A. Overview

Participation in the National Survey of Student Engagement (NSSE, pronounced “Nessie”) surveys has provided the opportunity for the University of Vermont to assess what its students feel about the quality of their UVM experience. Having participated in NSSE in both 2005 and 2002 makes it possible to examine not only the differences between our first year students and seniors, but also to view the changes in student perceptions over a three year time period.

The emerging overall perception that students have of their UVM experience is a positive one. Both UVM’s first year students and seniors show some remarkable improvements from 2002 to 2005 in many aspects, ranging from academic exploration and educational growth to time utilization.

B. Introduction

1. Background of National Survey of Student Engagement

NSSE has been collecting data from students at U.S. four-year colleges and universities since 2000 “to assess the extent to which students engage in educationally effective activities” under the premise that “student participation in these activities at reasonable levels is a meaningful proxy for collegiate quality.” The survey provides reliable and valid information on the quality of the undergraduate student experience in hopes to:

- Refocus conversations about undergraduate quality to what matters most;
- Enhance institutional improvement efforts;
- Foster comparative and consortium activity;
- Inform accountability; and,
- Provide systematic national data on “good educational practices”

The NSSE project was begun with a generous grant from The Pew Charitable Trusts. It is now sustained by grants from the Lumina Foundation for Education and the Center of Inquiry in the Liberal Arts at Wabash College in addition to institutional participation fees. It is co-sponsored by The Carnegie Foundation for the Advancement of Teaching and the Pew Forum on Undergraduate Learning.

During the 2005 spring semester, the University of Vermont was one of 529 colleges and universities that participated in NSSE. The survey was conducted through the Indiana University Center for Postsecondary Research. This is the second time the University of Vermont has administered the NSSE survey, having first participated in spring 2002.

In addition to providing the results for UVM first year and senior students, NSSE provides normative data from both Doctoral/Research Universities-Extensive (UVM’s
Carnegie Classification at the time the survey was administered) and a group of some of our peer-aspirant institutions that also participated in 2005.

It is important to note that the National Survey of Student Engagement was developed, in part, to provide an alternative assessment of students’ college experiences to the information provided by the various ranking systems found in publications such as America’s Best Colleges published by U.S. News & World Report.

2. The Survey Instrument

The NSSE survey instrument was available in two formats: an online web-based instrument or a paper-and-pencil version. UVM opted to use the online web-based version of the survey that also included a paper-and-pencil follow-up of a sample of non-respondents.

Either version of the NSSE survey instrument elicits student responses in eight general areas of student engagement:

a. The nature of the college activities in which students engage;

b. Institutional environments as measured by (a) the time and energy students dedicate to educationally purposeful activities and (b) the extent to which institutions emphasize the use of effective educational practices;

c. Student satisfaction with their college experience;

d. Course emphasis and educational programs -- a look at the kinds of intellectual and mental activities that institutions emphasize and the types of education programs in which students take part;

e. Involvement in community service and volunteerism;

f. Arts, wellness, and spirituality -- attendance or participation in fine and performing arts events, participation in exercise and physical fitness activities, and engagement in spiritual and religious activities in college;

g. Time on task, that is, how much time students put into their education as well as activities that may take away from their educational activities; and,

h. Educational and personal growth – student’s self-reported extent to which their college experience has contributed to their knowledge, skills, and personal development.
More specifically, the 2005 survey instrument was divided into the following fourteen content areas:

1. Academic & Intellectual Experiences ........................................ 22 items
2. Mental Activities ................................................................. 5 items
3. Reading & Writing ............................................................... 5 items
4. Problem Sets ................................................................. 2 items
5. Examinations ........................................................................ 1 item
6. Additional College Experiences ............................................ 6 items
7. Enriching Educational Experiences ......................................... 8 items
8. Quality of Relationships ...................................................... 3 items
9. Time Usage ........................................................................ 7 items
10. Institutional Environment ..................................................... 7 items
11. Educational & Personal Growth ............................................ 16 items
12. Academic Advising ............................................................. 1 item
13. Satisfaction ......................................................................... 2 items
14. Student Characteristics ......................................................... 15 items

In addition, there were a number of experimental questions (included only in the on-line version of the survey). The results of these items are not reported to the participating institutions. They are being tested for possible future inclusion in the survey.

3. NSSE 2005 Survey Administration

In the fall 2004, the University of Vermont identified 3,250 enrolled undergraduates who were determined to be likely to return as either a first year or senior student in spring 2005. From this group, NSSE staff drew our sample of 2,100. Early in spring 2005, UVM checked the enrollment status of these 2,100 students and found that 1,885 (90 percent) were in enrolled in the spring. The final sample consisted of 991 first year students and 894 senior students.

In February the full sample of 1,885 students received an email letter from President Fogel notifying them that they had been selected to participate in the NSSE survey and the importance of their participation. President Fogel’s letter was followed shortly by a postcard reminder from the University and the invitation email from NSSE. Students then received one reminder from President Fogel and three reminders from NSSE. Finally, NSSE administered a paper-and-pencil survey to a sample of non-respondents as a check on non-response bias.

Prizes totaling approximately $1,200 (an iPod, mini iPod, and twenty-two gift certificates ranging in value of $10 to $100) were offered as incentives to participate.

