STONY BROOK UNIVERSITY

INSTITUTIONAL SELF-STUDY

SUBMITTED TO
MIDDLE STATES COMMISSION ON HIGHER EDUCATION

SUBMITTED BY
STONY BROOK UNIVERSITY
STONY BROOK • NEW YORK • 11794

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1. EXECUTIVE SUMMARY

The topic that we have chosen as the focus of Stony Brook's self-study lies at the core of the institution's history over the last decade: **the student experience at Stony Brook**. The major objective of our self-study has been to study, understand and assess the student experience at Stony Brook and its relation to student learning outcomes, so that we can use this understanding to drive change in the direction of the goal of improving the student experience for all students, undergraduate and graduate. In this self-study, we identify what real progress we have made to date towards our goal, what the important gaps are, and what we need to develop or improve. The overarching goal of this self-study is to consolidate our future as a truly student-centered research university.

In choosing subtopics for this self study, we were acutely aware of the danger that in breaking the topic up into manageable pieces we might lose the essential relatedness of the whole. The five subtopics that we arrived at in the end divide the topic up thematically, along axes of both time and structure. On the time axis, we traced students' progress through their academic career, which covers most aspects of the student experience. Structurally, we examined the students' educational and social environment at the university, which should together foster growth of the complete person.

The themes of the self-study are as follows:

Theme 1: Transition to Stony Brook University
Who are our incoming students, how do we prepare them before they begin their education at Stony Brook, and how do we facilitate their transition to Stony Brook?

Theme 2: The Foundational Experience at Stony Brook University
How do the first and second years of our students prepare them for further success at Stony Brook?

Theme 3: Education and Scholarly Activities
How can we improve upon the integrated diverse education of Stony Brook students?

Theme 4: Stony Brook as a Community
How good is the Stony Brook community as an environment for intellectual growth?

Theme 5: Life Beyond Stony Brook
Are our students prepared for life beyond Stony Brook?

Professors Mark Aronoff and Petar Djuric were appointed to lead the reaccreditation process in the fall of 2001. Together, they selected a small group of faculty and staff, who arrived at the five themes, with a subcommittee devoted to each theme and each subcommittee co-chaired by two members of a steering committee made up by augmenting the original core group. The size of the steering committee was determined by the desire to represent the diversity of Stony Brook's campus, including representatives from throughout the academic and administrative sectors, while keeping the size within reason to be effective and efficient. Ten of these members also created and co-chaired thematic subcommittees and two co-chaired a research committee. The steering committee has met regularly since early April 2002.

The role of the steering committee has been to provide the principal guidance and coordination of the assessment processes carried out by the subcommittees. The steering committee co-chairs also met regularly with the President and Provost to ensure that the self-study was consonant with the mission and goals of the university. A major role of the subcommittees has been to provide direct links to the campus community and represent all areas of campus in making concrete suggestions. Subcommittee co-chairs were charged with two tasks: build the subcommittees and begin to formulate a set of questions around which their subcommittees could do their work. The subcommittees prepared questions that identified specific topics addressing core issues of the self-study with respect to the guidelines in *Characteristics of Excellence*.

The long-term goal of this self-study process is to foster a culture of constructive assessment followed by concrete actions that would lead to continuous improvements throughout the university. The efforts of the steering committee and subcommittees reflect this initiative. Most notable among these efforts are the session work at the Student/Faculty/Staff (SFS) Retreat and the design and implementation of a comprehensive student and faculty survey.

The primary goal of the SFS Retreat, which has met annually since 1985, is to provide a forum for interaction among students, faculty, and staff. In the fall of 2002, the Middle States steering committee directed the retreat, creating a series of breakout sessions in which to address the five themes and obtain feedback from the campus community. Over the two-day retreat 60 campus representatives brainstormed on ways to improve the student experience at Stony Brook. In the months following the retreat, several participants joined the subcommittees and a reunion in the spring of 2003 allowed the steering committee to assess the progress made on issues raised at the retreat.

The steering committee devised a survey designed to elicit opinions of Stony Brook University and the fulfillment of its mission, which was administered in the spring of 2002. The Stony Brook University Center for Survey Research conducted telephone interviews with Stony Brook University faculty members, graduate and undergraduate students, and alumni. Separate questionnaires were constructed and administered to each group. The results of this survey were instrumental in formulating the recommendations for improvement.

The self-study culminated in a set of recommendations from each of the subcommittees, which were discussed and refined by the full steering committee in consultation with the President, the Provost, and various university bodies, which are listed in Section 10 of this document. These recommendations will guide the university through the next decade.

GENERAL RECOMMENDATION

Establish a structure for ensuring continuous improvement of the student experience.

- Create a standing committee on the student experience, reporting to the President, which will refine the recommendations of the Middle States Self-Study into a set of concrete implementable actions for the President's consideration, aligned with the institutional strategic plan.
- Charge specific administrative offices with implementing each recommendation within a designated time-frame.
- Evaluate progress annually and report it to the university community.
- Develop new recommendations on a regular strategic planning cycle.

RECOMMENDATIONS FOR THEME 1: THE TRANSITION TO STONY BROOK UNIVERSITY

1. ***Continue to enhance scholarship and financial aid opportunities for new students at both the undergraduate and graduate levels.*** The number of first-year undergraduate students who received scholarships increased from 6.4% in 1999 to 15.8% in 2002. We must continue to expand these awards to compete for highly qualified students. Similarly, stipends for doctoral candidates should be brought into alignment with those of our peers. (pp. 27-30)

2. ***Improve the availability of courses for incoming students.*** The academic progress of some of our undergraduates is adversely affected by lack of space in appropriate courses. Failure to provide all incoming students with needed courses has the potential to harm our reputation and, consequently, our ability to attract highly qualified applicants. For example, modifying the orientation process to allow students to register for courses further in advance would provide more accurate prediction of demand in gateway courses and might allow us to fill this demand more easily. (pp. 30-31)

3. ***Raise further the external reputation of the institution.*** Stony Brook must do a better job of informing the public and prospective students of our successes. In addition to promoting our educational and research programs, we need to better monitor and promulgate the success of our alumni in gaining admittance to graduate and professional schools, obtaining jobs, passing professional licensing exams, and other outcome measures, since these measures are central to prospective students' decision to attend a particular institution. (p. 29)

4. ***Improve the geographic diversity of the undergraduate student body.*** Our peers are national in their undergraduate enrollment and they conduct significant ongoing out-of-state undergraduate recruitment. Attracting a more geographically diverse student body will enhance our national reputation, increase selectivity, and improve campus life. (pp. 28-29)

5. ***Improve registration and advising for new undergraduate students.*** We must take steps to make the summer registration days a more meaningful, engaging early socialization experience. Initial satisfaction might be improved by giving students more time with the orientation leaders during the registration day. Beginning in summer 2004, all students will be oriented within the context of their Undergraduate College assignment, which will provide them with a greater initial sense of connection. Stony Brook must also find ways to connect individual new students with advisors and mentors over the long term. The revamped college-based 101 and 102 seminars will also give students semester-long opportunities to establish close advising and mentoring relationships with both faculty and staff. (pp. 31-33)

6. ***Initiate systematic assessment of orientations for graduate and international students.*** We need to assess the extent to which our programs meet the specific needs of graduate and international students. There is wide variability in the comprehensiveness of orientations offered by individual graduate programs. We will scrutinize the curricula of these programs to develop best practices to enrich the orientation experiences of all graduate students. (pp. 36-37)

7. ***Strengthen and expand coordination among orientation events.*** We must coordinate all university orientation efforts, including those of individual programs, departments, student organizations, and the Undergraduate Colleges. Orientation curricula should be evaluated to provide examples of effective practices and to eliminate duplication of effort and information. Moreover, fostering communication among various groups will allow optimal sharing of resources. (pp. 30-31, 37-38)

RECOMMENDATIONS FOR THEME 2: THE FOUNDATIONAL EXPERIENCE

8. ***Improve first-year courses.*** Efforts to improve students' learning and experience in the classroom should be concentrated on large first-year gateway courses. The university should explore innovative ways of changing the large lecture course experience to make it more interactive and personal. The university should also find ways to decrease the size of first-year courses. In an effort to foster interdisciplinary cross-fertilization, faculty teaching large lecture courses in related disciplines should collaborate to develop common problem sets or learning skills exercises. Faculty should be rewarded for outstanding performance in these courses. (pp. 44, 48-51)

9. ***Simplify the array of courses available to first-year students.*** Freshmen are faced with the overwhelming task of putting together a schedule from the many available courses. While we do not advocate restricting course choice, first-year students should be given a simplified list of the courses that most freshmen take, along with sample schedule templates and popular course combination packages from which they can select, based on interest and need. (p. 44)

10. ***Improve the foundational experience.*** Virtually all academic programs offer courses that address broader needs of the campus community, such as freshman seminars, introductory survey courses, and courses designed to satisfy general education (DEC) requirements. In each case, the learning objectives and learning outcomes of the course should be explicitly stated and publicized. (pp. 46, 51-52)

11. ***Identify ways for transfer students to make a smoother transition to Stony Brook.*** We must better assess the skills and knowledge of transfer students and help those who fall short in specific areas. (pp. 44-45)

12. ***Continue to build e a culture of constructive assessment as a tool for improvement throughout the university.*** Many members of the university community view assessment as an externally imposed burden, rather than a tool for improvement. The university is already committed to the SUNY-mandated assessment of general education. Stony Brook should create incentives for assessment and mechanisms for disseminating and encouraging best practices, while assuring that assessment will not be an empty exercise, but rather a generator of concrete actions for continuous improvement of the university. (pp. 46, 52-53)

13. ***Encourage students to make academic and career goals a priority.*** Stony Brook should find mechanisms to encourage students to assess their academic and career intentions regularly. These should include improved outreach to students and other ways to encourage students to select a major. (p. 45)

14. ***Provide mentoring opportunities for every student.*** Our surveys show a very strong demand among students for mentoring. Mentoring can have a significant impact on the satisfaction, success, and retention of undergraduate students, both as mentor and mentee. Further, the relationships established between the mentor and mentee are mutually beneficial. Because no single approach can sufficiently meet all needs, efforts should be made to both grow existing programs and develop new ones (including training programs). (pp. 47-48, 52)

RECOMMENDATIONS FOR THEME 3: EDUCATION AND SCHOLARLY ACTIVITIES

15. ***Improve communication between teachers and learners.*** We intend to promote active learning by providing instructors with opportunities to improve their communication skills and hence their teaching effectiveness. Since communication is a two-way process, students should similarly be encouraged to use tools and resources that will permit them to excel (e.g. Blackboard, workshops, tutoring services). (pp. 58, 61)

16. ***Provide incentives to departments to improve TA training and performance.*** We must ensure that our TAs are appropriately trained to communicate with our student body. Associated with TA training is the strong need to ensure that best practices are made available to Stony Brook's community at large. For example, regular workshops could be arranged where TAs, instructors, and faculty who have been recognized for their excellence in teaching can meet within a common forum to exchange information about those practices that had an impact and those that did not. Web-based dissemination of successful practices might also be useful. (p. 59)

17. ***Evaluate curricular offerings regularly to ensure that they meet the needs and interests of our students.*** The academic enterprise lies within a changing world. Colleges, schools, and departments should therefore examine their courses and curricula on a regular cycle to ensure that they fit the needs of students and society, within the resources available. Curriculum and student demand should be important factors in hiring and planning at all levels. (p. 59)

18. ***Improve recognition and rewards for faculty, staff members, and graduate students who have demonstrated excellence in directing undergraduate research and creative academic projects.*** We must recognize and reward the effort that a faculty member, staff member, or graduate student devotes to directing undergraduate research and creative activities. This will both encourage their willingness to participate and enhance the overall quality of students' research and creative academic projects. (p. 61)

19. ***Increase the number of students who undertake independent research and creative activities.*** The incorporation of undergraduate students into the research and creative enterprise is highly desirable. Because such students are an extra load on the resources of the host, it is appropriate to create mechanisms whereby faculty and staff can access resources that will induce them to mentor more undergraduates. (pp. 60-63)

20. ***Support further expansion of the electronic library.*** Surveys of university students demonstrate a strong preference for electronic content which they can search on the Internet and download to a disc or printer. The library's role is to acquire and display these resources and to instruct students on their use. The very accessibility of these resources makes them valuable, and costly. In its drive toward an excellent student experience, the university needs to support these high cost/high benefit resources. Use of these resources is not intuitive. Expanding the library's instruction program would help the university give students life-long information skills. (p. 65)

21. ***Improve library access.*** Even as more and more information is going online, student use of the library's reading rooms is increasing. The university will open a 24-hour-a-day study space in spring 2004, an important step toward the larger goal of an information commons staffed twenty-four hours a day. The type and quality of all facilities within the physical boundaries of the main library building needs to be kept in mind, as well. (p. 66)

22. ***Assess, update, and expand instructional facilities regularly.*** The quality of the educational process is directly related to the quality of the teaching environment. Classrooms and laboratories need to be assessed regularly and, where needed, upgraded and expanded to a common standard that facilitates the learning process. This leads to a more efficient setup and delivery of instructional materials by the instructor and a learning-friendly environment for the students. Because laboratories have specific needs that depend on the academic discipline (e.g., music vs. biology vs. engineering), considerable care is needed to ensure appropriate changes. The possible need for a broader range of classroom sizes should be studied. (p. 65-67)

RECOMMENDATIONS FOR THEME 4: STONY BROOK UNIVERSITY AS A COMMUNITY

23. ***Provide regular timely information on community activities.*** Stony Brook has a wealth of activities and events but students, faculty, and staff perceive that it is more difficult than it should be to get information about these, despite the fact that the information is disseminated in a wide array of formats at considerable cost (web-based, e-mail, bulletin board, kiosks, university/student newspaper, television, radio, flyers). A mechanism should be found for disseminating information to both the university and the wider community in a timely and simple fashion. (pp. 74-75)

24. ***Encourage student community service.*** Students gain an appreciation of the value and relevance of their education and their potential as human beings through participation in community service activities, both inside and outside the university. Community service also improves students' perception of belonging and hence the health of the entire community. Although we have made progress in this direction, we need to find ways to reach a greater number of students. (p. 80)

25. ***Improve the integration of graduate and upper-level undergraduate students into the wider community.*** The survey data indicate that incoming students feel themselves to be more a part of the wider community than do upper-level and graduate students. Ways should be found to improve the engagement of these sectors of the university. We also need to look

carefully at our highest-achieving students, who appear to be less connected and to feel less sense of community. (pp. 78, 80)

26. ***Institute ongoing assessment of the sense of community.*** The sense of community is created through many factors, all of which have temporal components and reflect the evolving local culture. Mechanisms need to be established for assessing changes. A periodic assessment survey focused on community would enable us to find the specific factors that might improve the sense of community. (pp. 70, 78-79, 81-82)

27. ***Promote community pride.*** The focus groups and survey results confirmed the finding of the Boyer Report that pride in one's institution or the celebratory aspects of belonging are a vital aspect of the Stony Brook community. Undergraduate students in particular seem strongly influenced by celebratory events as a way of demonstrating and instilling pride in Stony Brook. (pp. 76-78)

RECOMMENDATIONS FOR THEME 5: LIFE BEYOND STONY BROOK UNIVERSITY

28. ***Increase opportunities for individual advising.*** Means should be found to encourage students to meet regularly with faculty members and professional advisors who will listen to their concerns and talk with them about academic programs, course selection, internships, and career plans. These connections would help students reflect on their experiences and understand the transferability of their skills, especially in the liberal arts, to a variety of post-college options in graduate study, research, and employment. (pp. 87-88)

29. ***Promote internships and other pre-professional work experience.*** Students must be better informed about career and internship opportunities. This can be accomplished by better interaction with academic departments and the Career Center. Invited professionals from the community can provide career scenarios in specific majors (e.g., high school chemistry teacher). Corporate internship programs are the first source for hiring at the entry level, yet few non-Health Sciences Center students participate. Credit and non-credit internships should be tracked and opportunities promoted by departments. Alumni could help us identify internships within their organizations. (pp. 86-88, 90)

30. ***Improve alumni record keeping and communication – especially post-graduation destination data.*** Available alumni data are fragmented and often difficult to obtain. Stony Brook needs a campus-wide effort to assemble post-graduation destination data on a regular basis and report the results in a timely manner. Maintaining regular communication with alumni and getting them involved will strengthen their commitment to the university. (p. 90)

31. ***Leverage existing models of success.*** We should make a concerted effort to identify departments and schools whose alumni feel a greater sense of connection to Stony Brook. The striking satisfaction of HSC alumni, for example, should prompt us to examine what results in such great satisfaction. We benchmark with other institutions on a variety of measures. We now have an internal model, elements of which may be used to improve the

student experience for all areas of campus and result in greater attachment of alumni to the Stony Brook community over the long term. (pp. 87-89)

2. INSTITUTIONAL PROFILE

Stony Brook University is set on Long Island's North Shore, 60 miles east of New York City and 50 miles west of Montauk Point. Established in 1957 as part of the State University of New York system, Stony Brook has grown rapidly in both size and reputation and is now recognized as one of the nation's finest public research universities. Physically and academically integral to Stony Brook is its academic health center, which comprises the Schools of Dental Medicine, Medicine, Nursing, Health Technology and Management and Social Welfare, as well as the Stony Brook University Hospital and Long Island State Veterans Home. A study published by John's Hopkins University Press (*The Rise of American Research Universities,* by Hugh Graham and Nancy Diamond, 1997) places Stony Brook among the top three public research universities in the country in terms of per capita faculty research productivity. Stony Brook University Hospital has been ranked among the top 15 teaching hospitals in the country.

