Improvement Dimension Report Stony Brook University

Foundations Institutions conduct assessment and maintain associations with other institutions and relevant professional organizations in order to achieve ongoing first-year improvement. This assessment is specific to the first year as a unit of analysisâ€″a distinct time period and set of experiences, academic and otherwise, in the lives of students. It is also linked systemically to the institutions' overall assessment. Assessment results are an integral part of institutional planning, resource allocation, decision-making, and ongoing improvement of programs and policies as they affect first-year students. As part of the enhancement process and as a way to achieve ongoing improvement, institutions are familiar with current practices at other institutions as well as with research and scholarship on the first college year.

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<u>Current Situation</u>
<u>Opportunities and Challenges</u>
Sources of Evidence

IMPROVEMENT SUBCOMMITTEE REPORT FINAL

Improvement Committee membership included: Dr. Leonie Huddy, Professor of Political Science and Director of the Center for Survey Research (co-chair); Marianna Savoca, Director of the Career Center (co-chair); Dr. Petar Djuric, Professor of Electrical Engineering; Dr. Andrew Gouldstone, Assistant Professor of Engineering Science; Dr. Eugene Katz, Professor and Director of Undergraduate Biology; Diana Voss, Manager, Instructional Computing Services; Dr. Nora Galambos, Associate for Institutional Research; Navneet Singh, Undergraduate Student.

The Improvement Committee interviewed representatives from the following departments:

The University's Academic Assessment Committee; Office of Institutional Research; Vice President of Student Affairs; Center for Survey Research; Department of Teaching, Learning, Technology; Undergraduate Colleges; Chemistry; Biology; History; Mathematics; Writing Program; Psychology; Office of Orientation & Family Programs.

ASSESSMENT GENERAL OBSERVATIONS: A clear message emerged from our work: Stony Brook University seems to be data-rich and analysis poor, and where analysis exists, it is not widely distributed or readily accessible to the campus community. Few individuals on the campus are aware of what data is being collected by whom, and fewer know who uses data to inform and improve practice.

Academic departments offering large survey courses enroll students from all class years, and do not intentionally create assessments targeting first year students. In these large survey courses, instructors rarely know each student individually, and we did not find a large survey course that targeted students in different class years for different assessments. One interviewee expressed frustration over the lack of resources and support for such practices, and another lamented the systems problem - pre-requisites are not enforced in SOLAR resulting in students enrolling in our courses (freshmen and others) who are unprepared for the level of work expected. According to the faculty survey, it seems that course evaluations influence faculty work with first year students the most; less used factors are: demographic information, pre-enrollment academic skills, academic skills measured after one semester, or measures of time spent studying.

Through our interviews, we learned that some assessment is taking place in some departments to some degree. A campus-wide assessment committee was initiated in 1999 through the Provost's office. Twelve courses in four categories of general education requirements are assessed each year., The instrument is designed by faculty. While clearly the Provost's office and perhaps the Deans are aware of this initiative, it does not appear that individual faculty members are cognizant of this committee's work, nor aware of what outcomes have been discovered and how results have been used for improvement. However, we also learned that in response to this SUNY assessment work, , the Dept of Teaching, Learning & Technology has been tapped to hire an assessment specialist that will work with departments on their efforts in the future.

SPECIFIC OBSERVATIONS:

ORIENTATION AND UNDERGRADUATE COLLEGES: The Stony Brook University Center for Survey Research (CSR) has conducted fall semester telephone surveys of randomly selected first-year students between the fall of 2000 and 2006. Surveys typically included roughly 200 resident and 200 first-year commuter students. In these surveys, questions are asked about advising, math placement, and orientation. The freshmen fall 2005 and a special spring 2006 survey are posted in the CPI and include questions about the undergraduate colleges, placement exams, and academic advising. In addition, the CSR also undertook a special assessment of retention in the spring of 2006, along with a study of all current first-year students. The retention study included students who had left SBU in their first year. Summaries of these studies follow.

SPRING 2006 - STUDENT RETENTION SURVEY In this survey, responses from a sample of 233 students who were enrolled in the spring of 2006 but not the fall (non-enrolled) is contrasted with responses from 211 students who were enrolled in both semesters (enrolled). Enrolled students were sampled from the entire universe of undergraduates enrolled in both semesters. An attempt was made to contact all non-enrolled students. Key findings are as follows:

• Differing levels of academic preparation play a key role in affecting the decision to leave Stony Brook. In the recent 2007 study, students who did not re-enroll in the following academic year had lower Stony Brook GPAs than enrolled students, were more likely to have taken a math course and found it too difficult, and were more likely to be on academic probation. [In an earlier survey conducted in the prior year (2005-2006), high school GPA and SAT math scores were lower among students who did not re-enroll in the spring of 2006 (in what would have been their second semester at SBU).]

