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To: Council of Academic Deans
Department Chairs

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Provost

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Re: **Reports on the Use of the National Study of Student Engagement (NSSE) Data and the Creation of Learning Communities**

I want to thank the chairs for the reports on how their departments make use of the NSSE data. I also appreciated the fact that some of the deans provided detailed summaries of how the departments in their colleges made use of the NSSE data. I will return to some of those summaries below. First, let me review what the assignment was and then explain why we will continue to collect and use the NSSE data set.

I asked that each department answer four basic questions, using the NSSE data set. If the sample was too small to generalize at the departmental level, college-level data were to be used. I also asked chairs to involve students in the discussions about the meaning and interpretation of the data. The four questions were:

1. Identify one student behavior to be changed. Note how the behavior is to be changed and indicate how you will determine if it has.
2. Identify one faculty behavior to be changed. Note how it will be changed and how you will determine if it has.
3. Note which of the 7 Principles of Good Practice in Undergraduate Education are best exemplified in your department. What is the evidence to support this?
4. Which of the 7 Principles deserves greater attention?

One goal of this exercise was to learn from one another by sharing best practices across the University. The activities that contribute to student engagement are a primary means to creating academic community. Another goal was to address directly two areas of concern for the institution: engagement and rigor. The reason is straight forward. Higher levels of student engagement, as measured by the NSSE scales, lead to higher levels of student success (e.g., reported satisfaction with their experiences in and outside of the classroom, higher retention rates, etc.) The NSSE scales are grounded in the 7

Principles, which serve as proxies for actual learning. For instance, the principle which focuses on setting high expectations is measured in a number of ways in the NSSE data, e.g., number and length of writing assignments, number of assigned readings, required reports, and so forth. Rigor is a two-way street with faculty expected to set high expectations, and students expected to meet them. Normally students do meet high standards, when they are clearly articulated and when the assignments are crafted to help them meet the standards that have been set.

The NSSE data set are also part of the larger assessment effort for the University. Assessment is not simple and most of us have on occasion found it frustrating. It's challenging because it requires the clear articulation of goals, usually learning outcomes, and requires us to match actions against measurable outcomes. Assessment requires the collection and analysis of data and it requires us to use the data to improve our actions. Let me provide an example from my own field, sociology. If I have decided the learning outcome for my course is that students will become more active citizens, then several things must happen:

- I must define what it means for a student to be an active citizen. Perhaps it's only voting, but I would want to move beyond that to include the development of a sense of responsibility for other people and a recognition that community and democracy are not just concepts but things which must be actively created. (I would choose reading assignments, writing assignments, and a service-learning requirement to help students acquire the learning outcome I've identified.)
- Then, I must measure whether or not students actually achieve the goal I have set. It does not do for me to point to the assignments and claim that because I have given the assignments that the students are now good citizens. I've got to figure out a way to measure civic engagement. I could use the NSSE data set which asks students to report on such things as citizenship, or I could make up my own instrument.
- Then, once I have the data I must determine if I can be more effective in accomplishing my goal, especially if the students report they are focused only on issues relating to their own well being. This could require me to change the readings, the service-learning project, or some other aspect of the course.

The point I want to make is that a number of chairs reported that the students in their department were actively engaged in learning because of a number of good things the faculty in their departments do, e.g., serve as faculty advisors, take students on field trips, encourage students to give presentations at professional meetings, etc. And, indeed, these are good things to do and probably do lead to high levels of engagement. However, assessment requires that we ask the students what their experiences are. We may find out that what we think we were accomplishing (active student learning) is not what we are accomplishing. In short, a number of departments did not use the NSSE data to assess engagement. (That would be perfectly acceptable if the department has another valid and reliable instrument to use that focuses on levels of student engagement, the 7 Principles, and rigor.)

Let me highlight some of the college-level summaries and approaches, so we can learn from one another.

College of Agriculture. The college decided they would poll all students in agriculture using the NSSE questionnaire, because of the original small sample. Once the data were reviewed, it was determined there was opportunity for improvement in terms of communicating high expectations for all courses and programs to the students (faculty behavior), and in helping students meet those expectations. The college also created their own rigor survey with help from Institutional Research to assess student perceptions of how rigorous a particular course or program of study was. Individual faculty were then provided with confidential data about how students perceived their courses. Change will be measured by using the same questionnaires (NSSE and rigor survey) in the future.