In May 2001, the Association of American Universities recognized Stony Brook's achievements when it invited Stony Brook to join its ranks. In October 2003 alone, Paul Lauterbur was awarded the 2003 Nobel Prize in Physiology or Medicine for research he did at Stony Brook, and James Glimm, Chair of the Department of Applied Mathematics, received the National Medal of Science for his work on shock wave theory.

In keeping with a tradition of improving upon excellence, Stony Brook has a five-part mission:

- To provide comprehensive undergraduate, graduate, and professional education of the highest quality;
- To carry out research and intellectual endeavors of the highest international standards that advance theoretical knowledge and are of immediate and long range practical significance;
- To provide leadership for economic growth, technology, and culture for neighboring communities and the wider geographic region;
- To provide state-of-the-art innovative health care, while serving as a resource to a regional health care network and to the traditionally underserved;
- To fulfill these objectives while celebrating diversity and positioning the university in the global community.

Stony Brook enrolls more than twenty-two thousand students, over fourteen thousand of them undergraduates, most of whom attend full time. Stony Brook offers more than sixty majors to its undergraduate students through the College of Arts and Sciences, the College of Engineering and Applied Sciences, the School of Health, Technology and Management, the School of Medicine, the School of Dental Medicine, the School of Nursing, the School of Social Welfare, the Marine Sciences Research Center, the School of Professional Development and the W. Averell Harriman School for Management and Policy. New York State's provisional teaching certification is available in the sciences, mathematics, foreign languages, social studies, English, and the teaching of English to speakers of other languages.

Stony Brook offers a variety of innovative programs to undergraduate students, including the Honors College, the Educational Opportunity Program/Advancement on Individual Merit (EOP/AIM), a program designed to provide access to higher education for economically

disadvantaged students, as well as several Learning Communities and Living Learning Centers, and Women in Science and Engineering (WISE).

Graduate and graduate-level professional study is offered in 45 different areas, including the health sciences. The doctoral degree is offered in 46 areas, the MA in 22 areas, and the MS in 28 areas, as well as two MFA's, the MM, MBA, and MSW.

We have our own study abroad programs in Italy, Russia, Spain, France, Tanzania, Australia, and Madagascar as well as exchange agreements with over fifty universities worldwide. International students representing some 90 countries attend Stony Brook.

In the past few years Stony Brook has also added several new undergraduate majors, including American Studies, Athletic Training, Bioengineering, Cinema & Cultural Studies, Computer Engineering, Environmental Studies, Health Science, and Women's Studies. In addition, Stony Brook offers several new graduate programs, including Art & Philosophy, Biomedical Engineering, Endodontics, Industrial Management, Molecular & Cellular Biology, Oceanic Science, Operations Research, Optoelectromechanical Systems Engineering, Physical Therapy, Public Policy, Social Work/Law (in conjunction with Touro Law School), and Technology Management.

Our student enrollment has increased by nearly four thousand over the last five years. At the same time, SAT scores of all regularly admitted students have risen over 100 points, the average having ascended from 1093 to 1208 in the seven years since the SAT scores were recentered. This year 17 freshmen were either National Merit finalists or semifinalists or Intel semifinalists, and 27 were valedictorians.

Stony Brook's student body is highly diverse. Figure 1 shows the composition of the whole undergraduate student body as the students identified their origins, figures 2 and 3 show the ethnicity of the undergraduate and graduate classes that entered in September 2003. In addition to diversity of origin, Stony Brook has a great number of students who are the first in their families to attend college or who come from low-income homes. Eighty seven percent of first-time, full-time Stony Brook students are still in attendance after their first year. Approximately 56% of each incoming freshman class graduates from Stony Brook within six years.

Since 1996, graduate enrollments have increased by approximately 2,200 students, and GRE scores for doctoral students have risen 70 points in the past two years.

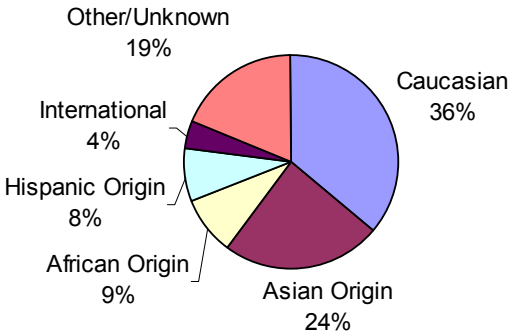

Figure 1: Undergraduate Student Ethnicity – Fall 2003

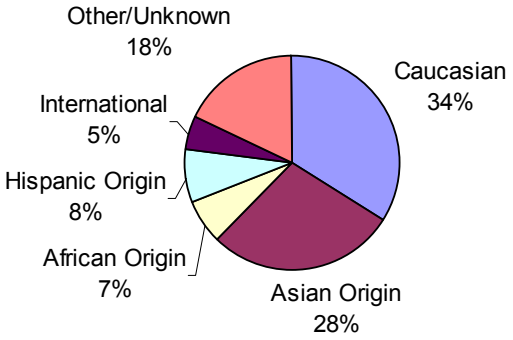

Figure 2: Freshman Student Ethnicity – Fall 2003

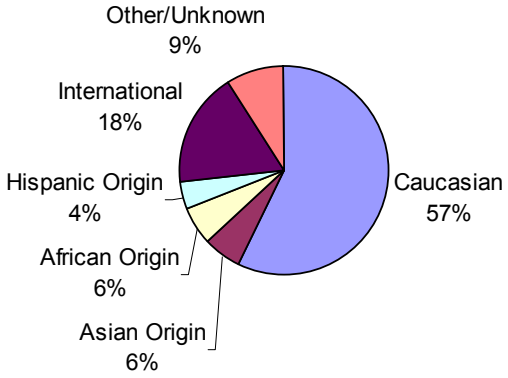

Figure 3: First-year Graduate Student Ethnicity–Fall 2003

Stony Brook's distinguished faculty includes sixteen members of the National Academy of Sciences, four members of the National Academy of Engineering and a member of the Institute of Medicine; a Nobel Laureate in Physics; thirteen members of the American Academy of Arts and Sciences; four MacArthur Fellows; four members of the Royal Society; a Fields prize winner; Grammy award winners; and recipients of the national Medals of Science and Technology and the Benjamin Franklin Medal. Stony Brook's faculty are also dedicated teachers, and include 105 recipients of the Chancellor's Awards for Excellence in Teaching. More than 300 scholars from 40 countries pursue research here and teach at Stony Brook throughout the year.

Stony Brook's faculty totaled 1,846 in October 2003, including 1,330 full-time and 516 part-time. There are 927 tenured or tenure-track faculty, 657 off-track faculty (mostly clinicians) and 262 adjunct faculty (defined as part-time lecturers and instructors included in the instructional faculty).

Nearly all of Stony Brook's full-time faculty members hold doctoral degrees or the highest degree in their field and more than 90% of the faculty are engaged in active research leading to publication and development of new technologies. Past areas of major technological achievement include MRI and bar code decoding, while more recent technologies include virtual

colonoscopy and rapid DNA sequencing. The great majority of adjuncts are in professional programs, composition, and the arts. The preliminary data for our tenure-track faculty show that 82% are Caucasian, 11% Asian, 4% of African origin, and 3% Hispanic.

3. OVERVIEW OF THE SELF-STUDY PROCESS

The major theme of Shirley Strum Kenny's presidency at Stony Brook since 1994 has been the student-centered research university. Students are also the focus of the blueprint for undergraduate education developed by the Boyer Commission, which Dr. Kenny chaired. The topic that we have chosen as the focus of Stony Brook's self-study in preparation for its ten-year reaccreditation therefore lies at the core of the institution's history over the last decade: **the student experience at Stony Brook**.

When the Stony Brook co-chairs (Professors Aronoff and Djuric) attended the November 2001 Self-Study Institute, two points became clear: first, that Stony Brook's self-study should concentrate on a single selected topic, because a comprehensive self-study would be much less useful to the institution; and second, that this topic should relate to students. Conversations with MSA senior staff at the Institute confirmed both these points, and when the co-chairs returned to Stony Brook to talk with the President and the Provost, there was quick general agreement on the topic of the student experience.

We discussed whether the self-study should confine itself to undergraduate students, but we agreed that at a research university like ours, where there is significant interaction between undergraduate and graduate students, it is unwise to try to separate the two groups. Stony Brook also has a large health sciences center on campus that educates students at all levels: undergraduate, graduate, and professional. The health sciences are integrated into the rest of the university, not only geographically, but in all dimensions: major academic departments in the life sciences (e.g. biochemistry and neurobiology) span both sides of the campus, and we have degree programs from bachelors-level to doctoral-level that integrate instruction from both halves. We have sought to examine the experience of all students in the entire institution to measure student learning outcomes and determine the value and effectiveness of the education provided at Stony Brook. Because the great majority of students are undergraduates, because the undergraduate experience is more homogeneous, and because we have access to more data on undergraduates, we expected to focus more on the undergraduate experience, but we also sought to understand the experience of graduate students and, in a departure from similar studies, the interaction of the two groups.

We approached the standards for reaccreditation from a variety of perspectives, using numerous methods to begin answering the fundamental question of how well Stony Brook as an institution is doing to educate its students. By and large, we documented the fundamental elements of each standard for reaccreditation by existing materials and data, so that the major efforts of the subcommittees were directed more towards analysis and planning.

By focusing our self-study on one topic: the student experience at Stony Brook, we at least implicitly focused this self-study on those standards that address educational effectiveness: standard 7, institutional assessment; standard 8, student admissions; standard 9, student support services; standard 10, faculty; standard 11, educational offerings; standard 12, general education; standard 13, related educational activities; and standard 14, assessment of student learning. We deliberately chose, however, not to approach these standards as a checklist, but rather as all contributing in an integrative fashion to the overarching standard of educational effectiveness, which is, in truth, the focus of our self-study.

For the standards related to institutional context that are not fully addressed in the self-study (standards 1 through 6) we assembled for the preliminary visit of the team chair and the designated generalist evaluator sufficient documentation to allow these team members to verify institutional compliance with these standards. Inevitably, though, we also address these first six standards at various places in this document.

SPECIFIC GOALS AND OBJECTIVES

The overarching goal of this self-study is to further our ambitions to truly become a student-centered research university. As the Boyer Commission report attests, the trend in American research universities over the last century has sometimes run counter to the interests of undergraduate students.[1] But in order to even begin to make it possible to achieve this goal, we need a cultural transformation. Towards that end, the major objective of our self-study has been to study, understand and assess the student experience at Stony Brook and its relation to student learning outcomes, so that we can use this understanding to drive change in the direction of our goal. In this self-study, we identify what real progress we have made to date towards our goal, what the important gaps are, and what we need to develop or improve.

Stony Brook has a wide variety of assessment mechanisms. In the somewhat longer term, we believe that the self-study will help drive a cultural change throughout the entire university community, faculty, staff, and students. In this new culture, both learning and assessment will be more highly valued and, most importantly, will not be viewed as antagonistic forces, but rather as two sides of a single coin. The long-term goal of the entire self-study process is to foster a culture of constructive assessment followed by concrete action that would lead to continuous improvement throughout the university.

It is easy to talk about large goals, but harder to achieve results. In keeping with President Kenny's philosophy of planning and implementation, which has always been at the level of concrete actions, we established through our self-study a set of actions that we expect to have a positive impact on the experience of Stony Brook students within a five-year period. Our progress in these areas will form the core around which our 2009 periodic review report will be organized. Towards that end, we put forward the following general recommendation:

GENERAL RECOMMENDATION

Establish a structure for ensuring continuous improvement of the student experience.

- Create a standing committee on the student experience, reporting to the President, which will refine the recommendations of the Middle States Self-Study into a set of concrete implementable actions for the President's consideration, aligned with the institutional strategic plan.
- Charge specific administrative offices with implementing each recommendation within a designated time-frame.
- Evaluate progress annually and report it to the university community.
- Develop new recommendations on the regular strategic planning cycle.

[1] http://naples.cc.sunysb.edu/Pres/boyer.nsf/

STRUCTURE OF THE STEERING COMMITTEE AND SUBCOMMITTEES

Professors Mark Aronoff and Petar Djuric were appointed to lead the reaccreditation process in the fall of 2001. A formative steering committee was created in the early spring of 2002 with student members added in the fall. The formation of the steering committee for the self-study was quite deliberately organic. Before being appointed, the two co-chairs had worked together for several years on a committee that coordinates undergraduate mathematics instruction. Together, they selected a small group of five additional close colleagues to form the core of the steering committee and begin deliberations. The president of the University Senate, Benjamin Walcott, also joined the steering committee in this formative stage, with the understanding that he would participate only in our formative discussions and then leave once the full steering committee was formed. This core group met weekly for six weeks to deliberate on two issues: the partitioning problem (what should the subtopics be?) and the appropriate final structure of the steering committee and subcommittees. It eventually arrived at a unified solution to both problems: five themes, with a subcommittee devoted to each theme and each subcommittee co-chaired by two members of a steering committee made up by augmenting the original core group. A sixth, small research subcommittee consisted of the two university administrators most familiar with the types of data that are central to our study. The two members of this subcommittee were full members of the steering committee. We were also joined by Elyce Acierno, staff assistant to the Provost, who has played an important role in all stages of preparation of the self-study.

The size of the steering committee was determined by the desire to represent the diversity of Stony Brook's campus, including representatives from throughout the academic and administrative sectors, while keeping the size within reason to be effective and efficient. Ten of its members also created and co-chaired thematic subcommittees. The decision to have co-chairs for each thematic subcommittee arose out of our success in having co-chairs for the steering committee and it made it more likely that at least one co-chair from each subcommittee would be present at all the meetings of the individual subcommittees and all the meetings of the steering committee. The steering committee has met regularly since early April 2002 and functioned very well as a group.

The role of the steering committee has been to provide the principal guidance and coordination of the assessment processes carried out by the subcommittees. The steering committee co-chairs also met regularly with the President and Provost to ensure that the self-study was consonant with the mission and goals of the university. The steering committee coordinated the self-study process campus wide. Other responsibilities of the steering committee included tracking progress, giving direction and advice to ensure that the subcommittees stay on track and avoid duplication of information, setting deadlines, assisting subcommittees in setting up assessment activities, and providing legitimacy in incorporating the data into our campus-wide activities.

A major role of the subcommittees has been to keep in touch with the campus community and represent all areas of campus in making concrete suggestions. The responsibilities of the subcommittees were to assemble and review existing evidence, collect additional data where necessary, identify short and long term goals, evaluate our current state, suggest actions, and provide a timeline.

