagement in effective educational practices. The NSSE project is grounded in the proposition that the frequency with which students engage in activities that represent effective educational practice is a good proxy for collegiate quality.

The second part briefly summarizes the results from a series of regression analyses examining the levels of engagement of different groups of students, controlling for various student characteristics and such institutional factors as selectivity, sector, and size.

College Activities

Page 1 of ***The Report*** includes 20 questions about the nature of the activities in which students engage. A "substantial amount" of engagement is defined to be at least 50% of all students reporting "often" or "very often" (Table 4).

The least frequent activities are those where the percentage of students who responded "never" exceeded 35%, meaning that roughly one-third or more of the students had no experiences in these areas during the 2000-2001 academic year (Table 4).

Table 4
Most Frequently and Least Frequently Reported Activities

Most Frequent Activities	All Students Responding Very Often or Often	1st Year Students Responding Very Often or Often	Seniors Responding Very Often or Often
Worked on a paper or project that required integrating ideas or information from various sources	80%	74%	87%
Asked questions in class or contributed to class discussions	65%	58%	71%
Used email to communicate with an instructor	63%	60%	67%
Had serious conversations with students who differ from you in terms of their religious beliefs, political opinions, or personal values	63%	65%	62%
Discussed ideas from your readings or classes with others outside of class (students, family members, coworkers, etc.)	61%	58%	65%
Received prompt feedback from faculty on your academic performance (written or oral)	60%	54%	65%
Least Frequent Activities	**All Students Responding Never**	**1st Year Students Responding Never**	**Seniors Responding Never**
Participated in community-based project as part of a regular course	66%	73%	59%
Worked with faculty members on activities other than coursework	55%	63%	47%
Tutored or taught other students	50%	54%	45%
Discussed ideas from classes or reading with a faculty member	36%	45%	28%

Course Emphasis and Educational Programs

Another way to gain insight into the student experience is to look at the kinds of intellectual and mental activities that institutions emphasize and the types of educational programs in which students take part that complement and enrich their collegiate experience.

- More than four-fifths (86%) of seniors said their classes emphasized analyzing ideas or situations to a substantial degree (combination of “quite a bit” and “very much” responses).
- About three quarters (78%) of seniors said their classes emphasized applying concepts or theories to new situations.
- More than two-thirds (70%) of first-year students and over half (61%) of seniors said their classes emphasized memorization to a substantial degree.

Table 5
Percentage of seniors who participated in various educational enriching activities

	Doc/Res - Ext	Doc/Res - Int	Master’s	Bac - LA	Bac - Gen	Total
Practicum, internship, field experience	72%	71%	72%	73%	75%	72%
Community service/volunteer work	61%	59%	62%	75%	63%	63%
Research with faculty member outside of course requirements	24%	23%	20%	30%	22%	23%
Foreign language	43%	37%	35%	61%	30%	41%
Study abroad	16%	16%	13%	34%	13%	18%
Independent study/self-designed major	24%	26%	27%	42%	33%	29%
Culminating senior experience	46%	55%	54%	72%	68%	57%

- Close to three quarters (72%) of seniors did an internship or other type of field experience.
- Almost two thirds of seniors (63%) did community service or volunteer work during college.
- Only about one quarter of seniors (23%) worked on a research project with a faculty member outside of course or program requirements.
- About 41% of seniors took foreign language coursework.
- Almost one-fifth (18%) of seniors studied abroad.

Time Matters

How students spend their time in college is a key indicator of what they put into their education and also predicts what they get out of it. Of the six time usage items, three are positively correlated with other engagement items and self-reported educational and personal growth. They are time devoted to preparing for class, extracurricular activities, and on-campus work. Of the remaining three items, two of them, working off campus and caring for dependents, may be prompted by circumstances not fully under the control of the student.

Only about 13% of full-time students spent more than 25 hours a week preparing for class; more than two fifths (42%) spent 10 or fewer hours a week (Figure 1).