• Performance differences between enrolled and non-enrolled students (in fall 2006) is further compounded by differences in their levels of motivation. More of the non-enrolled than enrolled students reported missing class and putting less effort into them. Of course, success and motivation are intricately connected and motivation could be influenced by improper placement leading students to become demoralized. It is thus difficult to know what comes first. At a minimum, this suggests the need to ensure that students' level of ability is carefully assessed before they are assigned to math classes, for example.

• In addition to effort and preparation, a sense of social isolation on campus plays an important secondary role in the decision not to return to Stony Brook. Students who did not re-enroll in the fall of 2006, were more likely to live off campus and off campus students are more likely to feel socially isolated at SBU. Those who did not re-enroll reported feeling more isolated, and were less satisfied with the quality of their social life. This helps to account for those students with a GPA at or above 3.0 who failed to return to Stony Brook (roughly a third of the non-enrolled).

• Finally, several facets of Stony Brook academic life also affect the decision to leave. Fully a quarter of non-enrolled students mention difficulty getting into their desired major and/or needed classes as a reason for not returning to SBU. This may reflect too few seats in specific majors such as engineering or it may indicate students who entered Stony Brook without realizing that they did not have the prerequisites to enter their major. Either way, it reflects an undesirable mismatch between student and institution. Enrolled and non-enrolled majors had roughly similar majors, but of those interested in a health field, a greater number of non-enrolled students were interested in something other than medicine. More of them also intended to major in business.

• In addition, non-enrolled students were more likely than enrolled students to say that classes were larger than they had expected, and tended to view their instructors as less concerned about them. Some of this disgruntlement is tied up with lower GPA, but the sense that instructors did not care about students lead to their decision to leave regardless of their GPA. This problem is undoubtedly compounded in large classes and suggests a need to reevaluate class size and the utility of extremely large classes.

SPRING 2006- FIRST YEAR EXPERIENCE This study was conducted towards the end of the spring semester in 2006 and included samples of all first-year students, including transfer students. It was also balanced to represent the views of commuters and residents. Students expressed clear satisfaction with some aspects of Stony Brook life such as the overall quality of education, and somewhat less satisfaction with other areas. Students report continued problems in gaining access to desired majors, class size, levels of concern among instructors, lower grades than expected, and higher work loads. In addition, commuters continue to feel more socially isolated than residents.

• As an amplification of concerns raised in the 2007 retention study, some majors are seen as very difficult to get into. More than a half of all students who hoped to major in the health sciences, engineering and applied science, or the Harriman

Business School (now renamed the College of Business) rated entry as somewhat or very difficult to get in.

• Most students feel instructors are concerned about students, but only 20% rate their instructors as "very concerned." This seems like a lukewarm rating given higher grades for instructors on their clarity and preparedness, and again may reflect the problems of large classes in which it is more difficult for instructors to connect with students at a personal level.

• More than half of all first year students rate class sizes as larger than expected.

• A substantial minority of students find the level of assignments, reading, and overall class difficulty as greater than expected (somewhere between a third and 40% depending on what is being rated).

 $a \in C$ A substantial minority of students also find their grades to be lower than expected (34% of transfers and 42% of freshmen).

a€¢ Transfers were less satisfied than freshmen with the quality of campus social life; this may reflect the fact that they have less time to socialize on campus. 62% of transfers had a job in the fall, compared to 36% freshmen; those jobs were more likely to be off-campus, pay more, and require more hours. Transfers were also less likely to belong to campus clubs and organizations Commuters were also less satisfied with campus social life than residents. Overall transfers and commuters are generally less involved in campus social life.

• Commuter freshmen felt less connected to their undergraduate college than did residents; but levels of connection are modest among both groups. Only 54% of freshmen felt somewhat or very connected to their college. This suggests the need to make the undergraduate colleges a more meaningful part of freshman life. Some of the colleges appear to bring together students with similar interests but others reflect a more disparate mix of students in the sciences, humanities and social sciences.

UNDERSTANDING

One of the major refrains we heard throughout our interviews was the general lack of use of assessment information. We heard from several administrators that information distributed by the Office of Institutional Research was rarely used in the planning process. In general, information is not widely distributed. We believe that a wider distribution of the information would better ensure that assessment data gets into the hands of those most able to use it. A research campus such as Stony Brook is a highly decentralized environment with much decision making occurring in far-flung departments. A broader form of information distribution (e.g., a highly accessible database) would make it easier for department chairs to gain access to needed data. In general, it was very difficult to know the degree to which information informed policy decisions and therefore Stony Brook would receive a low rating for use of assessment data.