Subcommittee co-chairs were charged with two tasks: build the subcommittees and begin to formulate a set of questions around which their subcommittees could do their work. The

subcommittees prepared initial sets of questions that identified specific topics addressing core issues of the self-study with respect to the guidelines in the *Characteristics of Excellence*. The sample questions were posed in such a way that formative answers could be provided from our students, faculty and staff constituencies on a wide variety of issues. They included students' expectations and perceptions of the education, services, and the environment at Stony Brook, the students' personal and educational needs, and the impact of Stony Brook on the students' lives. Questions were also posed for the collection of reliable information about student learning outcomes and identification of areas that need improvement. The questions were provided in draft form in the Design for Self-Study.

The subcommittees began working immediately upon their formation in the early summer of 2002. The major constituency that remained to be properly represented was the students themselves, most of whom were recruited early in the fall semester. The steering committee did not want to burden students with a commitment extending for so much of their university careers, from spring 2002 to spring 2004. A three-semester commitment is substantial for any student, undergraduate or graduate, and we hoped that it would be more attractive.

MEMBERS OF THE STEERING COMMITTEE AND SUBCOMMITTEES

Steering Committee Co-chairs

Mark Aronoff, Professor of Linguistics, Deputy Provost
Petar Djuric, Professor of Electrical Engineering.

Staff Assistant

Elyce Acierno, Staff Assistant to the Provost

Student Members of the Steering Committee

Rosanne Howell, Graduate Student (Social Welfare)
Sheena Wilson, Undergraduate Student (Business)

Subcommittee 1: Transition to Stony Brook University

Martha Furie, Steering Committee Liaison and Co-chair of Subcommittee 1, Transition to Stony Brook University, Professor of Pathology
Manuel London, Steering Committee Liaison and Co-chair of Subcommittee 1, Transition to Stony Brook University, Professor of Business Management, Associate Provost for Enrollment and Retention Management

Shawn Anderson, Undergraduate Student
Elizabeth Barnum, Assistant Dean for International Services
Judy Burke-Berhannan, Associate Dean of Admissions
Brian Delong, Senior Staff Associate for New Student Orientation
Paul Kassel, Assistant Professor and Director of Undergraduate Studies of Theatre Arts
Joan Kenny, Assistant Dean of the College of Engineering & Applied Science
Robert Kerber, Distinguished Teaching Professor of Chemistry
Mike Perez, Undergraduate Student

Subcommittee 2: The 1st & 2nd Year Experience

Kathleen Breidenbach, Steering Committee Liaison and Co-chair of Subcommittee 2 (through 7/03), The 1st & 2nd Year Experience, Assistant Dean of the College of Arts & Sciences

Nancy Tomes, Steering Committee Liaison and Co-chair of Subcommittee 2 (through 7/03), The 1st & 2nd Year Experience, Professor of History

Leo Bachmair, Professor of Computer Science
Dallas Bauman, Assistant Vice President of Residence Life
Adrienne Catedral, Undergraduate Student
Bridget Chesteron, Graduate Student
William Collins, Associate Professor of Neurobiology & Behavior, Director of Undergraduate Biology (Co-chair from 7/03)
Stephanie Foote, Staff Associate of New Student Orientation (Co-chair from 7/03)
Richard Gerrig, Professor of Psychology, Chair of the Honors College
Cheryl Hamilton, Director of Educational Opportunity Program/Advancement on Individual Merit
David Hanson, Professor of Chemistry and Chair of the Learning Communities
Kimberly Herrera, Undergraduate Student
Joseph Lauher, Professor of Chemistry
Sara Lipton, Associate Professor of History
Karen Mendelsohn, Assistant Dean of the School of Health, Technology & Management.
Kamal Sridhar, Associate Professor of Linguistics
Christine Tavares, Undergraduate Student
Jennifer Verdolin, Undergraduate Student
Claudia Wagner, Undergraduate Student
Tanequa Woods, Undergraduate Student

Subcommittee 3: Education and Scholarly Activities

Christopher Berndt, Steering Committee Liaison and Co-chair of Subcommittee 3, Professor of Materials Science, Associate Dean of the College of Engineering and Applied Sciences
Christian Filstrup, Steering Committee Liaison and Co-chair of Subcommittee 3, Dean and Director of Libraries

Paul Bingham, Associate Professor of Biochemistry and Cell Biology
Bonte Gbemudu, Undergraduate Student
Joanna Harris, Director of Disabled Student Services
Wendy Katkin, Director of the Reinvention Center
Karen Kernan, Director of Undergraduate Research and Creative Activities
Miriam Rafailovich, Professor of Materials Science & Engineering
Victor Santiago, Circulation Desk Stack Assistant in the Melville Library
Olufemi Vaughan, Associate Professor of Africana Studies
Troy Wolfskill, Instructional Support Specialist for Chemistry

Subcommittee 4: Community

Alan Inkles, Steering Committee Liaison and Co-chair of Subcommittee 4, Director of the Staller Center for the Arts
Partap Khalsa, Steering Committee Liaison and Co-chair of Subcommittee 4, Associate Professor of Orthopedic Surgery and Biomedical Engineering

Helen Auriemma, Assistant to the Director of the Staller Center for the Arts
Thomas Biancaniello, Professor and Vice Chairperson of the Department of Pediatrics
Patrick Calabria, Director of Media Relations for the Health Science Center

Alexandra Duggan, Director of Student Activities
David Ferguson, Distinguished Service Professor of Technology & Society, Chair of the Department of Technology and Society
Sarah Goshman, Undergraduate Student and National Merit Scholar
Elizabeth Khinde, Undergraduate Student
Nina Maung, Coordinator of the Center for Inclusive Education
Jill Richards, Internship Training Director in the University Counseling Center
Edward Schlissel, Director of Continuing Dental Education
Roslyn Sebastian, Graduate Student
Amanda Sosulski, Undergraduate Student
Yvette St. Jacques, Assistant Vice President of Communications
Suzanne Velazquez, Assistant to the Associate Vice President of Student Affairs

Subcommittee 5: Life after Stony Brook

Craig Lehmann, Steering Committee Liaison and Co-chair of Subcommittee 5, Professor of Clinical Laboratory Sciences, Dean of the School of Health, Technology & Management
Marianna Savoca, Steering Committee Liaison and Co-chair of Subcommittee 5, Director of the Career Center

Marijean Bushe, Instructor in the School of Nursing
Samantha Fallon, Graduate Student
Christine Fuentes, Facilities Schedule in the Student Union and Activities Center
Dahna Jones, Undergraduate Student
Jovanna Little, Director of Advancement Service
Glenn Lopez, Professor of Marine Benthic Ecology in the Marine Science Research Center
Sanal Mazvancheryl, Assistant Professor of Marketing in the Harriman School for Management & Policy
Joan Miyazaki, Curriculum Coordinator for Undergraduate Biology
Ann-Marie Scheidt, Director of Economic Development
Alexis Simeonides, Undergraduate Student
Wendy Tang, Associate Professor of Electrical Engineering
Richard Wolcott, Director of Operations in the Student Activities Center
Deborah Zelizer, Educator in the Department of Physical Therapy

Subcommittee 6: Research

Peter Baigent, Steering Committee Member, Associate Vice President for Student Affairs
Emily Thomas, Steering Committee Member, Director of Planning and Institutional Research

THEMES OF THE SELF STUDY

In deciding what subtopics to choose for this self study, the steering committee was acutely aware of the danger that in breaking the topic up into manageable pieces we might lose the essential relatedness of the whole. For example, one partitioning that we discarded early on was the following: undergraduate education; graduate education; extracurricular academic life; and quality of life. We agreed that this division would make the final integration of these subtopics harder instead of easier. The five subtopics that we arrived at in the end divide the topic up thematically, along both diachronic and structural dimensions.

- Diachronically, we traced the student's progress through his or her academic career.

- Structurally, we examined the student's educational and social environment at the university, which should together foster growth of the complete person.

Theme 1: Transition to Stony Brook University
Who are our incoming students, how do we prepare them before they begin their education at Stony Brook, and how do we facilitate their transition to Stony Brook?
The objective of subcommittee 1 was to assess the earliest interactions of students with the university, beginning with applying to Stony Brook and concluding with their experiences during the first few weeks of classes. It was the intent of the committee to address the expectations of all populations of students with respect to the topics addressed in Theme 1. For each topic, the goals were to evaluate how well current procedures meet the needs and expectations of the students, to determine whether existing resources (facilities, faculty, and staff) are sufficient (*Standards 3, 5, and* 9), to identify areas that need improvement, and to propose changes based on examples of excellent practice at other institutions. In other words, are the admissions, placement, registration, and orientation processes effective and efficient, and does the manner in which students make a transition to the university have a positive effect on learning outcomes (*Standards 7 and 14*)?

Theme 2*: *The Foundational Experience at Stony Brook University
How do the first and second years of our students prepare them for further success at Stony Brook?
The objective of subcommittee 2 was to improve alignment of Stony Brook's students and faculty. In the last ten years, Stony Brook has had great success in improving the caliber of its undergraduate education, both in terms of academics and student life more generally. Still, there is too often a serious misalignment between what faculty expect of students in their classes and what the students expect of themselves, of their courses and of their instructors. Our aim as a university was to re-examine our own expectations and consider how we can meet students' expectations in order to help them to succeed at Stony Brook. For this self-study, we wanted to focus on the issue of expectations: how can we more effectively identify and respond to unrealistic and changing expectations in the first two years at Stony Brook?

Theme 3: Education and Scholarly Activities
How can we improve upon the integrated diverse education of Stony Brook students?
The objective of subcommittee 3 was to determine if we provide an integrated diverse education for Stony Brook students. Topics include teaching, learning, research and creative activities, science for the nonscientists, libraries, laboratories, and instructional facilities, the role of research in education, and interdisciplinary programs.

Theme 4: Stony Brook as a Community
How good is the Stony Brook community as an environment for intellectual growth?
The objective of subcommittee 4 was to better understand and foster the relationships and connections between students, faculty and staff in Stony Brook's internal community and with our surrounding external community. The scope of the theme is quite general. It consists of issues like interactions among different communities at SB, interactions with off-campus communities, the social and cultural experiences and their integration with the academic experience, diversity, and commuter students. The physical environment and student services are also part of this theme.

Theme 5: Life Beyond Stony Brook
Are our students prepared for life beyond Stony Brook?

The primary objective of subcommittee 5 was to determine the value of Stony Brook's education to its graduates (over 30% of whom go on to graduate or professional school). We also wanted to determine if our students have what they need to be successful in their chosen career and how Stony Brook is supporting their career aspirations – curricular and co-curricular. We hoped to ascertain where our students are going after graduation, which employers are hiring them and what those employers are looking for in recent graduates.

FOSTERING A CULTURE OF CONTINUOUS IMPROVEMENT

The long-term goal of this self study process is to foster a culture of continuous improvement at the university. The efforts of the steering committee and subcommittees reflect this initiative. Most notably are the session work at the Student/Faculty/Staff Retreat and the design and implementation of a comprehensive student and faculty survey.

Student/Faculty/Staff Retreat

The Student/Faculty/Staff (SFS) Retreat at Stony Brook University began in the spring of 1985 under the direction of the Vice President of Student Affairs and the Department of Student Union and Activities. There was a need on campus to improve and enhance the relationship among students, faculty and staff. A committee composed of students, faculty, and staff plan the retreat annually and its primary goal is to provide a forum for interaction among these groups.

In the fall of 2002, the steering committee directed the SFS Retreat, creating a series of breakout sessions in which to address the five themes and obtain feedback from the campus community. Over the two day retreat 60 campus representatives brainstormed on ways to improve the student experience at Stony Brook. In the months following the retreat, several participants joined the subcommittees and a reunion in the spring of 2003 allowed the steering committee to assess the progress made on issues raised at the retreat.

Student and Faculty Telephone Survey, Spring 2003
Alumni Telephone Survey, Spring 2003

The steering committee and subcommittees devised a series of questions for a survey designed to assess student, faculty and alumni opinions of Stony Brook and the fulfillment of its mission to improve the student experience.

The Stony Brook University Center for Survey Research conducted telephone interviews with Stony Brook University faculty, graduate and undergraduate students, and alumni. Interviews were conducted between February 6 and March 29, 2003. All interviewing was conducted using a computer-assisted telephone interviewing based system and as a means of achieving the highest possible response rate, numbers were called a maximum of 15 times, and all initial refusals were re-contacted up to two additional times by refusal converters. Interviews averaged approximately 15 minutes in length.

Separate questionnaires were constructed and administered to undergraduate students, graduate students, faculty, graduate students who had designed and taught their own course, and alumni. Many of the questions included in the student and faculty questionnaires contained either identical or parallel wording. Alumni were asked similar questions to those of the current students regarding their experiences at Stony Brook, but were also asked a battery of questions about life after Stony Brook.

The results of this survey were instrumental in formulating the subcommittee recommendations and created an action list for the university to follow in attaining a culture of continuous improvement (SBU Institutional Self-study: The Student Experience Survey, Spring 2003).

4. THEME 1: THE TRANSITION TO STONY BROOK UNIVERSITY

FOCUS AND SCOPE

In this section we examine the earliest interactions of students with the university, beginning with the application process and concluding with their orientation experience when they arrive on campus. Specifically, we address students' expectations and experiences with the following stages of their transition to Stony Brook:

- applying to Stony Brook, being admitted, making the decision to attend
- getting ready to attend
- arriving on campus

For each of these stages, we evaluate how current procedures meet the needs and expectations of the students, we determine whether existing resources (facilities, faculty, and staff) are sufficient, we identify areas that need improvement, and we propose changes to effect such improvement. We consider the experiences of all new students, including freshmen, transfer students, and first-year graduate students. Working groups were assigned to each of these three areas.

QUESTIONS ADDRESSED

Applying to Stony Brook, Being Admitted, and Making the Decision to Attend

1. Who applies to Stony Brook and why?
    a. Is accurate and complete information about the university's mission, academic programs, admissions policies and criteria, and assessments of student learning outcomes readily available to prospective students? (*Standard 8*)
2. To whom are offers of admissions made?
    a. Are admissions policies clearly stated, fairly implemented, and reflective of the mission of the university? (*Standards 1 and 8*)
    b. How can we best balance the size and composition of the admitted class with available resources?
3. Who accepts offers of admission and why?
    a. What factors deter students?
    b. What is being done to encourage accepted candidates to choose Stony Brook?
    c. Are scholarships, grants, and loans being offered in a manner that is effective and consistent with the goals of the university? (*Standards 5, 8, and 9*)
4. What are the likely advantages and disadvantages of increasing our enrollment of out-of-state students?

Getting Ready to Attend

1. Is the information that new students receive from various entities prior to arriving on campus accurate, comprehensive, cohesive, and user-friendly? (*Standard 8*)
2. What are the course registration processes for new students?
    a. Do students receive adequate and accurate advice during registration? (*Standard 9*)
    b. Are sufficient classes available for entering students? (*Standard 10*)
3. Are procedures for placement of undergraduate students in mathematics, science, writing, and language courses appropriate and efficient? (*Standard 8*)
4. Do policies and procedures for transfer of credits from other institutions serve both students and the institution well? (*Standards 8 and 11*)
5. How are incoming students' interests (including major, minor, and co-curricular) discerned and then disseminated to the appropriate departments and organizations? How do departments

and organizations respond to students' interests? (*Standards 5 and 9*)

Arriving on Campus

1. What orientation events occur for undergraduate and graduate students during the opening week of school? (*Standard 9*)
   a. Do the orientations meet both the social and academic needs of students?
   b. Do the orientations address the particular needs of all populations of students?
   c. How do individual departments and programs participate in the orientation of new students?
   d. Will the orientation processes need to be changed to accommodate the implementation of freshman colleges?
2. What steps are taken to make new students feel welcomed as valued members of the university community? Are faculty, support staff, and more senior students perceived as available, helpful, and friendly? (*Standards 5, 9, and 10*)

WHAT WE KNOW

APPLYING TO STONY BROOK AND MAKING THE DECISION TO ATTEND

Undergraduate Admissions

Admissions policies for freshman and transfer applicants are clearly stated in major university publications for prospective students. These policies support Stony Brook's goal of enrolling a highly competitive class while maintaining a diverse student body. The viewbook is sent to all students requesting information from the university (over 56,000 inquiries in 2002), and the Undergraduate Bulletin is disseminated to all students attending on-campus events and to all students offered admission to Stony Brook. The bulletin is also available online through the Undergraduate Admissions website (http://www.stonybrook.edu/sb/admissions.shtml). From 2002 Student Opinion Survey data, students were between neutral and satisfied with the bulletin and admissions materials, the accuracy of general information, and the quality of financial aid information received prior to enrolling.