Less than one fifth (16%) of all students participated in co-curricular activities more than 10 hours a week.

Two thirds of all students were working, 55% of first-year students and 79% of seniors. Figure 2 shows the percentages of students who work off campus more than 20 hours per week. More than half of all part-time students (49% first-year students, 61% seniors) work more than 20 hours per week (Figure 2).

A non-trivial fraction of seniors (about 18%) spent 11 or more hours per week caring for dependents.

Two-thirds (69%) of all students spent 15 or fewer hours a week relaxing and socializing. One tenth spent more than 25 hours. Full-time enrolled first-year students spent as much time socializing as they did studying, a little over 13 hours per week. Part-time first-year students spent more hours socializing (11) than studying (9).

Figure 1
Hours Per Week Students Spend Preparing For Class

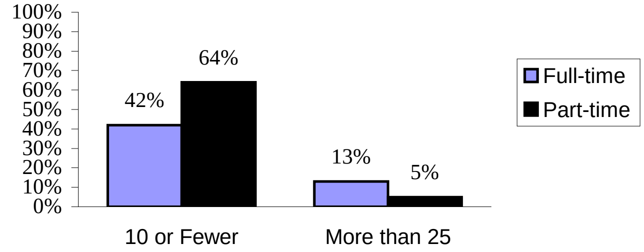
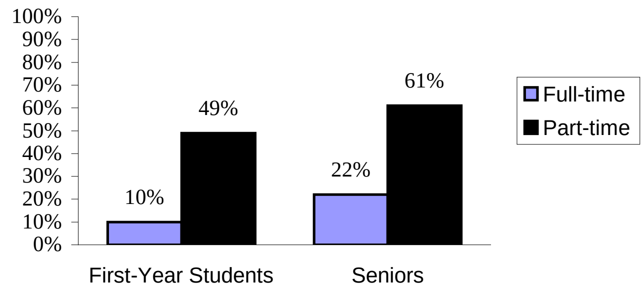


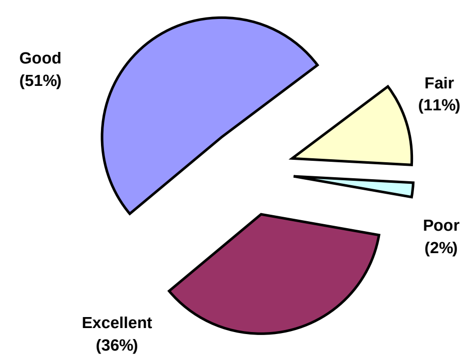
Figure 2
Percentages of Students Working Off Campus More Than 20 Hours Per Week



Student Satisfaction

Most students were generally satisfied with their college experience. Eighty-seven percent of all students rated their college experience "good" or "excellent" (Figure 3). Only 2% said their experience was "poor." Four fifths (84%) of first-year students and seniors (80%) would "probably" or "definitely" attend the same school if they were starting college again.

Figure 3
Satisfaction with College Experience



Patterns of Student Engagement

Overall, seniors were more engaged in good educational practices than first-year students… even though they worked more and spent more time helping dependents.

We conducted multivariate regression analyses for different groups of students using seven clusters of items from ***The College Student Report*** as dependent variables.[3] These clusters are: (1) college activities (20 items in Section 1); (2) reading, writing and nature of exams (Section 3, items a, c, d, e, and Section 4); (3) course emphasis on higher-order mental activities (Section 2, items b through e); (4) time-usage (Section 7, items a, b, and d are positively correlated with engagement); (5) educational programs (Section 6); (6) educational and personal growth (Section 8); and (7) opinions about your school (Section 9 through 12). In general, the results are consistent with those reported last year for NSSE 2000.

Class

Overall, seniors were more engaged in good educational practices than first-year students, net of a host of student and institutional characteristics, even though they worked more and spent more time helping dependents. First-year students scored higher in one area, opinions about your school. As expected, seniors reported greater gains compared with first-year students on all educational and personal growth items except for voting in elections, where the two groups were similar.