The college assessed the ways in which it best engaged students and identified three of the 7 Principles that reflected their particular strengths:

1. Encouraged faculty student contact.
2. Encouraged cooperation among students.
3. Encouraged active learning.

College of Business. The NSSE data were reviewed by a focus group and it was determined that a faculty practice that needed to be changed was prompt feedback. The information was shared with all faculty members, who were puzzled by the student responses, because they felt they were giving prompt feedback. However, when the students were queried, it became clear that what the students wanted was not just an early posting of grades (which is what the faculty were doing), but early explanations about their scores, e.g., why was a response right or wrong, and feedback on such things as end of the semester projects, in-class presentations, etc. Thus, the college chose to focus on changing faculty behavior by providing not only early but meaningful feedback. They chose to improve the student practice of working with other students, by reinstating a peer mentoring program. Follow-up data will be provided.

College of Behavioral and Social Sciences. All chairs did a very good job of explaining how students are engaged by reference to the practices of the faculty; some chairs reported on activities that were intended to show that the department supported one or more of the 7 Principles; others reported on departmental conversations that grew out of review of the NSSE data, with illustrations about what they could do to improve level of engagement, e.g.:

1. Introduce a service-learning requirement.
2. Require students in freshman courses to become involved in a novel community experience.
3. Encourage participation in departmental academic clubs.
4. Use WebCT to provide immediate feedback on grades.
5. Encourage group activities in and outside of the classroom.

One department focused specifically on the writing skills of their students. The School of Social Work enlisted the help of a graduate student in English and the Director of the University Writing Center, Mark Hall, to conduct two three-hour workshops for the faculty to improve their ability to assist students with writing. By all accounts, this was a very successful endeavor and chairs interested in a similar approach should contact Mark Hall.

I believe it is fair to say that the reports from the College of Behavioral and Social Sciences varied greatly in terms of what the chairs understood the assignment to be. (Please see above.) Because the College is a leader on the campus in the ways it engages students; because it plays a central role in University efforts to help our students become good citizens; and because it plays a major role in outreach activities to the North State, which are related to student engagement, it is essential that the College adequately address the NSSE data and complete the work requested. This will be a major goal for the college this coming year.

College of Communication and Education: Several departments used the NSSE data to initiate a conversation about faculty and student practices and engaged the students (as requested) in interpretation of the data. In general, the reports provide exceptional examples of how best to use the NSSE data, and provide good models for the creation of real learning communities. I will share the best of these examples with all of the chairs and deans. To give you some flavor of what was done, let me refer to two of the reports: one from the Liberal Studies and one from the Department of Recreation and Parks Management.

1. Liberal Studies. Faculty and students came together to discuss NSSE data relating to advising, the climate for diversity, academic rigor, and faculty-student interaction. Questions were posed for each of these major areas in terms of behaviors of the faculty and behaviors of the students that needed to be changed if, for example, the goal was to improve academic rigor. Another related question was also asked, “What actions does the program need to take if we want to improve rigor, or students’ time on task?” For academic rigor, the behaviors the faculty want the students to change involve:
 - a. Scheduling specific times to study.
 - b. Encouraging group study sessions.
 - c. Identifying the best environments in which to study.

The behaviors that faculty were asked to consider changing, to help students improve time on task were:

- a. Provide study guides.
- b. Implement effective practices to hold student interest.
- c. Be prepared for class.
- d. Set and communicate high expectations, without raising undue anxiety.
- e. Communicate enthusiasm for subject matter.
- f. Develop positive rapport with students.
- g. Use modes of assessment other than quizzes and tests.

2. Department of Recreation and Parks Management: The department, which has used NSSE data since 2004, compared the difference between freshman and seniors on the scales and compared the NSSE results with the department's own Senior Summit Survey. As a result the department decided they would strengthen further their mentor-advising system, and begin mandatory advising for all new majors in the fall of 2005. The NSSE data were shared with more than 70 students, who were completing their capstone experiences and were asked: 1) "What does the term academic rigor mean to you?" Students defined rigor in at least three different ways:
 - a. Academic rigor is defined by challenging course assignments, which for many meant a clear relationship between course assignments and success in a future career. Work not related to future goals was seen as "busy work."
 - b. Academic rigor is a set of behavioral characteristics that some students exhibit, e.g., studying and working hard.
 - c. Academic rigor is determined by the high expectations set by the faculty.