The Undergraduate Admissions website also provides comprehensive information about the admissions process and policies, with links to financial aid and scholarships, special programs, and academic majors. While only 9% of Stony Brook students surveyed reported the Internet as their initial point of contact with the university (2002 CIRP Survey), Undergraduate Admissions data indicate that students using the website as their first means of contact increased by more than half, from 8% in 2002 to 13% in 2003. In April 2003, the admissions website had 13,700 unique visitors and 24,066 hits. Stony Brook's website recently underwent a complete redesign, which greatly improved its value for both prospective students and members of the university community. In addition, further resources are being dedicated to enhancing electronic communications in the recruitment process.

More than half of all prospective undergraduate students have contact with the admissions office beyond their initial inquiry, 37% of these through an on-campus event (open house, campus tours, interviews) and 26% through contact at college fairs and other off-campus recruitment events. The admissions office provides campus tours and interviews year-round and participates in recruitment/outreach activities in more than 500 schools in the tri-state region. The campus visit is a significant factor in the decision to enroll. In 2002, 35% of those attending just the fall Open House enrolled at the university. Conversely, the 2001 Declination Study shows that 54% of students refusing offers of admission did not participate in a campus visit.

The Undergraduate Admissions website has a link designed to address the needs of prospective transfer students (http://www.stonybrook.edu/ugadmissions/transfer/), and several admissions publications target transfer students and transfer issues. The admissions office participates in recruitment events at two-year colleges in our region and also conducts special outreach through our joint admissions programs and articulation of programs with partner two-year schools on Long Island. Transfer students participating in these programs are guaranteed admission to Stony Brook upon receiving specified associate degrees and meeting GPA requirements for their major. Stony Brook staff visits Nassau Community College, Suffolk Community College, and SUNY Farmingdale four to six times annually to meet with students who are part of these programs to assist them in their transfer to our institution. Three full-time transfer advisors work directly with the admissions office to help transfer students both pre- and post-enrollment.

All candidates are evaluated on a rolling basis by the admissions committee, and there is a second review process for any applicant considered ineligible for admission before notification is sent to the student. Students denied admission may appeal for reconsideration by presenting supporting documents to the dean of admissions. Over the last three years, 70% or more of our admitted freshmen had a mean GPA of 86 or higher and combined SAT scores of better than 1100. In addition, these candidates had completed a minimum of four years of high-school English and social studies and three years of mathematics and science, as specified in our admissions publications. Each year, up to 20% of the freshmen applicant pool may be admitted with consideration given for special talent or unique academic circumstances. In fall 2002, we admitted 53.8% of the freshman applicants. The percentage of admitted students who enrolled was 26.7% overall and 23% for the high achievers (the best qualified category of applicants, as defined by SUNY based on SAT scores and grade point averages). The fall 2003 first-year class has an average SAT score of 1208 for regular admits and a smaller proportion of special admits than previous years.

Academic reputation, affordability, preparation for graduate school, and *geographic location* were the most frequently given reasons for enrolling at Stony Brook. Stony Brook's *special programs* are also a positive factor for approximately a quarter of entering freshmen (2002 CIRP Survey, with similar results in the Student and Faculty Telephone Survey, Spring 2003). Stony Brook students were substantially less concerned than their peers nationally about the size of their school or its social reputation (2002 CIRP Survey). Figure 4 shows the factors that influenced students' decisions to attend Stony Brook, while figure 5 compares the factors important to entering Stony Brook freshman with entering freshmen nationally.

Transfer students are admitted and enroll at higher rates than freshmen applicants. Usually, better than 60% of transfer applicants are offered admission, and more than 60% of these enroll. For the past five years, Stony Brook has enrolled over 2,100 new transfer students each year. Location and cost are major factors influencing the decision of transfer students to attend Stony Brook. In fall 2003, 30% of transfer students came from Nassau and Suffolk Community Colleges, 12% from other New York two-year colleges, 15% from SUNY four-year schools, 18% from other New York four-year institutions, and the remaining 25% from out of state.

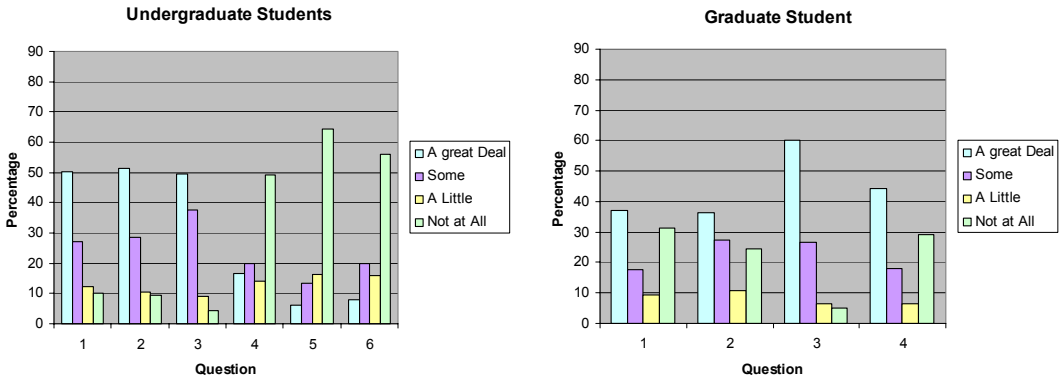

Figure 4: Factors influencing decision to attend Stony Brook

1. To what extent did the COST OF TUITION influence your decision to attend SBU?
2. To what extent did LOCATION influence your decision to attend SBU?
3. To what extent did ACADEMIC REPUTATION influence your decision to attend SBU?
4. To what extent did the AWARD OF A SCHOLARSHIP influence your decision to attend SBU?
5. To what extent did ATHLETIC PROGRAMS AND FACILITIES influence your decision to attend SBU?
6. To what extent did PARTICIPATION IN A SPECIAL PROGRAM (Honor's College, WISE, LLC) influence your decision to attend SBU?

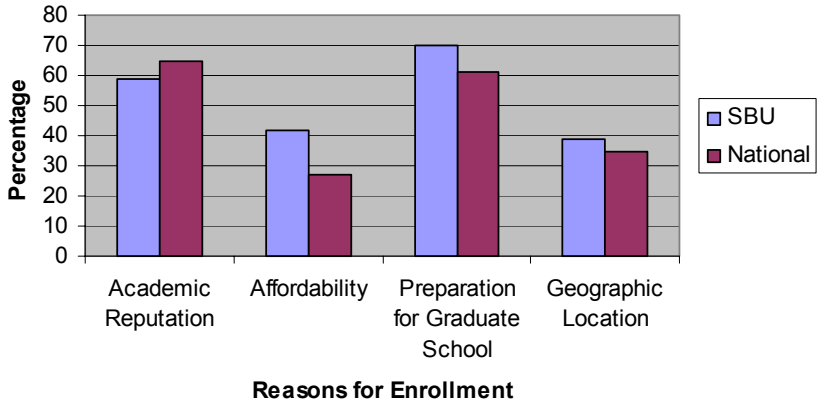

Figure 5: Factors rated very important in freshman choice of college (2002 CIRP Survey)

The major reasons that undergraduates declined offers of admission to Stony Brook were academic (41%), geographical (38%), and financial (27%) (2001 Declination Study). Academic reasons primarily included desire for specific majors or programs that are not offered here, dissatisfaction with program content, or preference for an institution perceived to have a better reputation. The proximity to New York City is an attraction for many students, especially those in the metropolitan region who prefer being close to home. For those who are seeking a more pastoral environment, however, it may be a deterrent. Schools with which we routinely compete for applicants include Binghamton University, Rutgers, University of Delaware, University of Maryland, and Pennsylvania State University in the public sector and, among private institutions, New York University, Cornell, Saint John's, Polytechnic, Boston University, Columbia, and Rennselaer Polytechnic Institute (2001 Declination Study).

A significant deterrent to enrollment is the paucity of financial aid in the form of scholarship support. For 70% of Stony Brook students, financing their college education is a concern, compared to 63% nationally (2002 CIRP Survey). Although in-state tuition and total cost are comparatively reasonable, 30% of applicants for fall 2002 admission came from families with annual incomes of less than $30,000. Federal and state aid is not always sufficient to fill the gap between resources and expenses. Need-based scholarships and discounted tuition for out-of-state residents would have a beneficial effect on increasing geographic diversity of our undergraduate students. The relatively limited number of merit-based and special talent scholarships (in the fine arts, for example) for freshmen has also affected the yield of high achievers, who cite higher levels of support offered to them by the other SUNY University Centers and private institutions (e.g., $7 million in academic merit scholarships at University of Buffalo in 1998 versus $1 million for new and continuing students at Stony Brook in the same year).

During the last five years, efforts have been made to increase the number and quality of freshmen. The freshman class size increased from 1,770 in 1996 to 2,392 in 2002, while the average combined SAT score increased from 1093 to 1170 in that period. The enrollment for fall 2003 was 2,164 freshmen, with an average combined SAT score of 1208 (the smaller number is determined by SUNY budget strictures).

A number of initiatives are underway to encourage a larger percentage of high achievers to come to Stony Brook, to improve the quality of undergraduate life, and to increase retention. These include expansion and enhancement of ongoing programs for high achieving students; major improvements in the physical environment (most notably in the residence halls and outdoor campus appearance); and the introduction of new programs, the most noteworthy being expansion of athletics to include Division I sports and establishment of thematic Undergraduate Colleges. Within the next two years, all freshmen will be placed in one of six such Colleges. The Colleges will provide advising, seminars, colloquia, and other activities to aid students academically and socially in a small-college environment.

In addition, fund-raising efforts have resulted in a dramatic increase in undergraduate scholarships. Merit-based scholarships for new and continuing students have risen in total amount from approximately $700,000 in 1998-99 to over $1.8 million in 2002-03. In 2002, more than $5.2 million was offered in scholarships to new students, and approximately $842,000 was accepted. The combination of these academic, programmatic, and financial initiatives has resulted in an increase in students choosing to enroll at Stony Brook, allowing us to maintain student quality while, in 2002, bringing in 250 more freshmen, including 100 in SUNY's highest category of selectivity. The percentage of applicants in this category who accepted offers of admission increased by nearly 3% from 2001 to 2002.

Similar to students at other SUNY University Centers, students at Stony Brook are generally satisfied with the diversity of the campus (Student Opinion Survey, Fall 2002). The ethnic background is given in Figs. 1-3. Fifty-three percent of entering students were female. With respect to geographic diversity, Stony Brook primarily serves the New York metropolitan area. Almost 90% of our students in fall 2002 came from Long Island or New York City. Students from elsewhere in New York State, other states, or other countries represent only 6%, 3%, and 4% of our undergraduate enrollment, respectively. The advantages of increasing representation of such students would include greater cultural diversity, more income from higher nonresident tuitions, and the likely enrollment of a larger number of high-achieving students. These students would also be more apt to remain on campus during the weekends, thus enhancing residential life and strengthening the campus as a community. These benefits must be weighed against the

resulting need for additional housing and services. Moreover, the recruitment of out-of-state students, especially from the high-achieving group, would require significant increases in scholarship support. Nonetheless, the ability to draw students from a wider geographic area might serve to enhance our academic reputation and place us more definitively among the ranks of highly regarded public research universities.

Graduate Admissions

Compared to data on our undergraduate students, information about graduate students is relatively sparse. Until recently, applications to graduate programs have been processed by the individual programs in a decentralized fashion. There is, however, an increasing move toward centralized, online applications, which will undoubtedly facilitate collection of data regarding the pools of applicants and admitted students. For admission in fall 2002, 40% of 5,265 candidates applied online; for fall 2003, the number increased to 51% of 7,107 applicants.

In 2000, the Graduate School initiated and subsidized an effort to publish recruitment/informational brochures for each graduate program. These color brochures, which will be updated every three years, have a uniform format and provide information about courses of study, facilities, faculty, placement of graduates of the program, the application process, financial aid, and life in the Stony Brook community. More detailed information, including policies of the Graduate School, degree requirements, and minimum requirements for application to the various programs, is available in the Graduate Bulletin. The bulletin is published in hard copy every two years, and the complete contents are available at http://www.grad.sunysb.edu/bulletin.htm. Moreover, all of the approximately 50 graduate programs maintain individual websites, with user-friendly access through the university's home page. Decisions regarding admittance are made by individual programs, although all accepted students must meet the minimum criteria set by the Graduate School. The average undergraduate GPA and GRE scores of enrolled graduate students vary fairly widely from program to program, with average GPAs ranging from 3.3 to 3.8 and average total GRE scores from approximately 1800 to 2100 (2003 Graduate Program Directors Survey).

With respect to diversity, the current population of graduate students is 60% female, 57% White American, 6% Asian-American, 6% African-American, 4% Hispanic-American, 18% international, and 9% unknown. These students come from a wider geographic area than do their undergraduate counterparts. Sixty-five percent of graduate students are from Suffolk or Nassau County. Interpretation of these figures is complicated, however, by the fact that they include a large number of students in masters' programs in the School for Professional Development, almost all of whom are from Long Island. Also, doctoral students who are U.S. citizens generally establish New York State residency to qualify for in-state tuition rates. Only 20–30% of graduate students in the Graduate School were residents of New York before admittance (2003 Graduate Program Director Survey). The percentage of international students has remained at 15–20% of all graduate students over the past five years. The fraction of international students in academic doctoral programs is higher.

As might be expected for graduate education, Stony Brook's academic reputation mattered a great deal for the majority (60%) of students who accepted admission to a graduate program see figure 4). Location, cost of tuition, and award of a scholarship or stipend meant a great deal to fewer students (36%, 37%, and 44%, respectively) (Student and Faculty Telephone Survey, Spring 2003). Nonetheless, the 2003 Graduate Program Director Survey revealed that many program directors perceived Stony Brook's comparatively low stipends to be an impediment to attracting the most highly qualified doctoral applicants. The problem is least acute in programs

in the sciences and engineering, where most of the students are supported by grant monies, which provide somewhat larger stipends, though the high local cost of living makes even these larger stipends less than competitive. Other programs must support their students largely through state-supported teaching or graduate assistantships, which currently provide $11,655 for the academic year. In both the 2001-02 and 2002-03 academic years, 744 of these assistantships were funded.

A limited number of scholarships to recruit exceptional applicants is made available each year through the Graduate School. These include Graduate Council Fellowships (about 10 per year) for exceptional incoming students and W. Burghardt Turner Fellowships (about 20 per year) for exceptional Native-American, African-American, or Hispanic-American students; both of these provide approximately $22,000 per year for five years. Pieper Awards (about 5 per year) for highly qualified incoming students provide $3,000 supplements for one year. The average acceptance rates for these awards over the past three years have been 25%, 56%, and 29%, respectively. Recently instituted University and Presidential Fellowships augment base stipends by $1,000 to $3,000 for one to three years, depending on the particular needs of each graduate program. For 2002-03, 303 such supplements, totaling $808,890, were awarded. The majority of graduate program directors reported that these initiatives have been useful for recruitment, but they are clearly too limited to remedy our general inability to compete in this arena with well-endowed private institutions.

BALANCING ENROLLMENT AND RESOURCES

How can we best balance the size of the admitted class with available resources? In large part, state funding to the university is based on the number of enrolled students. However, we must carefully weigh further increases in enrollment against the possibility that insufficient resources might negatively affect the experiences of our students. In July 2001, a working group focusing on the problem of course availability for undergraduates estimated that 15 to 20% of students experienced serious problems (delayed graduation, changes in major, or forced attendance at summer sessions) because they were unable to enroll in classes necessary for their program (see also Student Opinion Survey, Fall 2003). The problems stem in part from an inadequate number of sections in certain courses and inadequate availability of classrooms or laboratories, though another factor may be the inflexibility of students' personal schedules.