Gender

Women engaged more frequently in good educational practices than men. However, women and men were comparable in one area: time usage.

Race and Ethnicity

The relationships between race, ethnicity, and engagement are somewhat mixed. In some areas Blacks and Hispanics outperformed Whites. For example, Blacks and Hispanics were more engaged in college activities, more frequently took advantage of educational programs, reported greater course-emphases on higher-order mental activities, and had higher self-reported gains in educational and personal growth. Asians also reported stronger educational and personal growth and greater participation in educational programs. Compared with other groups, Hispanic students had the most favorable opinions about their schools (i.e. campus climate and the quality of relations among people on campus).

Age

As with race and ethnicity, the relationships between age and engagement in good educational practices are also mixed. Younger, traditional-age students (18-24 years) reported more participation in educational programs, spent more time in educationally-productive activities, and reported more educational and personal growth. In contrast, older students hold more favorable opinions about their school than traditional-age counterparts, a finding that emerges only after class is taken into account.

Fraternity and Sorority Membership

In all areas of good educational practice, members of Greek-letter social organizations were more engaged than nonmembers, after taking into account all other student and institutional characteristics.

Emerging Themes

From a preliminary analysis of the 2001 results at the national level we offer the following observations about the nature of student engagement at four-year colleges and universities.

Good Things Happen When Student Voices Fill Classrooms

Students who ask questions in class also make more class presentations. The latter behavior is largely determined by faculty members who design such activities into their courses. Students who ask questions in class are also more likely to talk with faculty members outside of class about various things, such as ideas from their readings, career plans, grades, and assignments. Perhaps getting students to speak out in class is a precursor to other positive forms of interaction with their teachers.

Student-Faculty Contact: You've Got Mail!

Talking with instructors about grades may have salutary effects. Students who do so are also more likely to talk with faculty members about ideas introduced in classes, and about career plans. They are also more likely to get frequent feedback from their teachers and work harder than usual on their studies. And giving students frequent feedback is a lever for engaging students in substantive conversations beyond the classroom, along with serving on committees and working on various activities and projects.

However, 28% of seniors and 45% of first-year students "never" discussed ideas from their classes or readings with a faculty member. That disappointing finding aside, e-mail appears to be a popular vehicle for getting feedback on academic work and discussing grades and assignments, career plans, and ideas from courses. Using e-mail to communicate with an instructor is also highly correlated with integrating ideas from various sources and working with classmates on assignments outside of class.

Twenty eight percent of seniors and 45% of first-year students "never" discussed ideas from their classes or readings with a faculty member.

The Undersubscribed Extracurriculum

Almost three quarters of part-time commuting students do not participate in extracurricular activities. Neither do fully one quarter of all first-year students and a fifth of all seniors who live on campus or within walking distance. Of those who are involved, less than 10% devote more than 15 hours a week to such activities.

Campus Climates That Foster Student Engagement

Faculty members often say that students should spend at least two hours outside of class preparing for every hour in class. But that is clearly not the case today...

NSSE results point to some characteristics of colleges and universities associated with high levels of student engagement:

Emphasize Diversity

Students who report that their school encourages contact with peers from different backgrounds also see their school as supporting:

- Their academic success
- Their coping with other responsibilities
- Their social needs.

Supportive Faculty Members

Students who report that their faculty members are accessible and supportive perceive that their school:

- Provides the support they need for their academic success
- Helps them cope with non-academic responsibilities
- Provides social support

Good Academic Advising

Students who report getting high quality academic advising:

- Are more likely than their peers to interact with faculty members
- Gain more in most areas
- Perceive their institution's environment is academically and socially supportive
- Are more satisfied with their overall college experience.

Enough Time on Task?

Faculty members often say that students should spend at least two hours outside of class preparing for every hour in class. But that is clearly not the case today, as full-time students reported spending only about 14 hours a week, on average.