4. Response Rates and Profile of Respondents

Table 1 shows the response rates for the University compared to response rates received at a group of Selected Peer-Aspirant institutions, all participating Doctoral/Research-Extensive Universities, and all 529 institutions that participated in the 2005 NSSE survey.
Table 1

NSSE 2005 Response Rates* by Class for the University of Vermont vs. Selected Peers, Doctoral Research-Extensive Universities, and All 2005 Participant Institutions

<table>
<thead>
<tr>
<th></th>
<th>First Year</th>
<th>Seniors</th>
<th>All Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Vermont</td>
<td>38%</td>
<td>41%</td>
<td>39%</td>
</tr>
<tr>
<td>Selected Peers</td>
<td>30%</td>
<td>31%</td>
<td>30%</td>
</tr>
<tr>
<td>Doctoral/Research-Extensive</td>
<td>31%</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>All NSSE 2005 Participants</td>
<td>35%</td>
<td>38%</td>
<td>37%</td>
</tr>
</tbody>
</table>

* Response rate (number of respondents divided by sample size) is adjusted for non-deliverable emailing and mailing addresses.

The response rates experienced by UVM for first year, senior, and all students were higher than the average response rates for the other three groups of institutions for which we were provided with comparative data. The response rate for individual institutions ranged from a low of 8% to a high of 89%.

Table 2 on the next page provides a comparison of UVM’s 2005 NSSE population, sample, and respondents by college/school, residence, gender, and class year. The sample of first year and senior students that NSSE selected very closely resembles the population from which it was drawn, with one exception. UVM’s population consisted of 60% first year and 40% senior students. However, UVM’s sample was 52% first year students and 48% seniors, a distribution that more closely resembles the national split between first year students and seniors.

UVM’s respondents closely resembled the sample with a few exceptions. The biggest difference was between the percentage of males and females. While both UVM’s population and sample were 57% female, 67% of the respondents were female. However, this is not unusual. Females are more likely to respond to surveys than males. The percentage of females who responded in our three comparison groups ranged from 61% to 67%. Finally, there were slightly lower proportions of out-of-state students and business administration students in our respondents than were in our sample.

NSSE has also provided a comparison of UVM survey respondents to the respondents from the group of selected peers, Doctoral/Research-Extensive Universities, and all NSSE participant institutions. UVM’s respondents did differ from these other groups in several instances:

- UVM had higher proportions of White (non-Hispanic) students and a lower proportion of respondents who were Black/African American. This is not surprising given UVM’s relatively lower proportion of ALANA undergraduates.
- Ninety-eight percent of first year and ninety-nine percent of seniors at UVM completed a web version of the survey, substantially greater than at Doctoral/Research-Extensive Universities and all NSSE institutions.
UVM had substantially higher proportions of first year respondents living on-campus and senior respondents living off-campus.

UVM had a substantially lower proportion of senior respondents who would be defined as non-traditional, i.e., 24 years of age or older.

Table 2
A Comparison of UVM’s 2005 NSSE Population, Sample, and Respondents
By College/School, Class Year, Residence, and Gender

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and Life Sciences</td>
<td>10%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Arts and Sciences</td>
<td>52%</td>
<td>52%</td>
<td>53%</td>
</tr>
<tr>
<td>Business Administration</td>
<td>10%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Education and Social Services</td>
<td>10%</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Engineering and Mathematics</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Environment and Natural Resources</td>
<td>5%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Nursing and Health Sciences</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Year</td>
<td>60%</td>
<td>52%</td>
<td>50%</td>
</tr>
<tr>
<td>Senior</td>
<td>40%</td>
<td>48%</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vermont</td>
<td>32%</td>
<td>32%</td>
<td>36%</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>68%</td>
<td>68%</td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>57%</td>
<td>57%</td>
<td>67%</td>
</tr>
<tr>
<td>Male</td>
<td>43%</td>
<td>43%</td>
<td>33%</td>
</tr>
</tbody>
</table>

5. Response Rates and Profile of Respondents

The 529 institutions that participated in the 2005 NSSE was the largest number of participants since the survey’s inception in 2000. These 529 colleges and universities represented a broad range of four-year schools as defined by the 2000 Carnegie Classification system:

- Doctoral/Research-Extensive: 11%
- Doctoral/Research-Intensive: 8%
- Master’s I & II: 47%
- Baccalaureate-Liberal Arts: 19%
- Baccalaureate-General: 15%
The University of Vermont is a Doctoral/Research-Extensive institution. It is this group of schools, along with the group of selected peer-aspirant institutions, that will provide the most relevant and useful comparisons. Table 3 provides a list of the Doctoral/Research-Extensive institutions that participated in the 2005 NSSE survey.