Housing is also a concern. In fall 2002, 933 new undergraduate students were tripled in rooms meant for two students, and 761 new and continuing students were placed on a waiting list for housing. Similarly, 256 new and continuing graduate students could not be accommodated. The situation will be alleviated, but only partly, by recent and planned expansion of housing capacity. A 528-bed apartment complex for upperclassmen opened in 2002, and a new apartment complex with an estimated 678 beds for upperclassmen and graduate students will open in the 2004-05 academic year. The Graduate Council has conducted a survey of housing needs among graduate and professional students and medical residents (Survey of Graduate Student, Medical Student, and Medical Residents' Housing Needs at Stony Brook, Spring 2001).

To balance curriculum capacity with enrollment targets, the admissions office works with academic departments to inform them of students' interests and to establish entrance requirements for some programs, such as engineering disciplines and business. Of course, at least a third of incoming freshmen have not yet decided on a major, and many others change their mind. The President's annual State of the University address, given each fall at a special convocation, includes data on applicants' interests and the number of majors in different

disciplines as a means of communicating how our student body is changing. College offices track numbers of admitted students and try to adjust capacity of courses to ensure sufficient availability of introductory classes for freshmen and gateway courses to the major for transfer students. Although these procedures have been helpful, they have not entirely solved the problem.

GETTING READY TO ATTEND

Undergraduate Students

Once admitted, students are sent a variety of information. The letter of acceptance for undergraduates is accompanied by the *Guide for Enrollment* a colorful booklet that describes how to submit the tuition deposit, sign up for housing and dining, and select a date for a summer orientation/registration day. After submitting the deposit, students receive information about housing options, and they are asked to complete an online form to express their interest in an Undergraduate College. All are invited to use a recently constructed website for new students (http://www.stonybrook.edu/sb/newstudents/), which provides up-to-date news about the registration day and opening week activities, as well as information from the offices of campus residences, commuter student services, and the like. The Office of Student Orientation and Family Programs sends new undergraduates a packet that describes the placement tests, and students are directed to a website with practice tests for the math exam and directions for taking the writing placement test (http://www.math.sunysb.edu/CDproject/OvUM/practice-exam/index.html). Students interested in taking chemistry are invited to use the online chemistry advisor, which asks them questions about their high school chemistry and math background and provides information about the different entry-level chemistry courses. Students take the writing placement test online before attending the registration orientation (a new development starting in the summer of 2003, replacing the hour-and-a-half writing test formerly administered during the registration day). On the registration day, students receive the welcome packet, which describes a variety of student services. This sequence of information is the result of an ongoing interdepartmental effort, started two years ago, to coordinate the information sent to new students from different offices. This process standardizes the appearance of materials to communicate a sense of university identity and ensures a logical flow of coherent information, which provides students with what they need to know when they need to know it.

As mentioned, freshmen and transfer students must participate in a one-day orientation/registration session during the summer before their arrival. This event is designed to place them in appropriate classes and aid them in the registration process. A second orientation, called "Experience Stony Brook," occurs in the two days prior to the beginning of classes. This two-part orientation, described below, has been operating for six years, and replaced a two-and-a- half-day orientation held in the summer. Significant problems made the summer overnight experience difficult. Students complained about the cost and the time that it took away from their summer jobs. Supervising the students was difficult; many took advantage of their freedom and were exhausted before taking the placement tests and registering for classes. Few continuing students wanted to be orientation leaders, because the schedule precluded their availability for summer courses. In moving to the one-day registration, we were able to recruit higher-achieving students as orientation leaders, run a concurrent program for parents, and provide a two-day socialization experience just prior to the start of classes.

The one-day summer programs for freshmen, transfer students, and their parents are coordinated by the Office of Student Orientation and Family Programs, with extensive cooperation from the Division of Student Affairs, the Office of University Advancement, and the Office of Enrollment

and Retention Management. Approximately 200 students are scheduled for each registration session, and the sessions focus on different areas of student interest. For transfer students, departments send their undergraduate directors and faculty to the appropriate sessions to assist with advising.

The registration day begins with a general introduction for students and parents. Students then meet in small groups with their orientation leader while parents begin their program. The parents' program includes a panel discussion with students, presentations by a variety of student services offices, and tours of campus and the community. The students take an hour-long math placement test, after which they receive information about the general education curriculum. They then consult faculty advisors and members of the Academic and Pre-Professional Advising Center staff to select from a list of typical freshman courses and complete their registration for fall semester. The results of the math placement test are used for placement in math, biology, physics, and chemistry. The writing placement test determines if students take English as a Second Language, Writing 101, or Writing 102. Placement in foreign languages depends on high school experience and grades.

General Satisfaction with Orientation and Registration

Students were satisfied to neutral about this orientation and registration process (2002 Student Opinion Survey). The 2002 New Student Survey indicated that students generally felt comfortable attending the placement and registration day. Reactions to the advising and registration experiences were mixed. When asked in the Student and Faculty Telephone Survey, Spring 2003 about their satisfaction with the academic advising and registration experiences of their first semester, 19% of new undergraduates were very satisfied, 44% were somewhat satisfied, 24% were somewhat dissatisfied, and 10% were very dissatisfied.

Usefulness of Materials

A majority (53%) of students were positive about the usefulness of materials that they received during orientation, 27% were neutral, and 17% were negative (2002 Winter Post-Orientation Survey). About half felt that the instructions provided in the student enrollment guide sent with their acceptance letter were very clear, and 35% judged them somewhat clear. The welcome packet was deemed very useful by 34% and somewhat useful by 49%. Forty-four percent had visited the new student website. Of that group, 54% found the website to be very useful, and 39% found it somewhat useful (2002 New Student Survey). A quarter of the students wished that they had received additional information, such as more housing/roommate information, a list of classes available, and advising/planning information. Freshmen believed that the new online SOLAR system for registration was effective (2002 New Student Survey).

General Advising

Overall, students were pleased with the helpfulness of the general advising session and the effectiveness of their faculty advisor (2002 Summer Orientation Evaluation). When asked about how well they understood the explanation of Stony Brook's academic requirements, 64% were positive and 26% were neutral. The 2002 Winter Post-Orientation Survey found that 69% of the respondents were positive and 27% were neutral about the helpfulness of the faculty advisors. A similar question in the fall 2002 Telephone Survey elicited that 27% were very satisfied and 44% were somewhat satisfied with the academic advising that they received from faculty during orientation. However, 13% were dissatisfied, and 6% were very dissatisfied. Students who attended the 2002 Student/Faculty/Staff Retreat felt that advising was not at a sufficiently personal level. Participants recommended assigning each student to an individual advisor right from the start. Students generally found the morning meeting with their orientation leader to be

helpful. Seventy-seven percent of the students were positive about their orientation leader, and 19% were neutral. Two-thirds felt that they received valuable information from the orientation leader, and 41% felt that the orientation leader influenced their course selection process (2002 Summer Orientation Evaluation).

Placement Exams

Turning to the placement exams, students at the 2002 Student/Faculty/Staff Retreat felt that they had not been prepared adequately for the placement exams. According to the 2002 Winter Post-Orientation Survey, 37% of students would have preferred to take both placement exams on a day other than the advising and registration day. The exams were seen as too stressful and time consuming—one of the prime reasons why, as of the summer of 2003, students began taking the writing placement exam online before coming to the registration day. Asked about the usefulness of the placement exam preparation website, 29% of the students were positive, 38% were neutral, and 29% negative (2002 Winter Post-Orientation Survey). The 2002 Summer Orientation Evaluation found neutral reactions to the math exam, whereas the 2002 Winter Post-Orientation Survey revealed that most students had positive (40%) or neutral (37%) reactions to the math placement test. The Student and Faculty Telephone Survey, Spring 2003 indicated that 60% of the students felt that the math course they were placed in was about right in difficulty. Only 6% found the course too difficult, while 22% found it too easy. Reactions to the writing placement exam given during the registration day were neutral-to-satisfied (2002 Summer Orientation Evaluation). However, 26% of students responded negatively, justifying the shift to the online writing placement test. Fifty-seven percent of the students felt that the writing course they were placed in was about right in difficulty. Only 2% found the course too difficult, while 20% found it too easy (Student and Faculty Telephone Survey, Spring 2003).

Transferring Credits

Students were neutral-to-satisfied with the process of transferring credits from other institutions (2002 Student Opinion Survey). Forty-seven percent reported that they received the transfer credits they expected, while 10% received more than expected, and 17% received fewer than expected (Student and Faculty Telephone Survey, Spring 2003). But almost a quarter were disappointed to learn that the transfer credits they received did not meet major or general education requirements and had to be used for electives.

Class Scheduling

When asked about the class scheduling process, 57% of students were positive, and 23% were neutral. Two-thirds felt that they registered for all the classes that they wanted (2002 Fall Telephone Survey). Satisfaction with course availability was slightly lower than neutral but better than at the other SUNY centers (2002 Student Opinion Survey). After the registration day, students were able to use the online or telephone registration system to make changes in their schedule on their own prior to the start of classes. Over a third did so. The predominant reason for changing classes was a desire to change to a more convenient time (2002 Fall Telephone Survey).

Overall Impressions

The 2002 Summer Orientation Evaluation indicated that 81% of the new students were positive about how they were treated by Stony Brook staff and faculty during the registration day and 15% were neutral. When asked, "After today, how do you feel about attending Stony Brook in the fall?," 63% were positive and 22% were neutral (2002 Winter Post-Orientation Survey). A number of general comments were collected from open-ended responses to the 2002 Winter Post-Orientation Survey: "I was confused about what had to be taken care of during orientation

and when and where to go for what things." "The day was tedious since students were supposed to be there by 8 AM. After all the tests and run around, when I was making my schedule, I just wanted to leave and go home." "It was fun. Made lots of friends from it. Got to find my way around faster." "Orientation was extremely helpful and productive. I learned a lot about classes and opportunities available at Stony Brook. It was comforting and relieved the skepticism I had." Some students provided recommendations: "Make orientation more fun." "...more social activities would get students excited and more involved." "There should be more advisors to help students select classes." A general comment from a participant at the 2002 Student/Faculty/Staff Retreat was that students need more time for socialization activities during the registration day. In general, retreat students encouraged making the registration process more welcoming and fun.

Comparison with Other Universities

We have investigated the formats other universities use for registering freshmen and transfer students. While many use placement tests, some place students based on their SAT scores and high-school record. Some register students by mail with phone calls from advisors. One SUNY university using this model subsequently offers students a two-day, on-campus program during the summer, which includes a strong social component. We have considered expanding the one-day summer orientation to two days. A two-day stay would be less expensive than the three-day experience that we offered in the past. Such a format, however, would make a program for parents logistically difficult, due to the high cost of lodging in the Stony Brook area. Our goal for the immediate future is to re-formulate the registration day in relation to the Undergraduate Colleges, making it a more personal experience while retaining the excellent program for parents.

Graduate Students

Once graduate students decide to enroll, they are sent a single, comprehensive booklet that includes information about tuition and fees, financial aid, registration, housing, health insurance and services, dining, and a wide spectrum of support services. A separate section addresses the particular needs of international students, and the International Services Office also provides these students with a variety of information relating to visas, required tests of spoken English, and the like. Graduate students, unlike their undergraduate counterparts, do not attend a summer registration/orientation session. Instead, all of their orientation activities take place just prior to the start of classes in the fall. Incoming students are mailed a schedule of these events during the summer.

ARRIVING ON CAMPUS

When students first arrive on campus in the fall, they are welcomed through a variety of programs. University-wide orientations are held for both undergraduate and graduate students, and supplemental sessions address the specific needs of transfer and international students. Individual departments, programs, and organizations also sponsor numerous events. Some initiatives extend past the opening week of school to provide support during the first semester and beyond. All of these programs are designed to introduce students to Stony Brook and prepare them to succeed in their studies and as active participants in the university community. Orientations include a comprehensive set of activities, organized to help students make friends and become familiar with the academic, social, and cultural resources available on campus.

Undergraduate Student Orientation

The opening week activities for undergraduates are published in a booklet called "Experience

Stony Brook," which is also the name given to the fall orientation. Copies of orientation materials and a wealth of other useful information are also available online in the "New Students' Welcome Center." Experience Stony Brook is mandatory for all new undergraduate students and is designed to introduce them to the campus and prepare them for the norms and expectations of the university. The first day begins with a welcome breakfast and includes the New Student Convocation, which is an official welcome to the university by the President and various distinguished faculty and staff. The First Year Reading Colloquium is a group discussion with the author of the required first-year reading assignment, which is mailed to enrollees in the summer. Recent selections include *The Tipping Point: How Little Things Can Make a Big Difference*, by Malcolm Gladwell, and *The Color of Water*, by James McBride. Incoming students in September 2003 read *Interpreter of Maladies*, by Jhumpa Lahiri, a Pulitzer-Prize winning collection of stories. A program entitled "Taking Ownership of Your Education" breaks students into groups according to their academic fields of interest and includes advice from faculty on expectations for performance in courses and tips on how to succeed academically. Transfer students attend a "Making the Transition," a session led by representatives from the Academic Advising Center and the Transfer Office. The day ends with dinner, entertainment, and a mixer.

On the second day, students attend presentations on personal safety and on-campus community rights and responsibilities. The remainder of the day involves conference-style workshops, which students can choose to attend according to their particular interests. Topics include eating disorders, interfaith opportunities on campus, getting involved with the media on campus, navigating biology, preparing for health professions, community service learning, meditation and stress management, and student clubs and organizations. During the weekend, there are receptions for specific groups of students, including those participating in the Honors College, athletics, or Alpha Tau Honor Society. Other opening week activities include residence hall information meetings, student activities information fairs, street carnivals, dances, and interactive programs.

Overall, students were pleased with orientation, with 21% very satisfied and 62% somewhat satisfied (Student and Faculty Telephone Survey, Spring 2003). Thirty-one percent of the students were positive about the "Experience Stony Brook" booklet; 50% were neutral (2002 Winter Post-Orientation Survey). The 2002 Fall Telephone Survey showed that students' overall impressions of the first day's events were neutral to favorable. Satisfaction with the student leaders and staff was high, with an average rating of 4.27 out of a possible 5 points (2002 Experience Stony Brook Evaluation). The session on academic expectations was rated very useful by 24%, somewhat useful by 39%, and not useful at all by 24%. Thirty-one percent of transfer students judged the session geared toward their needs as very useful and 41% judged it somewhat useful (2002 Fall Telephone Survey). The First Year Reading Colloquium, which has been in place for two years, has been neither well received by students (2001 and 2002 Experience Stony Brook Evaluation) nor perceived as particularly valuable by orientation staff. Its continuance will depend on identifying appropriate authors who can effectively lead large-group discussions.

Reactions to specialized workshops tended to be quite positive. Average ratings (out of a maximum of 5) were 4.6 for "Academic Programs in Media and Journalism," 4.5 for "The Date," 4.6 for "Preparing for the Health Professions," 4.6 for "Introduction to Mediation for Student Success," and 4.4 for "Student Media." A few sessions, however, received average ratings of less than 3 and will be revised to improve their appeal or replaced. These include "Community Service Learning," "The University Ombuds Office," and "History and Tour of the

Three Villages" (2002 Experience Stony Brook Evaluation).

Participants in the 2002 Student/Faculty/Staff Retreat suggested that Experience Stony Brook could be made more personal. They also felt that the orientation did not adequately recognize the needs of different groups of students (commuter, transfer, graduate, and international) and that lack of coordination among various university-wide and departmental orientations made some events repetitive. Retreat participants suggested limiting orientation information to the most essential items to avoid overwhelming students. They also proposed extending the responsibility of orientation leaders to encompass mentoring students during their first year.

Graduate Student Orientation

The Graduate School holds a mandatory, day-long orientation program for new students. This program introduces students to the policies and rules of the Graduate School, offers tips for success in their graduate careers, and provides an introduction to campus services and organizations for graduate students. The day begins with breakfast and an opportunity for students to meet one another and staff of the Graduate School. It ends with a catered reception, typically with live music. Faculty, graduate school staff, and officers of the Graduate Student Organization mingle with students and continue discussions on an informal basis.

During the following week, all new doctoral students, as well as master's degree candidates with teaching assignments, participate in a teaching assistant (TA) orientation organized by the Center for Excellence in Learning and Teaching (CELT). Doctoral students who do not have teaching responsibilities in the first semester are still required to attend CELT orientation, since doctoral education at Stony Brook requires a supervised teaching experience. CELT sessions continue throughout the semester to provide support for TAs. Those students whose native language is not English take a mandatory test of spoken English. Students who score below a set minimum are not permitted to teach and are required to take courses in English as a Second Language (ESL) until they become sufficiently proficient. These graduate-level courses are geared toward students who will be TAs and include practice in lecturing in front of an audience and instruction in use of audiovisual materials in the classroom. The CELT and ESL programs are important components of ongoing graduate student orientation and preparation for effective teaching.