Adding up time in class, studying, and involvement in extracurricular activities (about 34 hours for full-time students) – the traditional trinity of undergraduate activities highly correlated with gains, satisfaction, and persistence -- most students fall well short of a 40-hour week devoted to "collegiate endeavors."

Table 6 on page 11 accounts for an estimated 99 hours of the 112 waking hours in the week of a typical full-time student who works part-time. Allowing about 2 hours per day to take care of "miscellaneous" matters (e.g., laundry, personal hygiene, shopping) still leaves unaccounted more than 12 hours a week, about 10% of their waking hours.

The combination of students spending only about half as much time preparing for class as their teachers claim is necessary and 20% of students frequently coming to class unprepared points to a disconcerting shortfall of academic effort.

Enough Time on Task? - continued

Full-time enrolled seniors are very similar to their first-year counterparts in how much time they spend studying and in co-curriculars. But more of them work on and off the campus and more report caring for dependents. And more seniors spend more time getting to and from class as many of them live off campus.

The experiences of part-time students differ in many ways including the amount of time they devote to various activities. Part-time students study about 10 hours per week and are almost three times as likely to work off campus (about 80% of both first-year and senior students compared with only 20% of full-time first-year and 40% of senior students). Also, many more part-time students care for dependents.

Substantial proportions of both first-year students (21%) and seniors (24%) say they frequently ("often" and "very often") come to class unprepared. The combination of students spending only about half as much time preparing for class as their teachers claim is necessary and 20% of students frequently coming to class unprepared points to a disconcerting shortfall of academic effort.

That said, however, students are generally satisfied. At the same time, students say their institution could help them more in coping with non-academic responsibilities (37% say their college does "very little" of this) and in providing the support they need to thrive socially (26% say their college does this "very little").

Table 6
Hours Spent Per Week

Activity	*Full-time* Hours/Week	*Part-time* Hours/Week
Attending class	15	6-8
Studying	14	10
Extracurricular activities	5	2
Working	11	23
Eating*	20	20
Socializing/relaxing	13	11
Traveling to and from class*	4	10
Caring for dependents	3	12
Miscellaneous*	14	14
Total	99	110

** Estimates*

Do We Expect Enough of One Another?

All this paints a somewhat disconcerting picture of a sizeable fraction of today's undergraduates, especially traditional-age students enrolled full-time. Most students study only about half as much as faculty members say is desirable. And many students, particularly in the first year, are not highly involved in other activities on campus that are known to contribute to desired outcomes of college.

What are students doing with the hours we can't account for? More important, are students spending enough time on academic pursuits? How can colleges and universities structure learning and other activities inside and outside the classroom that will result in more productive, focused use of perhaps the most precious resource all students have – their time?

With these questions in mind, the final section of the "Overview" offers some suggestions for making productive use of your institutional results.

III. Advice to Users

Interest in putting NSSE data to use is building across all sectors and types of institutions. Indeed, the most frequently asked question posed to us these days is, "How are schools using their NSSE data?" This section of the "Overview" offers some tips for how to use your results from the National Survey of Student Engagement. The information is divided into two sections. The first section provides some general guidelines for interpreting results from the NSSE 2001 institutional reports. The second section offers ideas for making the most of NSSE data, both internally and externally.

Guidelines for Interpreting NSSE Results

Before sharing your NSSE results institution wide, become familiar with the nature of the data and "story line" of your school's performance.

Before sharing your NSSE results institution wide, become familiar with the nature of the data and "story line" of your school's performance. Here are some things to consider.

Check The Representativeness of Your Respondents

A good first step is to compare your student respondents' demographic characteristics summarized in the Frequency Distribution section with your institutional data files for first-year and senior students. Women and some historically underrepresented groups are somewhat over-represented among NSSE 2001 respondents. Check to see if this is also true in your case and whether your respondents differ in any other ways from the profiles of your first-year and senior students. FYI: the determination of student year in school ("first-year" or "senior") is based on the information from the electronic file that your school provided to us last fall. The Frequency Distribution section contains students' responses to this question on ***The Report***, which in a few cases may differ from the institution's classification.