Table 3
2005 NSSE Participant Institutions: Doctoral/Research Universities - Extensive

<table>
<thead>
<tr>
<th>Brigham Young University</th>
<th>Temple University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Western Reserve University</td>
<td>Texas A &amp; M University</td>
</tr>
<tr>
<td>Catholic University of America</td>
<td>Texas Tech University</td>
</tr>
<tr>
<td>Clemson University</td>
<td>University of Alabama, The</td>
</tr>
<tr>
<td>Colorado State University</td>
<td>University of Arkansas Main Campus</td>
</tr>
<tr>
<td>Florida State University</td>
<td>University of California-Davis</td>
</tr>
<tr>
<td>Georgia Institute of Technology</td>
<td>University of Cincinnati</td>
</tr>
<tr>
<td>Georgia State University</td>
<td>University of Connecticut</td>
</tr>
<tr>
<td>Indiana University-Bloomington</td>
<td>University of Delaware</td>
</tr>
<tr>
<td>Iowa State University</td>
<td>University of Denver</td>
</tr>
<tr>
<td>Kent State University</td>
<td>University of Georgia</td>
</tr>
<tr>
<td>Loyola University Chicago</td>
<td>University of Hawaii at Manoa</td>
</tr>
<tr>
<td>Miami University*</td>
<td>University of Idaho</td>
</tr>
<tr>
<td>Mississippi State University</td>
<td>University of Illinois at Chicago</td>
</tr>
<tr>
<td>Northeastern University</td>
<td>University of Kentucky</td>
</tr>
<tr>
<td>Ohio University</td>
<td>University of Louisville</td>
</tr>
<tr>
<td>Oklahoma State University</td>
<td>University of Maryland-Balt. County</td>
</tr>
<tr>
<td>Oregon State University</td>
<td>University of Maryland-College Park</td>
</tr>
<tr>
<td>Rutgers University-New Brunswick</td>
<td>University of Massachusetts-Amherst</td>
</tr>
<tr>
<td>Saint Louis University</td>
<td>University of Nevada - Reno</td>
</tr>
<tr>
<td>University of No. Carolina-Chapel Hill</td>
<td>University of Texas at Arlington, The</td>
</tr>
<tr>
<td>University of North Texas</td>
<td>University of Texas at Austin, The</td>
</tr>
<tr>
<td>University of Rhode Island</td>
<td>University of Vermont</td>
</tr>
<tr>
<td>University of So. Carolina-Columbia</td>
<td>University of Virginia</td>
</tr>
<tr>
<td>University of South Florida</td>
<td>University of Washington</td>
</tr>
<tr>
<td>University of Southern Mississippi</td>
<td>University of Wyoming</td>
</tr>
<tr>
<td>University of Tennessee, The</td>
<td>Wayne State University</td>
</tr>
</tbody>
</table>

*Miami University of Ohio is a Doctoral/Research-Intensive institution. It is included because it is considered a UVM peer-aspirant institution.

The institutions that have been shaded are a group of "Selected Peers", that is, a group of peer-aspirant institutions (or their proxies) that participated in the 2005 NSSE survey. The 2005 NSSE is the first time they have provided participating institutions the option of receiving comparative data on a user-defined list of peers.
6. Some Thoughts About Using the NSSE Data

There are several ways in which the NSSE data may be effectively used for making comparisons:

1. **Normative**: Compare UVM results with the normative data from the category of institutions that includes the University of Vermont, i.e., Doctoral/Research-Extensive institutions.

2. **Peers**: Compare UVM results with the data from a specific group of institutions most similar to UVM, i.e., peer and aspirant institutions.

3. **Criterion-Referenced**: Examine UVM’s results against an established goal or predetermined level that is determined to be appropriate or desirable for UVM. In the 2005 NSSE, for example, 86% of students say they had a good or excellent educational experience at UVM. Is this good enough or do we want it higher? What is our goal?

4. **Changes Over Time**: Look at the changes in UVM results over time, e.g., have we seen positive or negative changes from 2002 to 2005.

The data presented in the report prepared by NSSE is based upon the mean score on each question or the percentage distribution of responses to each value on the question (e.g., never-sometimes-often-very often; or poor-fair-good-excellent). Both mean item scores and percentage distributions are useful in all four comparison methodologies.

7. Findings from the NSSE Data

Sections C to F of this report will be devoted to looking at UVM’s NSSE results as follows:

1. Major findings for UVM from the 2005 NSSE survey. The focus in this section will be on items with very high statistical significance ($p<.001$) and/or items of particular institutional interest or importance.

2. Significant differences between UVM first year and senior students who participated in the 2005 NSSE survey.


A final note: Given the relatively large number of students in the three comparison groups and the relatively small number of UVM respondents, some care should be exercised in drawing definitive conclusions from the results. In addition, the magnitude of difference in statistically significant different mean scores may be relatively small, i.e., a difference of 0.2 between UVM’s mean score and the mean score for one of the comparison groups. In a number of instances the best use of some of the NSSE results will be to view the results from the criterion-referenced perspective.

These highlights of UVM’s 2005 NSSE survey focus on those items that address “big picture” issues (e.g., how students evaluate their entire UVM educational experience) or are of special interest to the campus community.

Figures 1 and 2 provide comparison of UVM students’ evaluation of their entire educational experience at UVM with the results for students at a group from our Selected Peer institutions and the students from the 52 other Doctoral/Research-Extensive universities that participated in the 2005 NSSE survey.

Figures 1 and 2
How Do First Year Students and Seniors Evaluate Their Entire Educational Experience?
[Where 1 = Poor and 4 = Excellent]

As the two graphs show, UVM’s first year and senior students mean (average) ratings are very close to the means of the two comparison groups and are not statistically different from them.