Respondents to the 2003 survey of graduate program directors indicated that all of their programs provide supplemental orientations for their enrollees. The duration of these programs varies greatly, ranging from a single, two-hour session to a series of meetings that continues throughout the first year. Topics covered include program-specific resources, policies, requirements, and expectations; registration and scheduling issues; research opportunities available within the program; teaching responsibilities; sexual harassment issues and dating policies; and training in laboratory safety. Most of the programs also include social events, such as barbeques, picnics, or mixers, as part of the orientation activities.

Graduate students were more positive about their university-wide orientation experience than were the undergraduates. Thirty-three percent were very satisfied, 48% were somewhat satisfied. Orientation provided by individual programs was quite well received, with 41% of students very satisfied and 35% somewhat satisfied (Student and Faculty Telephone Survey, Spring 2003).

International Student Orientation

International students attend a variety of orientation events tailored to their specific needs.

Separate programs are conducted for undergraduate and graduate students. In consideration of the large number of orientation events that international graduate students must attend, they have been required, for the past two years, to arrive on campus two weeks before the start of classes. In each of the past two years, more than 450 new enrollees participated in orientation programs for international students. It is a major challenge to provide necessary start-up and survival information that is relevant to students coming from such diverse locations as Beijing, rural China, Paris, Eritrea, Jamaica, and Botswana.

Since fall 2000, the International Services Office has arranged for incoming international students to be greeted by Stony Brook staff and volunteer students upon arrival at Kennedy or LaGuardia airport. New students are transported back to campus by bus and are welcomed by Campus Residences staff, provided with a snack, and checked into their rooms or apartments. On the day of check-in, students are given a welcome packet and taken on a tour of campus. They are assisted in obtaining ID cards and e-mail accounts and meet with an international student advisor for an immigration intake interview. The check-in day is staffed by student volunteers and personnel of International Services and the Graduate School. At check-in, international student advisors are available to assist students with problems ranging from lost luggage to homesickness. Student volunteers help to individualize the process of negotiating the campus by accompanying the newcomers on errands. These volunteers include both domestic and international students, many with personal experience in cross-cultural adjustment.

The formal orientation program for international students begins with a welcome session and pizza party in the evening, followed by two half-days of sessions that cover the university health insurance plan, personal safety, immigration regulations, basic features of the US system of education, and tips for cross-cultural adjustment. A major goal of this orientation is to provide students with the names and locations of people who can help them if they encounter difficulties in negotiating the complexities of academia and life in the United States.

International-student orientation also includes a gala welcome dinner, which is a joint activity of Student Affairs, the Graduate School, and International Services. Members of the community hospitality host family program are invited to this dinner, and students who have requested host families meet them for the first time. Host families provide personalized and ongoing orientation, friendship, a connection to the community, and an opportunity to share aspects of the student's culture with an American family. Some students and their host families remain connected for the student's entire career in the United States and long after the student returns home, while others remain in contact for just the first few months of the student's stay.

These orientation programs are necessarily geared to those students who are least familiar with the United States and its system of education. Students with poor comprehension of English report difficulty in large-group sessions. Presenters therefore speak slowly and repeat information frequently. The majority of new students at the orientation programs are in the United States for the first time, do not speak English as their first language, and were previously educated in non-Western settings.

Coordination of Orientation Programs

The university community is awash in opening week activities, ranging from formal events at the college and departmental levels to informal social gatherings sponsored by clubs, fraternities, sororities, and other student organizations. Truly, there is something for everyone who arrives at Stony Brook. The challenge lies in effectively communicating with both the populations for which these events are intended and the various sponsoring groups. What is wanted is not so

much additional programming, but a greater degree of communication and collaboration. An "opening of school committee" is already in place. This committee is chaired by the Associate Vice President for Student Affairs and includes representatives from relevant offices, including the Provost's Office, Undergraduate Admissions, the Graduate School, the Registrar's Office, the Office of the Bursar, Campus Residences, Facilities and Services, Campus Dining Services, International Services, and the Division of Student Affairs. This committee meets regularly to make certain that infrastructure for fall orientation programs is in place and that the various events do not conflict with one another. In addition, a group convened by the Associate Vice President of Student Affairs evaluates the "curriculum" for orientation and the materials provided to new students (including mailings, handbooks, and online information).

Within the next two years, it is planned that all freshmen will be affiliated with one of six Undergraduate Colleges. Undoubtedly, we will want to restructure undergraduate orientation programs to take full advantage of the more personal environments that the Undergraduate Colleges are intended to provide. At the same time, some university-wide events must be retained to ensure that students feel that they are part of the larger Stony Brook community. The need for effective planning and coordination with respect to orientation is certain to increase once the Undergraduate Colleges are fully established.

A major goal of our orientation programs should be to stimulate intellectual discussions, so that the student walks away with tools for academic success and an awareness of ways to participate in the academic, social, and cultural matrix of a comprehensive and diverse research university. Stony Brook has done a great deal in the past few years to develop better orientation programs for new students. These programs should continue to be examined and fine-tuned to meet the needs of our ever-changing student populations.

RECOMMENDATIONS FOR THEME 1: THE TRANSITION TO STONY BROOK UNIVERSITY

1. Continue to enhance scholarship and financial aid opportunities for new students at both the undergraduate and graduate levels. The number of first-year undergraduate students who received scholarships increased from 6.4% in 1999 to 15.8% in 2002. We must continue to expand these awards to compete for highly qualified students. Similarly, stipends for doctoral candidates should be brought into alignment with those of our peers.

2. Improve the availability of courses for incoming students. The academic progress of some of our undergraduates is adversely affected by lack of space in appropriate courses. Failure to provide all incoming students with needed courses has the potential to harm our reputation and, consequently, our ability to attract highly qualified applicants. For example, modifying the orientation process to allow students to register for courses further in advance would provide more accurate prediction of demand in gateway courses and might allow us to fill this demand more easily.

3. Raise further the external perception of institutional reputation. Stony Brook must do a better job of informing the public and prospective students of our successes. In addition to promoting our educational and research programs, we need to better monitor and promulgate the success of our alumni in gaining admittance to graduate and professional schools, obtaining jobs, passing professional licensing exams, and other outcome measures, since these measures are central to prospective students' decision to attend a particular institution.

4. Improve the geographic diversity of the undergraduate student body. Our peers are national

in their undergraduate enrollment and they conduct significant ongoing out-of-state undergraduate recruitment. Attracting a more geographically diverse student body will enhance our national reputation, increase selectivity, and improve campus life.

5. Improve registration and advising for new undergraduate students. We must take steps to make the summer registration days a more meaningful, engaging early socialization experience. Initial satisfaction might be improved by giving students more time with the orientation leaders during the registration day. Beginning in summer 2004, all students will be oriented within the context of their Undergraduate College assignment, which will provide them with a greater initial sense of connection. Stony Brook must also find ways to connect individual new students with advisors and mentors over the long term. The revamped college-based 101 and 102 seminars will also give students semester-long opportunities to establish close advising and mentoring relationships with both faculty and staff.

6. Initiate systematic assessment of orientations for graduate and international students. We need to assess the extent to which our programs meet the specific needs of graduate and international students. There is wide variability in the comprehensiveness of orientations offered by individual graduate programs. We will scrutinize the curricula of these programs to develop best practices to enrich the orientation experiences of all graduate students.

7. Strengthen and expand coordination among orientation events. We must coordinate all university orientation efforts, including those of individual programs, departments, student organizations, and the Undergraduate Colleges. Orientation curricula should be evaluated to provide examples of effective practices and to eliminate duplication of effort and information. Moreover, fostering communication among various groups will allow optimal sharing of resources.

5. THEME 2: THE FOUNDATIONAL EXPERIENCE AT STONY BROOK UNIVERSITY

FOCUS AND SCOPE

In this section we assess the foundational experiences of undergraduate and graduate students in their first two years at Stony Brook, including the following:

- Successful transition to the university
- Academic preparation
- Instruction in first-year courses
- Instruction in general education courses
- Advising and guidance

Our primary motive in examining these various issues—first-year and general education courses in particular—is the belief that students enter the university with one set of expectations about their experience while faculty have a rather different set of expectations. In choosing courses in the first year, for instance, students may expect the material to prepare them for either a particular career or career path by providing relevant knowledge and skills; faculty may view their introductory courses as providing opportunities for the development of skills needed for further success in the major and the university; students may expect coursework to lead to specific jobs and salaries; faculty expect coursework to create more broadly educated human beings. It is this mismatch of expectations, we believe, that is at the crux of much of the difficulty students experience in their first two years. That half of our students are the first in their families to attend college heightens this mismatch: parents of 36.3% of students have no college experience at all; another 14.4% have some college experience but no degree.

Objectives

We defined the following objectives for the first two years of undergraduate education:

- First-year students successfully make the transition to the university. (We have not considered transfer students.)
- Students develop threshold performance in "literacies" (quantitative skills, oral and written communication skills, information technology, foreign language, the arts).
- Students develop threshold performance in "transferabilities" (ability to apply skills, knowledge in different contexts, flexible knowledge, through disciplinary development).
- Students are prepared to participate in research by their junior/senior year.
- Students are self-directed learners.
- Students identify and assess their short-term, educational, and career goals.
- Each student develops a strong network within the Stony Brook community.
- Students develop a strongly positive attitude towards Stony Brook.

Challenges

From National Survey of Student Engagement 2003 we identified several areas where Stony Brook is deficient in relation to other institutions:

- opportunities for active and collaborative learning, including participation in class discussions, class presentations, and collaboration on assignments inside and outside of class
- student interaction with faculty in the first year
- level of academic challenge, including emphasizing transferabilities, number and length of reading assignments, and level of effort

- providing a supportive campus environment for first-year (and, by implication, second-year) students

Most distressing, only 19% of Stony Brook freshmen reported that they would "definitely" go to the same institution if they could "start over again" (National Survey of Student Engagement 2003). We note, though, that our own Student and Faculty Telephone Survey, Spring 2003 produced the following result: 43% of undergraduates and 41% of graduate students said they would definitely attend Stony Brook again; another 45% of undergraduates and 45% of graduate students said they would probably attend Stony Brook again. These more positive numbers notwithstanding, we clearly have some work to do.

QUESTIONS ADDRESSED

To facilitate the organization of this section, we have grouped the questions addressed into a number of broad categories.

Mismatched Expectations

1. What characteristics of entering freshmen set Stony Brook apart from peer institutions? (*Standard 8*)
2. Do students' and faculty members' expectations of college education match? (*Standard 8, 10*)
3. How can the disparities between the two groups be remedied? (*Standard 8, 10*)

First-year Courses

1. What courses do first-year students take? (*Standard 11, 14*)
2. What are the types and sizes of first-year courses? (*Standard 11, 13, 14*)
3. What steps can be taken to improve learning and teaching in large first-year courses? (*Standard 10, 11, 14*)
4. Are transfer students adequately prepared in the foundational courses that they take before attending Stony Brook (*Standard 8, 10, 11, 12, 14*)

The Second Year and Transition to the Major

1. What courses do students take in the first year and how does this impact retention to the second year? (*Standard 11, 12*)
2. How can we improve the availability and quality of course offerings to enhance student success and improve student retention? (*Standard 8, 11, 12*)
3. How much contact is there between students and faculty outside the classroom (*Standard 10, 11, 12, 14*)
4. How can we help students to make a sensible choice of major? (*Standard 9, 10, 11, 12, 13, 14*)
5. How can we expand assessment of general education requirements and courses and improve upon them? (*Standard 7, 10, 11, 12, 14*)

Graduate Students: The First Year

1. What types of teaching do first-year graduate students do? (*Standards 11, 13, 14*)
2. What training and preparation for teaching do first-year graduate students receive (*Standards 10, 11, 13, 14*)
3. How are first-year graduate students advised and mentored? (*Standard 10, 13*)

Mentoring

1. What value do students and faculty place on mentoring? (*Standard 9, 10, 14*)
2. What is the current state of mentoring at Stony Brook? (*Standard 9, 10, 14*)

3. What programs foster mentoring? (*Standard 9, 10, 14*)

Notable Courses and Programs

1. What important developments have taken place in courses and programs in the last decade? (*Standard 10, 11, 12, 13, 14*)
2. Is there a common pattern to the educational innovations of the last decade? (*Standards 11, 12, 13, 14*)

Programs in Development

1. What major undergraduate programs are currently under development? (*Standard 9, 10, 11, 12, 13, 14*)
2. What are the objectives of these programs and how are they integrated into the institution (*Standards 9, 10, 11, 12, 13, 14*)

Academic Support Services

1. What notable improvements have been made in academic support services in recent years? (*Standard 9*)
2. How are improvements in academic support services integrated with educational programs (*Standard 9, 11, 13, 14*)

Assessment Plan

1. What is the current state of educational assessment at Stony Brook? (*Standard 11, 12, 14*)
2. What is the role of electronic portfolios in assessment at Stony Brook? (*Standard 11, 12, 14*)
3. What are the plans for assessment of specific programs in the next several years? (*Standard 11, 12, 14*)

WHAT WE KNOW

MISMATCHED EXPECTATIONS

Five hallmarks of our student body are the number of first-generation college students, financial insecurity, the large amount of time students spend on paid employment, the students' diversity, and the number of students whose native language is not English. The first two contribute to a mismatch of expectations that students encounter in their foundational college years at Stony Brook. This mismatch is evident from responses to our Student and Faculty Telephone Survey, Spring 2003. Students are goal oriented: they expect an emphasis on job and career-related skills and knowledge. Faculty members are more concerned with means: they emphasize academic skills and knowledge. Figures 6 and 7 illustrate this mismatch. Faculty also clearly place greater importance than students do on development of writing skills and making connections among different courses. Our students believe if they expended more effort on their academic work and attended class more regularly, they would do better, yet faculty in all disciplines report that students cut class frequently. We need to better prepare students for thinking about what a college education means and we need to better prepare faculty to address the expectations of students. We believe that these disparities could be remedied by: more explicitly addressing these issues in the classroom, especially in first-year courses; efforts that require students to think consciously about their educational and career goals; and by example, through successful mentoring.

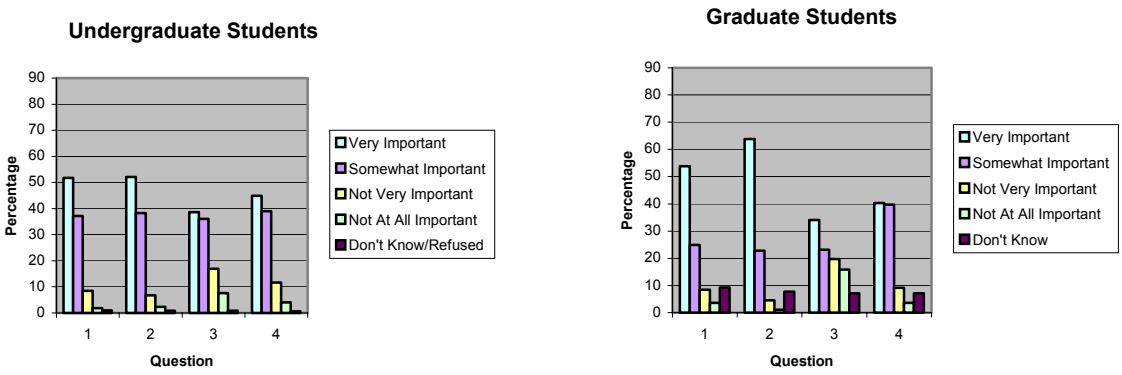

Figure 6: Important factors in course selection (students)

1. Thinking in general about all of your classes, when you choose a course at SBU, how important is it to you that the course provides you with specific job or career-related skills?
2. When you choose a course at SBU, how important is it to you that the course teaches you academic skills like problem solving and critical thinking?
3. When you choose a course at SBU, how important is it to you that the course helps you improve your writing skills?
4. When you choose a course at SBU, how important is it to you that the course draws connections to other courses you have taken?