Another way to gauge representativeness is through sampling error, an estimate of the margin by which the "true" score for your institution on a given item could differ from the reported score for one or more reasons (e.g., differences in one or more important characteristics between the sample and the population). For example, if 60% reply "very often" to a particular item and the sampling error is +/- 5% there is a 95% chance that the population value is between 55% and 65%. Keep in mind that sampling error is based on the population of interest. So if you want to estimate the sampling error for first-year male students, it must be calculated using the numbers of all first-year male students and the first-year male respondents (as contrasted with all undergraduates or all male and female first-year students). Increasing the number of respondents relative to the total population reduces sampling error. For this reason some schools are increasing their sample size using NSSE's oversampling option which is discussed later.

The Results Reported For Your School Are Unweighted

The data in the Means Summary Report comparisons are not weighted. That is, no adjustments were made to correct for potential bias in students' responses to approximate the populations of first-year and senior students at your school and other colleges and universities in your comparison groups. Later this fall, when we prepare the five national benchmarks of student engagement, we'll use appropriate weighting techniques similar to those employed last year to make the appropriate adjustments. That said, the unweighted and weighted results for most NSSE items tend to be very similar at the institution, comparison group, and national levels. Some possible exceptions may be the reading, writing, and time on task questions (e.g., study hours, caring for dependents) at schools that have substantial proportions of part-time students as they are taking fewer classes and cannot be expected to read and write as much as full-time students. Keep this in mind when interpreting the results.

Look Carefully At Items With Large Effect Sizes

In the Means Summary Report (Appendix B) an asterisk (*) marks those items where your students' responses differ at a statistically significant level from students at schools in your respective comparison group(s) or at all NSSE 2001 institutions. Because of the large numbers of students in NSSE 2001, we set a very high statistical significance threshold to reduce the probability that the differences noted are due to chance ($p < .01$ for consortia comparisons, $p<.001$ for Carnegie and national comparisons). Even so, the actual magnitude of some item score differences may seem trivial, even though they are highly reliable and statistically significant. For this reason we also report the effect size associated with those item comparisons that are statistically significant. The effect size represents the magnitude of the discrepancy in the student or institutional behavior represented by the item. When the effect size is large, or a pattern of moderate effect sizes exists, it's likely that the quality of the student experience represented by the survey question(s) is appreciably different and, therefore, may be of practical as well as statistical significance.

Finding large effect sizes is not that common in most areas of non-experimental educational and social science research including the NSSE project. So, if your results include some medium or large effects, something may be going on that warrants immediate attention, especially if other empirical or anecdotal information corroborate the NSSE data. Here are some general guidelines for determining the relative importance of a Cohen's *d* effect size:

- .20 is a small effect
- .50 is a medium effect
- .80 is a large effect

Because of the large numbers of students in NSSE 2001, we set a very high statistical significance threshold to reduce the probability that the differences noted are due to chance.

Look for Patterns in Item Differences

In addition to focusing on items with medium to large effect sizes, look for patterns in your students' responses. For example, are your students consistently above or below the mean of your comparison group in certain areas of engagement? Are the differences explainable, perhaps a function of your school's mission, the nature of the undergraduate program, or certain students' characteristics? Also, don't rely exclusively on statistical significance tests to identify areas that warrant attention. A consistent pattern of scoring above the mean, even though all the items may not reach statistical significance, may indicate the institution is doing the right things in terms of good educational practice. At the same time, some institutions have very high expectations for student engagement and may fall short of their own aspirations even though comparisons with other institutions are favorable.