Figures 3 and 4 show UVM students’ response to another very important question: If you could start over again, would you go to UVM?” Again, UVM’s results are not statistically different than those of the two comparison groups.
Figures 3 and 4
If Students Could Start Over Again, Would They Attend the Same Institution?
[Where 1 = Definitely No and 4 = Definitely Yes]

There is a very encouraging message in the information presented in Figures 1 to 4. That is, just over 86% of our students rated their UVM educational experience as excellent or good and 81% said that they would “definitely” or “probably attend” UVM if they could start over again.

One interesting note: while both the means and the percentages for students reporting “probably yes” and “definitely yes” are slightly lower for seniors than first year students at UVM and the other two comparison groups, UVM experienced a slightly larger, but not significant, drop than did the two comparison groups.

Concerns about the quality of academic advising at UVM have been expressed. An item on the NSSE survey directly addresses this issue and provides data not only for UVM but also for our two comparison groups.

What becomes immediately obvious from the information in Figures 5 and 6 is that while UVM first year students rate their academic advising almost identically to their peers at our two comparison groups, our seniors rate their advising (statistically) very significantly better than their peers. While UVM’s first year and senior students rate their advising almost identically, we see a sizable drop off in the ratings of seniors at the schools in the two comparison groups.
Students Evaluate the Quality of Their Academic Advising

[Where 1 = Poor and 4 = Excellent]

While these results are encouraging for UVM, it does raise an important question. While 71% of our first year students and 70% of our seniors rate their academic advising “excellent” or “good”, we need to ask (a) whether that is good enough and (b) where do we want to be or what goal should we establish?

The NSSE Survey asks three very important questions about students’ relationships with faculty, other students, and administrative personnel and offices. Figures 7 to 9 present an overview of the findings on these three items.

Figure 7 compares UVM students’ ratings of the quality of their relationships with faculty. The ratings are on a seven-point scale, where 1 = Unavailable, Unhelpful, Unsympathetic to 7 = Available, Helpful, Sympathetic. Both UVM first year and senior students rated the quality of the relationships statistically significantly better than their counterparts at the selected peer and Doctoral/Research-Extensive institutions, with higher percentages of our students rating their faculty relationship a “6” or a “7”. This should not be surprising since UVM students rated their experiences with faculty higher in a number of areas statistically higher than students from our comparison groups.

These include: received prompt feedback from faculty on your academic performance; worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.); discussed ideas from your readings or classes with faculty members outside of class; talked about career plans with a faculty member or advisor; used email to communicate with an instructor.
Figure 7
Students Rate Their Relationships with Faculty
[Where 1 = Unavailable, Unhelpful, Unsympathetic and 7 = Available, Helpful, Sympathetic]

Figure 8 provides an evaluation of our students’ relationships with other UVM. Again, a seven-point scale is used, where 1 = Unfriendly, Unsupportive, Sense of Alienation to 7 = Friendly, Supportive, Sense of Belonging. It appears that our students rated their relationships with other UVM students at about the same level as, although slightly higher, their ratings of their relationships with faculty.

Figure 8
Students Rate Their Relationships with Other UVM Students
[Where 1 = Unfriendly, Unsupportive, Sense of Alienation and 7 = Friendly, Supportive, Sense of Belonging]
In this area, however, our first year student ratings, although slightly higher, are not statistically different than students at the other comparison schools. UVM seniors’ ratings of their relationships with other UVM students are statistically higher than their peers, though the magnitude of this relationship is not as large as the one experienced with the relationship of students with faculty.

It is very interesting to see that all students in the survey rate their relationships with administrative personnel and offices (Figure 9) lower than their relationships with faculty and other students. A seven-point scale was also used, where 1 = Unhelpful, Inconsiderate, Rigid and 7 = Helpful, Considerate, Flexible. Among first year students, UVM students seem to enjoy a warmer relationship with administrative personnel and offices than their counterparts at the peer and Doctoral/Research-Extensive universities. There is no statistical difference among the seniors.

**Figure 9**

**Students Rate Their Relationships with Administrative Personnel and Offices**

[Where 1 = Unhelpful, Inconsiderate, Rigid and 7 = Helpful, Considerate, Flexible]

Another important question on the NSSE survey asks students to tell us the extent to which their examinations during the school year challenged them to do their best work. On a scale of 1 to 7, where 1 = Very Little to 7 = Very Much, UVM first year and senior students gave a very similar assessment (5.35 versus 5.27), but only first year students have scores that are statistically lower than their counterparts. [See Figure 10.]

It might be interesting to follow-up on this issue with an attempt to determine what UVM students see really challenges them to do their “best work”. Perhaps working with faculty or participating in service learning activities might be a greater incentive to doing their best.

When it comes to the emphasis UVM first year students and seniors see the school places on “spending significant amounts of time studying and on academic work” they had an average score of 2.92 and 2.91, respectively. [Figures 11 and 12.] A score of 3.0 means...
“quite a bit.”) Students from peer and Doctoral/Research-Extensive schools have statistically higher scores, ranging from 3.06 to 3.10.