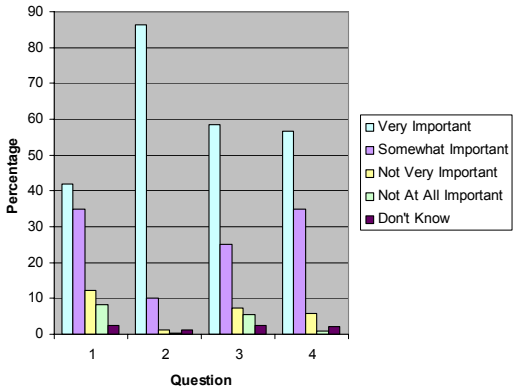

Figure 7: Course goals (instructors)

1. Thinking in general about a course, how important is it to you that the course provides students with specific job or career-related skills?
2. How important is it to you that the course teaches your students academic skills like problem solving and critical thinking?
3. How important is it to you that the course helps you improve your students' ability to write clearly and effectively?
4. How important is it to you that the course draws connections to other courses your students have taken?

FIRST-YEAR COURSES

First-year enrollments are concentrated in a small number of courses (listed below in order of decreasing first-year enrollment). First-year writing courses are limited to 20 students and about half of the first-year students also enroll in SBU 101, a one-credit introduction to the university taught mostly by professional staff members. Most of the remaining courses are large lectures with smaller recitation sections attached.

- WRT 101, Introductory Writing Workshop, and WRT 102, Intermediate Writing Workshop A—required to satisfy the university's writing requirement. Approximately 30% of students place out of the first course—small seminars of 20 in both courses.
- PSY 103 Introduction to Psychology—lectures of up to 560 students.
- CHE 131, 133 General Chemistry and Lab—lectures of up to 560 with 36-student workshops. Labs have a large common lecture with lab sections of 24.
- CHE 130 Problem Solving in General Chemistry—a zero-credit extra session for students in CHE 131 with weak mathematics preparation.
- MAT 123 Introduction to Calculus—lectures of 250 students with recitations of 36.
- First and second semester calculus courses and introductory calculus—lectures of 150-200 students with recitations of 36.
- MAP 103 Proficiency Algebra—a developmental course taught by undergraduates in the mathematics teacher preparation program and supervised by a mathematics professor.
- BIO 150 The Living World—lectures of up to 400 students with workshops of 24.
- SOC 105 Introduction to Sociology—lectures taught by faculty, adjuncts and graduate students.
- BUS 110 Business in the 21st Century—lectures of approximately 200 students with recitations of 35.
- PHI 104 Moral Reasoning—lectures of 100 taught by faculty and smaller lectures of 45 taught by graduate students.
- SBU 101—Introduction to the university taught in sections of 20-22 by university staff.

While the chemistry and biology departments have made tremendous improvements in providing a better small-class experience for their students within the large lecture, for most Stony Brook students, writing courses constitute the only small seminars they take.

Some students complain about our large classes but both instructional and facilities resources largely prevent our reducing class size in the first two years. Since large courses will be a fact of undergraduate education at Stony Brook, we need to take steps to improve the experience in those courses through development of alternative teaching methods that would enhance both student learning and the educational experience in general. By targeting the courses listed above, plus some additional courses that are also primarily taken by freshmen, we can improve students' learning, their engagement, and their sense of community.

We should note that all first-year students do have some small classes. Writing classes are limited to twenty students, as are one-credit first-year seminars. Classes in languages and the performing arts are also limited in size, as are classes in the Honors College.

We are particularly distressed by anecdotal information that many students who transfer to Stony Brook, especially from area community colleges, lack the knowledge and skills they would have acquired had they taken the foundation courses at Stony Brook. We could identify only one attempt to target the special needs of transfer students over the last five years: for two semesters,

a special learning community tried to provide opportunities for advising and skills development comparable to what the learning communities program (see below) provides for freshmen. We need to find ways in which transfer students can be helped to make the transition more swiftly and smoothly.

THE SECOND YEAR AND THE TRANSITION TO THE MAJOR

Like many institutions, we have put most of our emphasis on the first year and we've made significant strides in improving that experience. We have a healthy first-year retention rate of 87%. Students have opportunities to participate in various programs aimed at freshmen. But when students reach the sophomore year, they find little specifically for them. Over half have yet to determine a major; many more are confronting the painful realization that their intended major is inappropriate. Treating the first two years as a continuous process of building and preparing for advanced study and career preparation, we hope to address this imbalance, sensitize faculty and staff to difficulties encountered during the first two years, and identify strategies to help students' progress successfully to graduation.

In *Visible Solutions for Invisible Students: Helping Sophomores Succeed*, Philip D. Gardner writes that "Looking at reported faculty interactions of at least 10 minutes with faculty outside of class, sophomores reported the fewest number of encounters" (2000) yet we know that "at this point in a student's career, an advising relationship with a caring faculty member can make all the difference." All of our survey data, both national and local, indicate that Stony Brook sophomores too have insufficient contact with faculty outside the classroom.

Many sophomores at Stony Brook fall into the state that has been labeled the sophomore slump. More Stony Brook students have not declared a major than their peers at other institutions (a problem that we are now addressing). Those who have not declared a major often do not have the benefit of faculty advising, and may still be taking large introductory courses. Our Directors of Undergraduate Studies (DUGS) survey points to difficulties in the "major shopping" process. Departments have tried offering events to showcase their disciplines, but report that these are poorly attended by students, whose packed schedules of class and work do not allow much time for exploration. Even when students do declare a major, it can be hard for departments to communicate with them, simply because e-mail addresses for students are often inaccurate, though we believe this situation is improving.

Stony Brook has taken an important step towards addressing this issue. Beginning in fall 2002, we inaugurated a comprehensive Prime Time Academic Fair, to occur once a semester, at which students have the opportunity to learn about various academic disciplines and majors. For the first time, we provided a forum where students could go from program to program, exploring options. Our DUGS survey also documents how many departments are effectively using Blackboard and other websites to provide students with information about majors and departmental offerings. But we need to do much more, especially to encourage students to re-assess their own academic and career goals and aptitudes, to create advising opportunities that specifically address the integration of curricular and career issues, to develop curricular and co-curricular programs aimed at sophomores, especially in the service area, and to sensitize the campus to the needs of this population. Our recommendations for improvement include a number of suggestions aimed at improving the sophomore experience and the transition to the major.

GENERAL EDUCATION: DIVERSIFIED EDUCATION CURRICULUM

Stony Brook's general education program, the Diversified Education Curriculum (DEC), has been in place for a dozen years. It consists of 42 credits of courses and its objectives are to build intellectual skills and understanding of our students so that upon graduation they can excel in their professional and personal lives. The curriculum is described in detail in the Undergraduate Bulletin.

Our review of the DEC has identified a lack of understanding of its nature and purpose, on the part of both students and faculty. Fully 88% of respondents to our 2003 online faculty survey said that they valued teaching DEC courses because it makes "our students more well-rounded educationally" (44% strongly agree, 44% agree). This far outweighed other reasons for valuing teaching of general education courses. Yet in our faculty survey, 22% of respondents said they did not know which DEC categories their courses fulfill; 63% said that when a course satisfied a DEC category, it does not affect the course content or how the course is taught (Student and Faculty Telephone Survey, Spring 2003). A coordinated effort is needed to better align individual course syllabi with the goals of the DEC. Only with such efforts can we expect students to understand the value of these courses and how they contribute to the student's growing understanding and knowledge.

We hear anecdotal reports from students that they don't understand why they have to take a course in a certain category, or how the course relates to their other learning and their other coursework, although Stony Brook rates about average on the national scale in students' satisfaction with general education courses. We must do a better job of communicating to both faculty and students the purpose of general education courses and how these course contribute to that purpose.

We have begun to implement systematic assessment of both the DEC as a whole and the courses that compose it. In spring 2003, in response to a SUNY mandate to assess SUNY general education learning outcomes (satisfied by our DEC), the Provost convened a group of faculty and staff to develop a plan to assess our general education courses. The members of the committee recognized that while assessment is important, faculty would undertake the effort only if the assessment would provide useful information for actually improving student learning. To that end, faculty members of the committee developed a two-pronged proposal. To meet the immediate needs of SUNY, several instructors embedded learning outcomes assessment questions into their final examinations. But we are particularly proud of our longer-term proposal, which we piloted in spring 2003. We will assess general education as general education rather than as discrete courses. Our pilot consists of using one introductory biology course to assess learning outcomes in quantitative skills, communications skills (both written and oral), natural sciences, and information management. The General Education Assessment Plan is included in the supporting documents.

GRADUATE STUDENTS: THE FIRST YEAR

First-year graduate students take a prescribed program of courses. In almost all disciplines, the first year of Ph.D. study constitutes a transition from the classroom to a research environment. Because of the diverse experience of graduate students in different disciplines it was very difficult to make other generalizations about their first year. Furthermore, the university does not routinely conduct surveys of graduate students at the same level as is done for undergraduates (although there have been recent surveys concerning housing and quality of life). We therefore

concentrated our attention on the use of first-year graduate students in either teaching or research. As a rule, no first-year students are permitted to teach stand-alone courses. Students in the humanities, the arts, and the social and behavioral sciences often serve as teaching assistants in large classes, while first-year graduate students in the laboratory sciences are in general required to conduct recitations or laboratories in introductory science courses. In some departments, there is extensive support of these teaching efforts, for instance in chemistry and biology, where students are carefully trained in instructional methods.

Among graduate students surveyed, 71% reported they had received some teacher training before beginning their first teaching assignment; 37% said the training consisted of several sessions, a little over half said it was a semester course. Asked how satisfied they were with the mentoring and supervision they received from their department during their teaching assignment, 88% were either very satisfied or somewhat satisfied.

In the survey of graduate program directors, a minority report having a practicum course for new instructors. For the rest, instruction is provided either by the course coordinator for whom the graduate is serving as an assistant or through an orientation and training program provided by CELT. Given that the university now mandates a teaching experience for graduate students, this is an area that needs to be addressed more closely and systematically. Indeed, the Graduate Council has made the teaching practicum a priority for the current academic year, along with housing, stipends, and tuition.

From the survey of graduate program directors, we conclude that the directors are the primary early resource for advising and mentoring. In the first year, most students are advised by the graduate director of their department while some are assigned a faculty advisor. In the sciences, there is emphasis on helping students find a permanent research advisor. In a few departments, first-year students are assigned a senior graduate student mentor.

Of particular note is the chemistry department, which has a systematic program for orienting, training and mentoring new graduate students. Students spend approximately six days in orientation sessions over the course of the orientation week and the first few weeks of classes. Topics include information about the department and program, safety training, placement examinations, and TA training. Social gatherings are also offered. All first-year students are assigned an advisor and are also assigned an advanced graduate student mentor. This was clearly the most extensive and coordinated program for helping graduate students make the transition to the graduate program, preparing them for teaching responsibilities in the first year, and for advisement for future years.

Finally, while 80% of graduate students (including master's students) reported that they had a faculty advisor or mentor, and 77% found that advisor very helpful or somewhat helpful; 10% found the advisor not very helpful or not helpful at all. We must make an effort to identify and assist this last group.

MENTORING

We use the word mentoring to mean any relationship between a member of the university community—the mentor may be student, faculty, or staff—and a student to whom the mentor provides guidance on issues of concern, most especially academic issues. Mentors should show an open, welcoming attitude that invites the student to seek advice and to engage in meaningful discussion.

Among the students who participated in the SFS Retreat, mentoring was the single most important issue. Students reported that one of the most valued aspects of their Stony Brook experience was the development of a relationship with a person whom they classified as a mentor. In the Stony Brook New Student Survey, 82% of respondents believe a relationship with faculty members beyond the classroom is important, though less than half report having had any discussion about ideas with their instructors outside the classroom. In the Student and Faculty Telephone Survey, Spring 2003, 81% of respondents were interested or very interested in having a faculty or staff mentor (42% very interested; 39% somewhat interested). In the freshman/sophomore survey, more than 96% of freshmen and 90% of sophomores said they would want such a relationship.

While students consider a relationship with a faculty member outside the classroom so desirable, Stony Brook does not rate well in relation to other institutions in the amount of contact students have with faculty outside the classroom (Student Opinion Survey 2003). Our current solution to this problem—regularly scheduled faculty office hours—is not working well. While three-quarters of the respondents to the freshman/sophomore survey indicated that faculty have office hours at times they can attend, fewer than half say they take advantage of faculty office hours.

Many faculty report that they encourage students to attend their office hours and try to be welcoming, but students don't take advantage of it. Faculty also report that the majority of student questions are not asked during office hours but at the beginning and end of classes. Given the short time periods scheduled between classes, these before-and-after class question periods are not sufficient. Over twenty years ago, the University Senate mandated minimal requirements for office hours, but we have seen that office hours are not the best method of developing faculty-student interaction. The policy should be revisited and reconceived as student contact hours, and alternative methods of contact, like e-mail and Blackboard, should be encouraged as means by which to develop this kind of relationship, initiating direct contact between faculty and students. We also believe that the burden should not rest entirely with the student to initiate that contact. Faculty bear a responsibility to foster mentoring relationships with students and to act in ways that provide opportunities for them to develop.

Stony Brook does, however, offer a number of programs designed to pair mentors with students or to provide the opportunity for such relationships to develop. These include the Advancement on Individual Merit/Equal Opportunity Program, which mandates four annual visits to an assigned advisor and has a high rate of graduation; the Mentor Program, in which volunteer faculty and staff are paired with underrepresented students interested in having mentors; Health Sciences Center programs, in which second semester students voluntarily pair with new students; and peer advising opportunities, where peers serve as advisors and potential mentors. A peer mentor program is also in development.

NOTABLE COURSES AND PROGRAMS

Over the last few years, Stony Brook has made several successful changes to foundational courses and programs, including the Freshman Learning Communities Program, which enrolls approximately four hundred students each fall. Two academic programs in particular have made successful changes: chemistry and biology. Two administrative areas have also made substantial changes: the Academic and Pre-Professional Advising Center and the Career Center. Other programs, such as Women in Science and Engineering (WISE), the Honors College, and the Program in Writing and Rhetoric have also undergone change.

General Chemistry
The undergraduate chemistry program is Stony Brook's poster child for instructional innovation. Faculty have made extensive changes over the last several years to improve students experience and chances for success in chemistry.

The department has instituted an extended course sequence for introductory chemistry for students with weaker mathematics preparation and a zero-credit help session mandated for students with a certain performance level on our local mathematics placement examination. Coursework is supplemented by weekly individualized quizzes that are modified and graded by computer. Each student registers an e-mail address with the chemistry webmaster. On request, an individual quiz is e-mailed to the student. The student works the problems, registers answers, is scored instantly, and may try again on any wrong answers. The department has changed from a fifty-five-minute recitation to an eighty-minute workshop format with emphasis on teamwork as a means for engaging students in learning and developing their conceptual understanding and problem solving skills. As these modifications are undertaken, feedback from students is sought and mid-course corrections are made. These initiatives are now seen by students and faculty alike as positive for morale and constructive for the learning process.

Introductory Biology
Undergraduate biology is fast coming to rival chemistry as an innovator. The faculty's plan for general education assessment is far-sighted and far-reaching. Five years ago the three biology departments that contribute to undergraduate biology convened a group to examine the curriculum in light of recent significant changes in the disciplines. As a result, the old two-course biology sequence was replaced with a three-course sequence to allow greater consideration of growing fields. More importantly, the department introduced an introduction to research course for students with lower mathematics preparation. The course is revolutionary at Stony Brook in that it helps students develop quantitative reasoning and research skills in preparation for study in the discipline. For instance, students design and conduct their own experiments, even making their own solutions. All work is team-based. A new learning lab created for this purpose has also contributed to the course's success. Initial assessment of the course is positive and anecdotal reports from instructors of subsequent courses report their students seem better motivated and better able to conduct research.