Take Into Account Possible Mode-of-Administration Effects

Our analyses show that a mode-of-administration effect slightly favors schools where a high percentage of students completed ***The Report*** via the Web. However, the differences that favor the Web mode have very small effect sizes. This phenomenon has also been noted by others using the Web for survey research and is discussed in more detail in the "NSSE Conceptual Framework and Overview of Psychometric Properties" paper (Appendix A). We still don't know for sure whether this pattern of responses is a function of the mode of administration itself (e.g., something about responding via the Web induces students to slightly inflate their responses), a function of certain institutional features (e.g., technology investment), or whether students who complete the survey via the Web are different in some ways including engaging more frequently in good educational practices. Evidence of the last of these is that the Web effect is most prominent on the three technology–related items ("used e-mail to communicate with an instructor," "used an electronic medium to discuss or complete an assignment," and self-reported gain in "using computing and information technology"). We'll continue to monitor this issue and alert you if our analyses lead us to modify our tentative conclusion that the Web mode has little practical impact on the nature of student responses to ***The College Student Report***.

In addition to focusing on items with medium to large effect sizes, look for patterns in your students' responses.

Take Special Note of Consortium Questions

If your school is part of a consortium that used additional questions, the responses to these additional questions are included in the Means Summary Report and Frequency Distribution sections. These data are also in the institutional data file. Answers to such questions as "What is your reason for working off campus?" and "Who is your academic advisor?" have categorical response options that are meaningless when displayed in the Means Summary Report format. For this reason the response cells for such questions are empty. When presenting the results to categorical questions to colleagues and others, please use the information in the Frequency Distributions.

Results For the Consortium, Carnegie, and National Comparisons Do Not Include Oversampled Students

NSSE's minimum sample sizes are determined by undergraduate enrollment (e.g., less than 4,000 students = 450; 4,000 to 15,000 students = 700; greater than 15,000 students = 1,000). It is possible to add students to the minimum sample size by oversampling in one of two ways: (1) all Web-only schools are oversampled using an algorithm based on undergraduate enrollment; and (2) some institutions request oversampling, which requires an additional fee. An increasing number of schools are using the oversampling option to add students to their sample to reduce sampling error (discussed earlier) and to insure an adequate number of respondents to analyze the information by major field, race and ethnicity, or other variables.

NSSE's policy is to use only respondents from the institution's standard random sample when developing the national benchmarks of effective educational practice and sector and national norms. This protects against the possibility that colleges and universities with oversamples might have an undue influence on the results. However, if your school requested an oversample, the responses of **all** your students (standard sample and oversample) **are included** in your institution's reports and data file.

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IV. Using NSSE Results

NSSE reports point to areas where a college or university can take action almost immediately to begin to improve student learning and institutional effectiveness. Here are some of the ways schools are now using their NSSE data.

Understanding Key Aspects of the Student Experience

To anchor discussions about the quality of undergraduate education in empirical evidence, some schools circulate a copy of the Overview section of the institutional report and other selected sections to such groups as:

- Governing board members
- President and president's cabinet
- Senior administrators, Deans, and Department chairs
- Faculty committees, faculty development workshops and retreats, and various academic councils
- Students (via discussion with student leaders and articles in the student newspaper)

One small college sent a hard copy of its institutional report to all senior administrators and department chairs. All faculty and staff got an e-mail message listing conclusions and recommendations distilled from the data. The institutional contact said, "This was the first survey at our College in which everyone on campus received the results." The information prompted a series of productive discussions about the general education program and academic expectations, especially for first-year students.

"This was the first survey at our College in which everyone on campus received the results."

Included on the enclosed CD (Appendix B) with your institutional report is a sample PowerPoint presentation you can modify for presenting NSSE results to various audiences.

To generate a more comprehensive picture of the undergraduate experience some institutions are linking NSSE data to other sources of information. Because NSSE assigns unique student respondent identification numbers, it's possible for you, with appropriate approvals, to link individual students' NSSE results with

1. Other institutional data about students such as

   - Pre-college characteristics
   - Other demographic information
   - Financial aid awards
   - Transcripts and course taking patterns
   - Graduate and professional school test scores.

2. Results of local surveys of student satisfaction, the first-year experience, the senior experience, alumni, and employers.