Figures 11 and 12
College’s Emphasis on the Amount of Time Spent on Studying and Academic Work
[Where 1 = Very Little and 4 = Very Much]
However, when we look at the number of hours students say they spend preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities), we see relatively similar distributions of effort.

Figure 13
The Extent to Which First Year Students Say They Spend Preparing for Class: Studying, Reading, Writing, Doing Homework or Lab Work, etc.

Figure 14
The Extent to Which Senior Students Say They Spend Preparing for Class: Studying, Reading, Writing, Doing Homework or Lab Work, etc.
In addition, there is no statistically significant difference between UVM students and their counterparts in either the first year or senior level.

A possible measure of diversity is the NSSE survey question that asks if students have had a serious conversation with students of a different race or ethnicity than their own. As is evidenced by the data in Figures 15 and 16, UVM students are statistically significantly less likely to have serious conversations with students of a different race or ethnicity than their own. It should be noted that the mean scores and percentages reporting “often” or “very often” for UVM are higher than we experienced in our 2002 NSSE survey.

**Figures 15 and 16**

Have Students Had Serious Conversations with Students of a Different Race or Ethnicity Than Their Own?

*Where 1 = Never and 4 = Very Often*

In contrast to this finding, UVM students are very similar to their counterparts in the two comparison groups having had serious conversations with students who are very different from them in terms of their religious beliefs, political opinions, or personal values. This finding, along with the fact that UVM students responded very similarly to their counterparts about their perception of the university’s encouragement of contact among students from different economic, social, and racial or ethnic backgrounds, raises the need for a “critical mass” of racially or ethnically diverse student body in order to provide the opportunity for student interactions and conversations.
The National Survey of Student Engagement provides significant amounts of information and the opportunity to use that information for making changes. Data from the 2002 survey substantiated anecdotal information about the lack of student involvement in a variety of campus activities such as special speakers, cultural events, athletic events, etc. With this valuable quantitative information, UVM took actions to increase the number of events and activities, their quality, and ease of access for students (e.g., national experts speaking on campus; success in intercollegiate athletics along with establishment of special student sections). As a result, we saw dramatic increases in the student ratings of the emphasis UVM places on attending these kinds of events and performances.

**Figures 17 and 18**

**College’s Emphasis on Attending Campus Events and Activities**
(Special Speakers, Cultural Performances, Athletic Events, etc.)

*Where 1 = Very Little and 4 = Very Much*

**Figure 17**

**Figure 18**

**Figures 17 and 18** present the results from the 2005 NSSE Survey. The mean scores for UVM first year students and seniors both increased by a full half-point from the 2002 NSSE. The UVM first year scores went from 2.51 to 3.00; UVM seniors’ scores increased from 2.26 to 2.76. The percentage of UVM first year students who said that UVM’s emphasis on attending these activities was “very much” or “quite a bit” increased from 51.8% to 74.1%; for seniors, the increase went from 38% to 64.3%. The differences in UVM’s average mean scores compared to students at Doctoral/Research-Extensive institutions went from very statistically significantly lower to very statistically significantly higher.
D. Differences Between Fall 2005 First Year Students and Seniors at UVM

In this section we will take an in-depth look at the items with a strong significant difference between the UVM first year and senior students who participated in the 2005 NSSE survey. Given the difference in the number of years they have attended UVM, it should come as no surprise that seniors generally appear to be more informed and accomplished than first year students.

Regarding their Academic and Intellectual Experiences as well as some other types of College Experiences, seniors are much more likely than first year students to have:

- Asked questions in class or contributed to class discussions.
- Made a class presentation.
- 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.
- Put together ideas or concepts from different courses when completing assignments or during class discussions.
- Tutored or taught other students (paid or voluntary).
- Participated in a community-based project (e.g. service learning) as part of a regular course.
- Used e-mail to communicate with an instructor.
- Discussed grades or assignments with an instructor.
- Talked about career plans with a faculty member or advisor.
- Discussed ideas from their readings or classes with faculty members outside of class.
- Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.).

Seniors are also somewhat more likely than first year students to have:

- Worked with other students on projects during class.
- Received prompt feedback from faculty on their academic performance (written or oral).
- Worked harder than they thought they could to meet an instructor's standards or expectations.
- Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.).
- Discussed ideas from their readings or classes with others outside of class (students, family members, co-workers, etc.).
- Exercised or participated in physical fitness activities.
- Examined the strengths and weaknesses of their own views on a topic or issue.
- Learned something that changed the way they understand an issue or concept.
However, **seniors are somewhat less likely** than first year students to have serious conversations with students of a different race or ethnicity than their own.

Regarding the **Mental Activities required by their coursework**, **seniors are much more likely** than first year students to think that their coursework emphasized:

- Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships.
- Applying theories or concepts to practical problems or in new situations.

**Seniors are somewhat more likely** than first year students to think that their coursework emphasized:

- Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components.
- 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.

However, **seniors are somewhat less likely** than first year students to think that their coursework emphasized memorizing facts, ideas, or methods from their courses and readings so they can repeat them in pretty much the same form.