These findings will continue to be discussed by the faculty as assessing whether or not the curriculum helps to prepare students for success in their chosen careers.

College of Engineering, Computer Science, and Construction Management. All of the departments used the NSSE data, and one also used the data from the NSSE Faculty Inventory Survey, to answer the four questions posed by me. There were variations across departments in terms of the student and/or faculty behavior they wished to change, and how they would determine if change had occurred. Let me provide an overview. (I will share one or two of the departmental reports with you.)

1. Student behavior to change:
 - a. Reluctance to ask for help and come to office hours.
 - b. Coordination and completion of tasks for senior projects, so that work which needs to be completed in the first semester is not completed until the second. Stronger advising will be used to help students.
 - c. Improve attitude toward academics.
 - d. Classroom attendance.
2. Faculty behaviors to change:
 - a. Implement the automatic checking of prerequisites to assist advisors.
 - b. Give prompt feedback.
 - c. Provide more effective feedback.
3. Which of the 7 Principles does the department need to do a better job implementing?
 - a. Respect diverse ways of knowing and learning.
 - b. Give prompt feedback.
 - c. Set high expectations.
4. Which of the 7 Principles are exemplified by departmental practices?
 - a. Emphasizing time on task.
 - b. Encouraging active learning.
 - c. Encouraging faculty-student contact.
 - d. Communicating high expectations. (Note that what one department saw as strength, another saw as an area for improvement.)

5. Other. One chair noted that he felt there was an important element missing from the 7 Principles, viz, the need to know or intellectual curiosity. He gave a personal example of building rockets when he was a boy and deciding he needed to be able to calculate just how high his rocket had flown, after a successful launch. That desire to know “how high” lead him to his protractor, tape measure, and volume “T” of the family’s encyclopedia. This example raises an interesting question about whether or not intellectual curiosity can be taught. Certainly the teaching of K-12 science is grounded in that premise. Is intellectual curiosity the goal of higher education and if it is, how would we measure it?

College of Humanities and Fine Arts. All departments addressed the NSSE data, although not all departments involved students in the conversations. I recommend strongly that this be done when new data sets are available. The chairs decided that the focus of the College for 2005-06 would be academic rigor and identified six actions to take concerning both faculty and student behaviors:

1. Make it clear to students that they are responsible for their own learning.
2. Hold students accountable for assignments, attendance, etc.
3. Learn the names of students quickly and use them.
4. Encourage students to meet with the professor outside of the class.
5. Communicate with students before the semester, using the portal.
6. Provide clear information about expectations, as well as clear explanations for how to meet them.

Departments approached implementation of these recommended actions differently. All responded to the questions posed by me, but in a variety of ways. I’ll provide some examples. First, in focusing on rigor departments chose a variety of means:

1. Revised writing intensive courses, and introduced writing assignments in courses where there were none previously.
2. Revised course syllabi to assure greater rigor, e.g., high standards, time on task, etc.
3. Questioned students about the means of academic rigor and implemented, or are implementing, means to address student concerns, e.g., busy work.
4. Encouraged all faculty to use fully the first day of class to review expectations.
5. Set specific departmental goals for learning names of students and using the names.
6. Sent letter to all students beginning the major.

The departments all detailed answers to questions such as, “Which of the 7 Principles best exemplifies work done in your department?” Given the rich detail provided I will not try to summarize the responses here; rather, I will select 2-3 of the best examples to circulate among all deans and chairs.

Dean Blackstone provided a summary of her observations and recommendations from the college chairs, which are worth noting:

1. Active learning that recognizes varied learning styles takes time and energy by students and faculty, and both are in short supply.

2. The University's assessment effort has focused a good deal of attention on matters related to engagement and rigor and will help the entire University improve in this area.
3. Departments that regularly engage students in academic-related out-of-class experiences report higher levels of both student and faculty satisfaction.
4. Department across campus need to build on the skills introduced in the GE courses, e.g., communication skills, written skills, quantitative reasoning, critical thinking, so students can practice those skills throughout their educational experience.
5. A diversity of approaches to student engagement is necessary.
6. Using the NSSE data at the department level is less effective than using it at the college level, because of the size of the data set.

I will add a couple of my own observations below.