Some departments had engaged in very successful forms of assessment which are difficult to capture in the overall FoeTec ratings. Evidence of the efforts of Chemistry to improve teaching of their core courses is attached below. Likewise, Engineering is required to undertake assessment as part of the ABET accreditation process which involves town hall meetings and other forms of direct student feedback. For example, each faculty member has to identify problems in their course offerings from student evaluations and students' performance and then report how these problems will be fixed in the next course offering. However, these successes are seemingly hidden from the broader campus.

STRATEGIES

Not surprisingly relatively few faculty at Stony Brook, a major research university, attend conferences devoted to the first year experience. A small percentage of faculty are likely to attend on and off campus meetings that deal with issues of relevance to first year students. The annual meetings of professional academic associations regularly hold sessions on pedagogy, but it seems that relatively few faculty attend them. This is not surprising at a research university where conference and workshop attendance is most likely focused on a faculty member's research interests and activities. Overall, 20% of faculty report attending on-campus workshops and 18% report attending national or regional meetings focused on the first year. This kind of activity is more common among administrators and professionals who have contact with first year students at Stony Brook (which seems reasonable). Just under 40% of administrators had been involved at a high or very high level in campus workshops and 38% reported attending regional and national conferences on the first year at a high or very high level. 36% of professional staff had been involved at a high or very high level with campus workshops and 28% with regional and

national conferences.

Faculty are also less likely than administrators and professional staff to read professional materials about the first-year experience. 43% of administrators and 42% of professional staff are highly or very highly involved in reading such materials. Relatively few individuals on campus are highly involved in presenting information about the first year experience at conferences and this does not differ very much between administrators, faculty and professional staff. Roughly 20% of all three groups said they were highly or very highly involved in this.

RECOMMENDATIONS

The Improvement Committee offers the following recommendations:

Å- Create a centralized information warehouse of data collection/reports for faculty and staff to access online. Data and statistics gathered by the Office of Institutional Research and the Center for Survey Research would be available and accessible for use by departments.

Å· Create a centralized resource library for best practices in assessment, that would complement the data warehouse, and invite faculty and staff to contribute their own best practices. This online library would be created and maintained by the assessment professionals currently being hired through the Departments of Teaching, Learning & Technology, and the Division of Student Affairs & Enrollment Retention Management.

Å· Enlist support from the Office of Institutional Research and the new assessment staff in helping departments acquire and analyze data they need, and put results into practice. Support from the data collection & analysis experts in these offices seems a natural part of helping academic and administrative departments understand what is happening and develop strategies for improvement. Few departments are aware that OIR could be of assistance in this area

· Consider the successful model used by the College of Engineering & Applied Sciences for ABET accreditation as described earlier in this report.

A Share information widely about what is actually taking place and what outcomes result. For example, the University wide assessment committee results could be a key showpiece for the beginning of the new assessment culture at Stony Brook.

Å Departments should not simply be encouraged to engage in assessment but should be rewarded and recognized for their efforts.

Å Further, resources should be committed to make the improvements suggested by assessment results. For example, we have reported that large classes seem to be a factor in retention - shouldn't the university make it a priority to reduce the size of these large classes?

CONCLUSION

Departments are interested in the success of students at all levels, not just the first year. And while this major committee effort was supposed to be focused on the first year exclusively, we feel strongly that data collection and assessment should be utilized to positively impact retention and success overall. Stony Brook University can be a leader among SUNY campuses in this area, as well as lead efforts to use assessment results to press the decision makers within New York State government to improve resource allocations to campuses who can document their efforts in this area and the changes that result from the assessment process.

Recommended Grade: C

Recommended Action I tems:

- Develop a collection of best practices in assessment. (High priority)
 - Some units are using assessment to inform practice so it would make sense to identify those best-practice areas and offer those as models to the rest of the campus.
- Create an online information warehouse for faculty & staff. (High priority)

Data and reports generated by the Office of Institutional Research and the Center for Survey Research would be available and accessible for use by departments.

• Create an online resource library for best practices in assessment. (High priority)

Complementing the data warehouse, this resource library will be created and maintained by the assessment professionals currently being hired through the Departments of Teaching, Learning & Technology and the Division of Student Affairs & Enrollment Retention Management. Faculty & staff would be invited to contribute models and best practices for others to emulate.

• Enlist support from OIR in helping departments acquire & use assessment data. (High priority)

Support from our university data collection & analysis experts seems a natural part of helping academic and administrative departments understand what is happening and develop strategies for improvement. Few departments are aware that OIR could be of assistance in this area.

- Consider deploying a successful assessment model like that required by CEAS for ABET accreditation. (High priority)

 Details of this model are presented in our FY Report.
- Share information widely about what is actually taking place and what outcomes result. (High priority)

For example the University wide assessment committee results could be a key showpiece for the beginning of the new assessment culture at Stony Brook.

- Departments should be rewarded and recognized for their accomplishments in assessment. (High priority)
- Resources should be made available for departments who engage in assessment. (High priority)