3. Other national surveys such as the College Student Experience Questionnaire (CSEQ), the Cooperative Institutional Research Program (CIRP), the College Student Expectations Questionnaire (CSXQ), surveys from Educational Testing Services such as Academic Profiles or Tasks in Critical Thinking, ACT's Collegiate Assessment of Academic Proficiency (CAAP), or Noel Levitz's Student Satisfaction Inventory.

Institutional Improvement

NSSE data serve a diagnostic function by identifying institutional strengths and weaknesses in terms of effective educational practice. Toward this end, NSSE results are especially useful for benchmarking, the process of comparing and measuring an institution against high performing colleges and universities and adapting best practices to order to improve. There are two approaches to benchmarking. One or both may be appropriate, depending on your institution's situation.

The first is a **normative** approach, whereby you compare your students' responses to those of students at other colleges and universities. This can also be done at the department or major field level if enough students have participated, which is a particularly effective way of stimulating faculty interest in the findings. The provost from a state university of 15,000 told us:

"We have used the survey and the resulting NSSE data to set some benchmarks for ourselves within the context of our strategic plan…The information has been a real eye-opener for us particularly as it relates to the freshmen year. [The data are] a great stimulus for discussion and have reaffirmed how committed the faculty are to providing an excellent educational experience for all of our students. The fact that the questions and the subscales can be compared against a variety of national benchmarks makes the information very valuable for us. We are always looking for "best in class" types of benchmark data and what we get from the NSSE helps us identify some of those best in class indicators."

The second approach to benchmarking is **criterion referenced**, whereby you examine your school's performance against a predetermined value or level that you and your colleagues deem appropriate for your students, given your institutional mission, size, curricular offerings, funding, and so forth. For instance, after reviewing NSSE findings at one state university in the south, faculty members in various units established what they considered to be reasonable thresholds as to the amount of time they felt students should be spending on preparing for class. Some groups stipulated that a minimum of two hours studying for every hour of class meeting should be the standard while other units established somewhat higher or lower thresholds. NSSE data for students majoring in the different units were then interpreted according to whether these criterion levels were met.

Faculty-student interaction is another area where legitimate differences may exist across units in interpreting the meaning of absolute values of student responses to certain questions. For example, "occasional" conversations between students and faculty about career options may be "educationally effective." But in terms of giving students prompt feedback or challenging them to work harder than usual to meet an instructor's standards, we might want most students to say they experience this "often" or "very often."

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Documenting the Efficacy of Improvement Initiatives

The NSSE project focuses on effective educational practices so the results are instructive for faculty and staff members who are working on various teaching and learning initiatives.

The NSSE project focuses on effective educational practices so the results are instructive for faculty and staff members who are working on various teaching and learning initiatives, such as those sponsored by the local chapter of The Carnegie Academy for the Scholarship of Teaching and Learning. NSSE data can be a source of estimating the impact of such initiatives over time. Here are some examples:

- Assessing the impact of learning communities by comparing responses of students enrolled in learning communities with their peers who are not enrolled.
- Estimating the quality of intentional first-year programs by comparing NSSE responses of students participating in freshman interest groups, intensive freshman seminars, and orientation to college courses with their counterparts who are not in such programs.
- Assessing the quality of general education courses by examining students' responses to NSSE course emphasis and time-on-task items.
- Assessing the quality of the senior year by comparing responses to selected NSSE items of students enrolled in capstone courses and other special programs with students who don't have these experiences.
- Sharing NSSE data with advisors so that they can help their advisees better manage their time and use other academic resources.
- Incorporating NSSE results into relevant faculty and staff development workshops and retreats.
- Using student engagement as the theme for a campus-wide symposium and emphasizing the implications of NSSE results for teaching and learning initiatives and managing student culture.

Planning, Accountability, and Institutional Research

All regional accreditation associations require evidence of student learning, so it's no surprise that the vast majority of NSSE schools, about 85%, say they will likely use their results in self-studies and certification reports. This information is particularly powerful if NSSE results are corroborated by other institutional data such as the results from other national or local surveys, review of institutional records, and so forth.