When it comes to the amount of **Reading and Writing** students experience, **seniors are much more likely** than first year students to:

- Have read more books on their own (not assigned) for personal enjoyment or academic enrichment than first year students.
- Written more papers or reports of at least 20 pages than first year students.
- Written more papers or reports between 5 and 19 pages then first year students.

**Seniors are much less likely** than first year students to have **Homework Problems** that take less than an hour to complete. However, there is no difference between seniors and first year students in having homework problems that take more than an hour to complete.

Both first year and senior students were asked about whether they have done or plan to undertake a number of activities before graduation that would be **Enriching Educational Experiences**. Because they have been enrolled at UVM for several more years and had more opportunities to partake in these experiences, it is not surprising that **seniors are much more likely** than first year students to have:

- Done or plan to do a practicum, internship, field experience, co-op experience, or clinical assignment.
- Done or plan to do community service or volunteer work.
- Participated or plan to participate in a learning community or some other formal program where groups of students take two or more classes together.
- Worked or plan to work on a research project with a faculty member outside of course or program requirements.
- Taken or plan to take foreign language coursework.
- Studied or plan to study abroad.
- Done or plan to do an independent study or self-designed major.
- Done or plan to do a culminating senior experience (capstone course, thesis, project, comprehensive exam, etc.)

There are several areas in which seniors and first year students differed in their Usage of Time. Seniors are much more likely to spend more time working for pay off campus than first year students and somewhat more likely to spend more time providing care for dependents living with them (parents, children, spouse, etc.) than first year students. However, they are somewhat less likely to spend time relaxing and socializing (watching TV, partying, etc.) than first year students.

Students were asked to indicate the extent that UVM emphasized selected activities or student support (Institutional Environment). The results show that:

- Seniors are much more likely than first year students to believe that UVM emphasizes using computers in academic work.
- However, seniors are much less likely to believe that UVM emphasizes (a) providing the support they need to thrive socially and (b) attending campus events and activities (special speakers, cultural performances, athletic events, etc.).
- Seniors are also somewhat less likely to believe that UVM emphasizes contact among students from different economic, social, and racial or ethnic backgrounds and helping them cope with non-academic responsibilities (work, family, etc.).

Students were asked to indicate how much they believe UVM contributed to both their Educational and Personal Growth in a number of areas. It is not surprising that seniors are more likely to feel that their experiences at UVM had more contributions to their overall educational and personal growth.

- Seniors are much more likely than first year students to believe that their UVM experience aids them in: writing clearly and effectively; thinking critically and analytically; and working effectively with others.
- Seniors are somewhat more likely than first year students to believe that their UVM experience aids them in: acquiring job or work-related knowledge and skills; speaking clearly and effectively; using computing and information technology; and learning effectively on their own.

Interestingly, no statistically significant differences were found between first year students and seniors in the following areas:
- The extent that their examinations during the current school year challenged them to do their best work.
- The quality of their relationships with other students, faculty, and administrative personnel and offices.
- The quality of their academic advising at UVM.
- The evaluation of their entire educational experience at UVM.
- Their decision to attend UVM if they were to start over again.

E. Significant Differences Between Fall 2002 and Fall 2005 First Year Students

Perhaps, the changing times have brought about an increased sense of involvement and awareness in our 2005 first year students from was evident in our 2002 first year students. The current first year students are likely to be more active in class. There is a broader participation in reaching across to peers of different races, in volunteering for community services and voting in elections. More importantly, there is a strengthening belief that UVM will help students cope with their responsibility and thrive socially; and that their UVM experience will ultimately benefit their educational and personal growth.

However, there are a few areas that may merit further evaluation. First year students in 2005 are likely to feel less challenged to do their best work by their examinations, less connected to administrative offices and personnel, and less in touch with themselves than 2002 students.

The following is a list of items where we found statistically significant differences between our fall 2002 and fall 2005 first year students.

**First year students in 2005 are either much more or somewhat more likely than 2002 students to:**

- Ask questions in class or contribute to class discussions.
- Have serious conversations with students of a different race or ethnicity than your own.
- Have taken a foreign language coursework.
- Spend more time commuting to class (driving, walking, etc.).
- Believe that UVM encourages students’ attendance at campus events and activities (special speakers, cultural performances, athletic events, etc.)
- Believe that UVM emphasizes providing the support they need to thrive socially.
- Believe their UVM experience has contributed to their voting in local, state, or national elections; speaking clearly and effectively; analyzing quantitative problems; and working effectively with others.
First year students in 2005 are either much less or somewhat less likely than 2002 students to:

- Have written papers or reports of 5 pages or less. *[It seems that there has been a general reduction in the number of writing assignments from 2002 to 2005, though only the number of written reports fewer than 5 pages is statistically significantly different between the two groups.]*
- Report that examinations during the current school year challenged them to do their best work.
- Find relationships with administrative personnel and offices helpful, considerate or flexible.
- Spend time socializing (watching TV, partying, etc.) than 2002 students.
- Believe their UVM experience aids them in learning effectively on their own or aids them in understanding themselves.

Again, it is interesting to note *that no statistically significant differences* were found between 2002 and 2005 first year students in the following areas:

- The quality of their relationships with other students and faculty.
- The quality of their academic advising at UVM (but 2005 average score higher than 2002).
- The evaluation of their entire educational experience at UVM (but 2005 average score same as 2002).
- Their decision to attend UVM if they were to start over again (but 200 average score higher than 2002).