College of Natural Sciences: All departments and the School of Nursing addressed the NSSE data, which of the 7 Principles were exemplified by actions the department took, and which they would try to improve. Students were engaged in the conversations in most of the departments. A very useful summary of the actions to be taken by each department to improve student engagement by changing faculty and student behavior was provided, as were summaries of which principles were exemplified, and which needed to be changed.

1. Faculty behaviors to change.
 - a. Biology. Learn student names.
 - b. Chemistry. Increase advising interactions with both faculty and peer advisors.
 - c. Geosciences. Make class more relevant to the contemporary environment.
 - d. Mathematics. Increase student-to-student engagement.
 - e. Nutrition. Improve academic and professional advising.
 - f. Nursing. Engage students during the pre-nursing phase of course work.
 - g. Physics. Improve student perception of prompt feedback.
2. Student behaviors to change.
 - a. Biology. Increase out of class time spent on learning material.
 - b. Chemistry. Increase advising interactions with both faculty and peer advisors.
 - c. Geosciences. Increase out of class time spent on learning material.
 - d. Mathematics. Come to class better prepared (student suggestion).
 - e. Nutrition. Seek advising early in program.
 - f. Nursing. Come to class better prepared.
 - g. Physics. Make better use of faculty office hours and problem-solving sessions.
3. Principles exemplified.
 - a. Encourages active or "hands on" learning. (This was identified by all units in the college as a positive trait.)
 - b. Sets high expectations.
 - c. Emphasizes time on task.
 - d. Encourages faculty and student and student-to-student interaction.
4. Principles to embrace:
 - a. Respect diverse ways of knowing and learning.
 - b. Encourage faculty and student and student-to-student interaction.

- c. Communicate high expectations.
- d. Providing prompt and meaningful feedback on assignments and projects was identified as an important objective by most of the departments.

The Dean's summary of what the rest of the University can learn from the college is that "students need to be engaged in relevant 'real-world' problem solving situations." The Dean Houpis also provided some other suggestions for consideration:

1. The theme of opening lines of communication between faculty and students is of sufficient importance to consider offering faculty development to learn how to do this.
2. As the faculty are uniform in expressing a desire that students spend more time outside of the classroom on course work, the University needs to provide a uniform and clear position concerning academic rigor.
3. Departments have focused on their majors in addressing the NSSE data. The examination of engagement needs to be extended to non-majors.
4. Each department and college needs to continue to talk to students about engagement and to work across colleges to address problems of student engagement. In short, we should not lose the momentum we have gained.

Summary observations and the 2006-2007 Year.

Overall, departments did a very good job of addressing the four questions. However, few departments were in any position to answer, "How will you know that you have been effective in changing the student behaviors you identified and how will you know you have been successful in changing faculty behavior?" We need to keep these questions before us, as part of our assessment effort to determine how best to help our students achieve the goals we set for them.

At the end of this academic year, I will ask each chair to report, through the dean, on the progress made toward implementing the goals set by each department. I will be interested in the data you have collected on both student and faculty behavior, even if the data is very preliminary. We will also have a new set of NSSE data, which I will ask you to share with your faculty and with the students. I will want to know how you have involved students in conversations about academic engagement and rigor. I will want the material, in summary form from the dean by May 1. The deans will set deadlines after a conversation with you. You will need to address four questions:

1. What information do you have that will allow you to answer the question, "Are we being successful in changing student behavior?"
2. What information do you have that will allow you to answer the question, "Are we being successful in changing faculty behavior?"
3. How have you involved students in conversations (that are based on data) about academic rigor and engagement?
4. Based on discussions with the students, what do we need to do at the all-University level to improve student engagement and rigor?
5. What can colleges/faculty do to help students locate and habitually use good times/places to study?

Why are we doing this? We are seeking effective ways to build learning communities that are central to the values and mission of the University. We seek to build learning communities because they create an environment that helps students to master subject matter, to grow intellectually, and to become active and engaged citizens.

We have already learned some important things from one another. We have learned that active learning in-and-outside the classroom is very effective. We have learned that breaking down barriers to communication between professors and students is essential to student success, and to faculty satisfaction. We have learned that if we want our students to be engaged citizens, we must provide them with opportunities for ethical growth and involvement in real leadership opportunities. There is no right or wrong way to go about building learning communities; it will vary by department and college. What we must do is to continue the dialogue and share our experiences in an open and positive manner, which is what assessment is all about.

Thank you for your help with this important project.