Toward these ends governing boards, accrediting bodies, and state oversight agencies are using NSSE data for:

- Informing academic reviews and strategic planning processes related to teaching and learning.
- Developing campus and system indicators of institutional effectiveness.
- Meeting certain state performance indicator requirements related to persistence and graduation rates, general education, student learning, civic engagement, and customer satisfaction. For a good example, go to the Longwood College website (www.lwc.edu/assessment/NSSE_Summary.htm).
- Sharing data with peers (consortium) to better understand the nature of the student experience relative to peer institutions, such as is being done by the Association of American Universities consortium and a group of four public universities in Ohio.

Enrollment Management

NSSE data are also being used in enrollment management by providing more accurate and realistic descriptions of campus life to prospective students and parents. This information can help them formulate more specific questions to ask college officials about the student experience. Toward this end some schools are:

- Describing empirically-derived behaviors of the typical student in viewbooks and presentations to accurately convey expectations for college life to prospective students, parents and others.
- Using the NSSE survey as a template to guide discussions with newly matriculated students about activities that are important to succeeding in college.
- Linking first-year student NSSE data with sophomore fall enrollment records to discover student engagement factors that predict persistence, with an eye toward developing an early warning system to identify students at risk of premature departure. For an illustration of this, see the University of Wisconsin-Green Bay website (www.uwgb.edu/iresearch/NSSERetentionResearch_files/v3_document.htm).

Communicating Collegiate Quality to the Public

Finally, some schools are using their NSSE data to call attention to various dimensions of collegiate quality as an alternative to *U.S. News and World Report* and other media rankings by:

- Informing alumni of campus initiatives by sharing NSSE results through alumni newsletters, magazines, and websites.
- Incorporating NSSE data in parent newsletters and other publications to describe the undergraduate experience in terms of college activities, time usage, educational and personal growth, and satisfaction. Miami University and Brigham Young University are two such examples or sharing NSSE results in this way.
- Preparing stories for local, regional, and national media about distinctive aspects of the student experience.

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Closing Note

We hope these suggestions are helpful and welcome comments about how we can make this and other NSSE reports practical and relevant to your needs. We intend to regularly update the NSSE website with other examples about how schools are using their NSSE data as we learn about them. In that regard, please keep us informed about how you are using, or plan to use, your NSSE results.

Notes

[1]The NSSE 2001 overall sample size reported in the "Overview" does not include the additional students who were oversampled. Oversampling was done at Web-only institutions and at schools that requested more of their students be surveyed than dictated by the NSSE sampling strategy, which is a function of institutional size. The NSSE 2001 sample size including oversampling was 215,658.

[2] The 42% overall response rate for NSSE 2001 is comparable to the 42% response rate realized for NSSE 2000 and the 43% response rates realized in the 12-institution spring 1999 field test and the 56-instituiton fall 1999 pilot study. However, the NSSE 2001 response most likely underestimates the actual adjusted rate. Student postal service and e-mail addresses were based on fall 2000 enrollment information provided by the institutions. An unknown number of students in the sample were no longer eligible to complete the survey because they had dropped out or transferred to another institution. Even though first-class postage was used to guarantee the return of survey packets that could not be delivered, experience suggests that packets were not returned for some students who were no longer in school or living at the fall 2000 address. In addition, many students have multiple e-mail accounts (e.g., Yahoo, AOL, Hotmail) and do not routinely use their institution-assigned e-mail which is the electronic address where the invitation to participate in NSSE 2001 was sent to students attending Web-only schools. Therefore, the actual response rate for Web-only institutions, when corrected for the unknown number of students who were no longer in school or did not receive the invitation to participate, is probably several percentage points higher than 41%.

[3] The regression of each cluster of items on a group characteristic is net of the following student and institutional controls: class, residence, gender, enrollment status, race/ethnicity, age, major, parental education, 2001 Barron's admissions selectivity, sector, 1998-99 IPEDS undergraduate enrollment, IPEDS urbanicity, and 2000 Carnegie Classification.