**F. Significant Differences Between Fall 2002 and Fall 2005 Seniors**

As in the case of first year students, UVM seniors exhibit a broad range of improvements from 2002 to 2005. In the academic realm, 2005 seniors are more likely than their 2002 counterparts to synthesize ideas from diverse sources. They are also more likely to have participated in a community-based project (e.g., service learning) as part of a regular course. Where time usage is concerned, 2005 seniors are likely to spend less time watching TV or partying and more time participating in co-curricular activities. There is also a firmer belief in UVM’s role as a guiding force in their life to provide the framework with which to tackle their personal problems, social integration, and their future education.

However, it is not clear why 2005 seniors are less likely than 2002 seniors to believe their UVM experience aids them in understanding themselves.
Seniors in 2005 are either much more or somewhat more likely than 2002 seniors to:

- Include diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments.
- Put together ideas or concepts from different courses when completing assignments or during class discussions.
- Participate in a community-based project (e.g. service learning) as part of a regular course.
- Receive prompt feedback from faculty on their academic performance (written or oral).
- Have participated in a learning community or some other formal program where groups of students take two or more classes together.
- Have taken foreign language coursework.
- Spend more time participating in co-curricular activities (organizations, campus publications, student government, social fraternity or sorority, intercollegiate or intramural sports, etc.).
- Spend more time commuting to class (driving, walking, etc.).
- Spend less time relaxing and socializing (watching TV, partying, etc.).
- Believe that UVM encourages students’ attendance of campus events and activities (special speakers, cultural performances, athletic events, etc.)
- Believe that UVM emphasizes helping students cope with their non-academic responsibilities (work, family, etc.)
- Believe that UVM emphasizes providing the support students need to thrive socially.
- Believe their UVM experience aids them in voting in local, state, or national elections.
- Believe their UVM experience aids them in acquiring a broad general education.

Seniors in 2005 are either much less or somewhat less likely than 2002 seniors to:

- Believe their UVM experience aids them in understanding themselves.

As with the previous groups, no statistically significant differences were found between 2002 and 2005 seniors in the following areas:

- The extent that their examinations during the current school year challenged them to do their best work.
- The quality of their relationships with other students, faculty, and administrative personnel and offices.
- The quality of their academic advising at UVM (but 2005 higher than 2002).
- The evaluation of their entire educational experience at UVM (but 2005 same as 2002).
- Their decision to attend UVM if they were to start over again (but 2005 higher than 2002).
G. 2005 NSSE Benchmarks Report

In addition to the standard report prepared the NSSE staff, they also publish a second later report, NSSE Benchmark Report. Using 39 of the 85 items on the 2005 NSSE survey, the NSSE staff has created five clusters or benchmarks of effective individual practice:

A. Level of academic challenge
B. Active and collaborative learning
C. Student-faculty interaction
D. Enriching educational experiences
E. Supportive campus environment

As with the standard report, this second report compares the results for the University of Vermont with our group of selected peers and the Doctoral/Research-Extensive institutions.

In four of benchmark areas, the University of Vermont’s benchmark scores are higher than those for our group of selected peers and the group of Doctoral/Research-Extensive institutions. UVM does very well on the student-faculty interaction, supportive campus environment, and level of academic challenge benchmarks and, to a slightly lesser degree, on the active and collaborative learning benchmark. The one exception: UVM does not fare quite as well on the “enriching educational experiences” benchmark, regardless of statistical significance. UVM’s relatively low rating on the “serious conversations with students of a different race or ethnicity” which is included in this benchmark may have had a significant impact on the score of this particular benchmark.

Definitions, graphs, and lists of benchmark items are displayed on the next five pages, one page per benchmark.
Benchmark #1: Level of Academic Challenge:

“Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance.” [NSSE description]

Items Related to Level of Academic Challenge:

- Preparing for class (studying, reading, writing, rehearsing, etc. related to academic program)
- Number of assigned textbooks, books, or book-length packs of course offerings
- Number of written papers or reports of 20 pages or more; number of written papers or reports of between 5 and 19 pages; and number of written papers or reports of fewer than 5 pages
- Coursework emphasizing analysis of the basic elements of an idea, experience or theory
- Coursework emphasizing synthesis and organizing of ideas, information, or experiences into new, more complex interpretations and relationships
- Coursework emphasizing the making of judgments about the value of information, arguments, or methods
- Coursework emphasizing application of theories or concepts to practical problems or in new situations
- Working harder than you thought you could to meet an instructor’s standards or expectations
- Campus environment emphasizing time studying and on academic work
Benchmark #2: Active and Collaborative Learning

“Students learn when they are intensely involved in their education and asked to think about what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students for the messy, unscripted problems they will encounter daily during and after college.” [NSSE description]

**Items Related to Active and Collaborative Learning:**

- Asked questions in class or contributed to class discussions.
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments
- Tutored or taught other students
- Participated in a community-based project as part of a regular course
- Discussed ideas from your readings or classes with other outside of class (students, family members, co-workers, etc.)
Benchmark #3: Student-Faculty Interactions

“Students learn firsthand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning.” [NSSE Description]

Item Related to Student-Faculty Interactions:

- Discussed grades or assignments with an instructor
- Talked about career plans with a faculty member or advisor
- Discussed ideas from your readings or classes with faculty members outside of class
- Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.)
- Received prompt feedback from faculty on your academic performance (written or oral)
- Worked or planned to work with a faculty member on a research project outside of course or program requirements
Benchmark #4: Enriching Educational Experiences

“Complementary learning opportunities in and out of classroom augment academic programs. Diversity experiences teach students valuable things about themselves and others. Technology facilitates collaboration between peers and instructors. Internships, community service, and senior capstone courses provide opportunities to integrate and apply knowledge.” [NSSE description]

Items Related to Enriching Educational Experiences:

- Participating in co-curricular activities (organizations, publications, student government, sports, etc.)
- Practicum, internship, field experience, co-op experience, or clinical assignment
- Community service or volunteer work
- Foreign language coursework and study abroad
- Independent study or self-designed major
- Culminating senior experience (comprehensive exam, capstone course, thesis, project, etc.)
- Serious conversations with students of different religious beliefs, political opinions, or personal values
- Serious conversations with students of a different race or ethnicity
- Using electronic technology to discuss or complete an assignment
- Campus environment encouraging contact among students from different economic, social, and racial or ethnic backgrounds
- Participate in a learning community on some other formal program were groups of students take two or more classes together
Benchmark #5: Supportive Campus Environment

“Students perform better and are more satisfied at colleges that are committed to their success as well as the working and social relations among different groups on campus.” [NSSE description]

Items Related to Supportive Campus Environment:

- Campus environment provides the support you need to help you succeed academically
- Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)
- Campus environment provides the support you need to thrive socially
- Quality of relationships with other students
- Quality of relationships with faculty members
- Quality of relationships with administrative personnel and offices
H. Next Steps

Now that the data and information have been received and analyzed, the next step is to determine how best to use this information. Presentations have been made to the Provost’s Senior Leadership Group, the Deans’ Council, the Academic and Student Programs Committee of the Board of Trustees, and the Student Experience Strategic Enrollment Task Force. Another presentation has been scheduled for Mastering the Maze in March. The standard NSSE reports and several of the presentations have been listed on a password-only basis on the Office of Institutional Studies web site.

The NSSE staff has offered a series of steps for using this information:

1. Determine if current levels are satisfactory (normative, peer or criterion referenced comparison).
2. Discover current levels of engagement (institution, college or school, major field, year in school).
3. Target areas for improvement.
4. Modify programs and policies accordingly.
5. Teach students what is required to succeed.

The university will also need to establish its priorities on what areas it most needs to place its efforts. There are a number of internal campus issues for which these data can brought to bear, primarily directed at institutional improvement.

Some suggested internal campus uses are:

1. Gauge status of campus priorities.
2. Examine changes in student engagement between first and senior years.
3. Assess campus progress over time.
4. Encourage dialogue about good practice.
5. Link with other data to test hypotheses, evaluate programs.
6. Improve curricula, instruction, and services involving:
   - Academic advising
   - Academic affairs
   - Enrollment management
   - Faculty development
   - First year and senior experience
   - Institutional research
   - Learning assessment
   - Learning communities
   - Peer comparisons
   - Student affairs
There are also a number of suggested external uses, primarily in the area of public accountability, for which this information can be helpful:

1. Assess status vis-à-vis peers, competitors.
2. Identify, develop, and market distinctive competencies.
3. Provide evidence of accountability for good processes, while awaiting improvement in outcomes through outcomes assessment.

The focus of these external applications can include:

- Accreditation, especially outcomes assessment
- Alumni
- Fund raising
- Governing boards
- Media
- Parents
- Performance indicators
- Prospective students
- State policy makers

As an additional aid in generating ideas at how these data may be used, NSSE has developed a series of example case studies developed from their Documenting Effective Educational Practices (DEEP) project. They provide concrete examples of how institutions have affected improvements in the quality of the student experience by, and for, a number of difference constituencies. The titles of these briefing papers are:

1. What Campus Leaders Can Do
2. What the Media and the General Public Need to Know
3. Creating Conditions So Every Student Can Learn
4. The Importance of Shared Leadership and Collaboration
5. What Student Affairs Can Do
6. What Faculty Members Can Do
7. Using Financial and Other Resources to Enhance Student Success
8. What Student Leaders Can Do
9. Small Steps Campuses Can Take
10. What Department Chairs Can Do
11. What Advisors Can Do
12. What New Faculty Need to Know
13. Making Place Matter to Student Success
14. What SHEEO's and System Heads Can Do
15. What Accreditation Teams Can Do
16. What Business Leaders Can Do

Copies of these briefing papers are available upon request from the Office of Institutional Studies or at the following web site:  http://nsse.iub.edu/institute/index.html
I. Closing Comment

The National Survey of Student Engagement is proving to be a critical instrument to assess the quality of the student experience at the University of Vermont, how it has changed over time, and how we compare with similar institutions. Its ultimate value, however, will be determined by the extent to which its findings are used to continue the improvement of the experiences students have at the University of Vermont.

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