Program in Writing and Rhetoric
This is another area in which we have made major strides. Previously almost all courses were taught by adjuncts and graduate students, including many first-year English graduate students. In 1997, a new director was hired and has professionalized the program. The majority of classes are now taught by full-time lecturers. In addition, in 1998 the university's writing requirement was strengthened, creating a two-course sequence, though about 45% of students place out of the first course. Previously, approximately 95% of incoming students placed into the standard one-semester course. The lower-level course, though counting toward graduation, enrolled few students because the university lacked the resources to offer additional sections. The change to the writing requirement in 1998 was both cosmetic and substantive. The cosmetic change was intended to improve the way students—and advisors—felt about the lower-level course. It was a subtle change but has appeared to have been effective. Students are now told that most students take two writing courses and their improved attitude toward having to take two courses has improved their performance in the courses. The substantive change was to the number of students now actually required to take two semesters (or more, for some students for whom

English is a second language). We would like, as an institution, to be able to require all students to take two writing courses, but resources still stand in the way of meeting that objective.

Calculus

Four years ago, the Provost and the Deans of the College of Arts and Sciences (housing the mathematics department) and the College of Engineering and Applied Sciences (housing the department of applied mathematics and statistics) convened the Freshman Mathematics Advisory Committee to examine issues of teaching and learning in introductory mathematics courses. Now functioning as a forum for members of mathematics, science, and social science departments to examine issues of teaching and learning quantitative skills and reasoning, the committee has been instrumental in developing and implementing a plan for mathematics assessment in non-mathematics courses and prompting a number of changes to freshman mathematics instruction, such as better placement, coordination between the two departments, and consultation with user departments. A major consequence of the committee's efforts is a shift in focus: the disciplines using mathematics now recognize that they need to work together with the math departments to reinforce for students the importance of quantitative skills.

The applied mathematics department has also introduced a two-course introductory calculus sequence organized around team learning and computerized homework problems. Class time is spent primarily with students doing homework problems in groups, as the instructor and a course assistant monitor and assist the groups. Individualized homework problems are generated, students submit solutions and are instantly told if their answer is wrong, in which case they can revise and resubmit as often as needed. Students develop a wide array of sources for getting help outside of class—they come to office hours, e-mail the instructor, form study groups, and get help from friends not in the course.

Honors College

The Honors College was created to provide cohorts of high-achieving students with extensive faculty mentoring and a seminar-based curriculum for general education. Stony Brook's Honors College is very small, with a yearly class of about sixty students, and highly selective by any standard (the minimum SAT score for applicants is 1250). The Honors College also houses the Scholars for Medicine program, which each year admits no more than six students, each of whom is conditionally accepted to Stony Brook's medical school, provided that they meet certain academic goals. Each entering student receives a faculty advisor in the academic area of his or her interest. Advisors provide academic and career guidance. In addition, each student completes a year-long honors project consisting of research or creative activities under the direction of a faculty member. The Honors College provides a series of seminars in place of the university's DEC. The seminars, limited to twenty-five students, are explicitly interdisciplinary. Through a process of self-study, these seminars were revised in 2000 to increase their interdisciplinary nature, which students valued highly. Students in the Honors College typically have garnered praise for both their academic excellence and their community service. For example, in recent years, Honors College students have combined to make the campus newspaper, Statesman, into a model of its kind. The curriculum and faculty mentoring provided by the program allows the students to take greatest advantage of their own potential.

WISE (Women in Science and Engineering)

Women in Science and Engineering is a comprehensive program that seeks to increase the number of girls and women in science, mathematics, and engineering (SME) through a program for high-achieving female undergraduates interested in SME areas that provides early research opportunities, multi-tiered advising from advanced undergraduates and faculty, scholarships, and

social support. Students also are given opportunities for summer research internships on and off campus. Successful features of the program that might be applied more broadly include: the use of a small introduction to research course (WSE 187) to engage student interest in research; the formation of peer study groups; and the development of junior student mentoring programs.

PROGRAMS IN DEVELOPMENT

Undergraduate Colleges

In this ambitious initiative coordinating student affairs, student life, and academic affairs, all freshmen are assigned to one of six thematic colleges. This is the university's first truly campus-wide initiative on the undergraduate level. The program provides a thematic, social and academic component to a student's experience outside of the classroom. Each college is loosely organized around themes sufficiently general to have appeal to all students. Key features of the Colleges include:

- on-site academic advising with advisors assigned to each college
- SBU 101 sections taught by college advisors
- a faculty director who coordinates the offering of one-credit special seminars around the theme of the college
- small seminars taught by faculty and designed to provide an opportunity for small-class interaction between faculty and students
- opportunities for additional outside-the-classroom experiences at sponsored dinners and programs

We are concerned about how our commuter freshman population (currently 23%) will be included. While each College is housed in a particular residential area, meeting areas in the central academic mall for informal gatherings and more formal seminars and clubs should enable commuters to feel more a part of the College experience.

Learning Communities Program

We hope that the Undergraduate Colleges will provide a forum for instructional experimentation and our Learning Communities Program is preparing to take advantage of that. The program, begun five years ago, will provide an enhanced academic component to the Colleges and an opportunity for instructional flexibility and interdisciplinary development. The Learning Communities Program was created to address five specific problems that are general to research universities.

- Many students are unready to take full advantage of the special opportunities offered by a research university.
- Students perceive general education requirements as hurdles unrelated to their goals and areas of specialization.
- Students report feeling lost in a large institution and express a need for intellectual community.
- The curriculum does not include elements that specifically engage students in learning and help them develop essential learning skills.
- Faculty are not motivated to develop more effective modes of teaching or to respond to the growing interdisciplinary nature of what is taught.

The learning-communities concept builds on the idea of using common enrollment in courses to develop common interests, experiences, and challenges; students who have these commonalties engage in learning together and help each other succeed. Each community is a cluster of three courses anchored by a program seminar focusing on collaborative research, integrating learning

across the disciplines, and developing key learning skills (e.g. information processing, problem solving, oral and written communication, teamwork, and self-assessment). The seminar instructor functions as teacher, academic advisor, mentor, and exemplar. Faculty teaching in the program collaborate in the development and delivery of their courses. The program is now in a good position to provide leadership in the development of variations on this model to enhance the academic and co-curricular experience of more and more Stony Brook students.

Peer Mentoring and Faculty Mentoring in the Undergraduate Colleges

The Learning Communities Peer Mentoring Program is designed to educate students on how to be an effective peer mentor: students enroll in a mentorship course and work with freshmen in the Undergraduate Colleges. The Colleges provide a prime opportunity for pairing students with faculty mentors as well. The small seminars, for instance, provide a locus for development of long-term relationships between students and faculty. We expect that the small seminar environment will also increase student/faculty interaction. This has already been borne out to an encouraging extent in the first year of the program.

ACADEMIC SUPPORT SERVICES

Academic and Pre-Professional Advising Center

The center has been the object of a strong administrative commitment to improve general student advising. In the last year, a new director and several additional staff were hired, and the center was re-named the Academic and Pre-Professional Advising Center to better reflect the comprehensive nature of the general, pre-health, and pre-law advising services available. The center analyzed the advising process and has changed to advising by thirty-minute appointment period. In most cases, students see an academic advisor immediately or later the same day. The system encourages students to schedule appointments with specific advisors for repeat visits, building more personal and on-going advising relationships. In addition, the center established an information table outside the office staffed by professionals and undergraduate peer advisors to provide basic information and answer quick questions. Finally, the center has worked to improve its visibility on the campus through several new initiatives, including:

- a periodic Stony Brook Source e-mail message that includes important academic information such as events, policies, and deadlines
- Academic Advising Day on the academic mall
- a coordinated Prime Time Academic Fair for students to explore major and minor opportunities with faculty representatives from all academic departments

The center plans to develop improved coordination and collaboration with academic departments to allow for a more seamless transition once students declare their major. Comprehensive assessment will be undertaken to examine individual and collective impact on student satisfaction and retention.

ASSESSMENT PLAN

In spring 2003, SUNY System Administration approved Stony Brook's comprehensive plan for the ongoing assessment of general education. Further assessment will also be done with existing survey data with progress measured against our own and national benchmarks. Indeed, Stony Brook has a wealth of such data, accumulated over the years. We need to close the feedback loop by responding to the findings of these surveys. A major recommendation of our entire report is to do just that.

Measurement of some of the quantitative and many of the qualitative learning outcomes might also be accomplished through the use of an electronic portfolio system. There has been extensive discussion and development of electronic portfolios over the last several years and there are many existing models we could use. We see potential value in the electronic portfolio not only for assessing whether we are accomplishing our ends but also for encouraging student self-assessment.

In addition to assessment of the foundational experience, we want to encourage programs to develop and implement assessment systems of their own over the next several years. Several departments and support services have committed to undertake assessment of all or aspects of their programs over the next several years as a result of our efforts. Support—both financial and administrative— should be provided by the administration to facilitate that essential activity.

General Education
Expansion of a comprehensive assessment of general education will require the engagement of many faculty and staff and resources will be needed to help faculty and staff develop and implement the plan.

Writing and Rhetoric
Undertake a complete review, with emphasis on writing placement and the two principal writing courses, to determine whether students are indeed achieving competency in basic writing and critical interpretation skills.

Undergraduate Biology
Continue to develop and expand an interdisciplinary plan of assessment of general education learning outcomes in biology courses.

Chemistry
The department has already begun assessment of their introductory courses, and will continue to develop and expand their efforts.

Psychology
The department has already begun to develop a plan to assess the undergraduate program.

Undergraduate Colleges
Assessment is built into the planning of the Colleges and will be implemented as the Colleges are introduced.

RECOMMENDATIONS FOR THEME 2: THE FOUNDATIONAL EXPERIENCE

8. ***Improve first-year courses.*** Efforts to improve students' learning and experience in the classroom should be concentrated on large first-year gateway courses. The university should explore innovative ways of changing the large lecture course experience to make it more interactive and personal. The university should also find ways to decrease the size of first-year courses. In an effort to foster interdisciplinary cross-fertilization, faculty teaching large lecture courses in related disciplines should collaborate to develop common problem sets or learning skills exercises. Faculty should be rewarded for outstanding performance in these courses.

9. ***Simplify the array of courses available to first-year students.*** Freshmen are faced with the overwhelming task of putting together a schedule from the many available courses. While we do not advocate restricting course choice, first-year students should be given a simplified list of the courses that most freshmen take, along with sample schedule templates and popular course combination packages from which they can select, based on interest and need.

10. ***Improve the foundational experience.*** Virtually all academic programs offer courses that address broader needs of the campus community, such as freshman seminars, introductory survey courses, and courses designed to satisfy general education (DEC) requirements. In each case, the learning objectives and learning outcomes of the course should be explicitly stated and publicized.

11. ***Identify ways for transfer students to make a smoother transition to Stony Brook.*** We must better assess the skills and knowledge of transfer students and help those who fall short in specific areas.

12. ***Continue to build a culture of constructive assessment as a tool for improvement throughout the university.*** Many members of the university community view assessment as an externally imposed burden, rather than a tool for improvement. The university is already committed to the SUNY-mandated assessment of general education. Stony Brook should create incentives for assessment and mechanisms for disseminating and encouraging best practices, while assuring that assessment will not be an empty exercise, but rather a generator of concrete actions for continuous improvement of the university.

13. ***Encourage students to make academic and career goals a priority.*** Stony Brook should find mechanisms to encourage students to assess their academic and career intentions regularly. These should include improved outreach to students and other ways to encourage students to select a major.

14. ***Provide mentoring opportunities for every student.*** Our surveys show a very strong demand among students for mentoring. Mentoring can have a significant impact on the satisfaction, success, and retention of undergraduate students, both as mentor and mentee. Further, the relationships established between the mentor and mentee are mutually beneficial. Because no single approach can sufficiently meet all needs, efforts should be made to both grow existing programs and develop new ones (including training programs).

6. THEME 3: EDUCATION AND SCHOLARLY ACTIVITIES

FOCUS AND SCOPE

The topics addressed in this section include teaching and learning; curriculum; research and creative activities (the role of research in undergraduate education); and academic resources (libraries, laboratories, and instructional facilities).

QUESTIONS ADDRESSED

Teaching and Learning

1. What sorts of learning outcomes do students and instructors value most when choosing a course and are these learning outcomes delivered? (*Standards 10, 11, 12, 14*)
2. What specific types of instructional activities beyond the standard lecture take place in the classroom? (*Standards 10, 11, 12, 14*)
3. Are the courses available that students need to complete their graduation requirements and are they available when students want to take them? (*Standards 10, 11, 12, 14*)
4. How well prepared are students when they come to class? (*Standards 10, 11, 12, 14*)
5. How do students and instructors interact outside the classroom? (*Standards 10, 11, 12, 14*)
6. Are graduate students adequately prepared to act as instructors? (*Standards 10, 11, 12, 14*)
7. Are students satisfied with the faculty advising they receive? (*Standards 10, 11, 12, 14*)

Curriculum Development

1. Who oversees the curriculum? (*Standards 7, 0, 11, 12*)
2. Does Stony Brook have any notable programs for fostering curriculum development? (Standards *7, 10, 11, 12*)

Research and Creative Activities (the role of research in undergraduate education)

1. Has Stony Brook been successful in engaging undergraduate students in research, following the recommendation of the Boyer report? (*Standards 10, 11, 12, 14*)
2. How do students who participate in research value the contribution of faculty? (*Standards 10, 11, 12, 14*)
3. How does research affect the overall experience of undergraduates at Stony Brook? (*Standards 10, 11, 12, 14*)
4. How often do individual faculty members serve as undergraduate research advisors? (*Standards 10, 11, 12, 14*)
5. How do faculty feel about undergraduate participation in research? (*Standards 10, 11, 12, 14*)
6. Why do faculty sometimes refuse to supervise undergraduate research? (*Standards 10, 11, 12, 14*)

Academic Resources (libraries, laboratories, and instructional facilities)

1. What notable academic resources does Stony Brook have? (*Standards 9, 10, 11, 12, 13)*
2. How are academic resources used to advance education for both undergraduate and graduate students? (*Standards 9, 10, 11, 12, 13*)
3. How has the library kept up with developments in technology? (*Standards 9, 11*)
4. How much do students use the library as a resource? (*Standards 9, 11*)
5. Are students satisfied with access to computer laboratories? (*Standards 9, 11*)

6. Are classroom and laboratory facilities adequate to the needs of the institution? (*Standards 9, 11, 13*)

WHAT WE KNOW

TEACHING AND LEARNING

Stony Brook students have a better overall impression of the quality of their education than those at the other three SUNY universities and most of the four-year colleges. They feel that they have been intellectually stimulated, but are somewhat less satisfied with the university in general (Student Opinion Survey 2003).

Spring Survey Results on Teaching and Learning

Students and instructors were asked a number of questions about what sorts of learning outcomes they value most when choosing a course: improved job skills; improved academic skills like problem solving and critical thinking; improved writing; or establishing connections between courses. Not surprisingly, as already noted in the discussion of Theme 2, there was a discrepancy between students and instructors. Instructors valued academic skills, writing, and establishing connections between courses more highly, while students valued specific job skills more highly. Most telling was the Janus-like difference in the responses of graduate students who answered on the one hand as students and on the other as instructors. As students, 54% rated job skills as very important, while as instructors the response was only 38%. Similarly, as instructors, 66% rated teaching writing skills as very important, while as students only 34% rated writing skills as very important (lower than the 39% response of undergraduates). These differences show nicely how expectations are determined in at least some part by one's role in the classroom. It is still important, though, that faculty especially, understand that students' expectations are very different from theirs and that they allow for these differences in planning and teaching their courses.

The next set of questions was designed to measure both students' and instructors' assessment of whether the courses that they took or taught had achieved these learning outcomes. Interestingly, students felt that they had made greater progress in the two areas that faculty felt were most important: problem solving and critical thinking; and drawing connections between courses (61% and 58% felt they had learned very much or quite a bit in each area, respectively). The responses for writing and career skills were lower; though it is notable that Stony Brook students were more satisfied than any other SUNY students with their improvement in writing, according to the spring 2003 SUNY survey of student satisfaction. Alumni showed a similar pattern.

Students and faculty were asked a number of questions about specific classroom activities: making presentations; asking questions or contributing to class discussion; in-class and out-of-class group projects. All these appear to be reasonably wide-spread (with class presentations being the least common), though it is hard to gauge without cross-institutional comparison how typical Stony Brook is on these measures. Figure 8 shows the student responses; figure 9 gives faculty responses to a comparable series of questions.

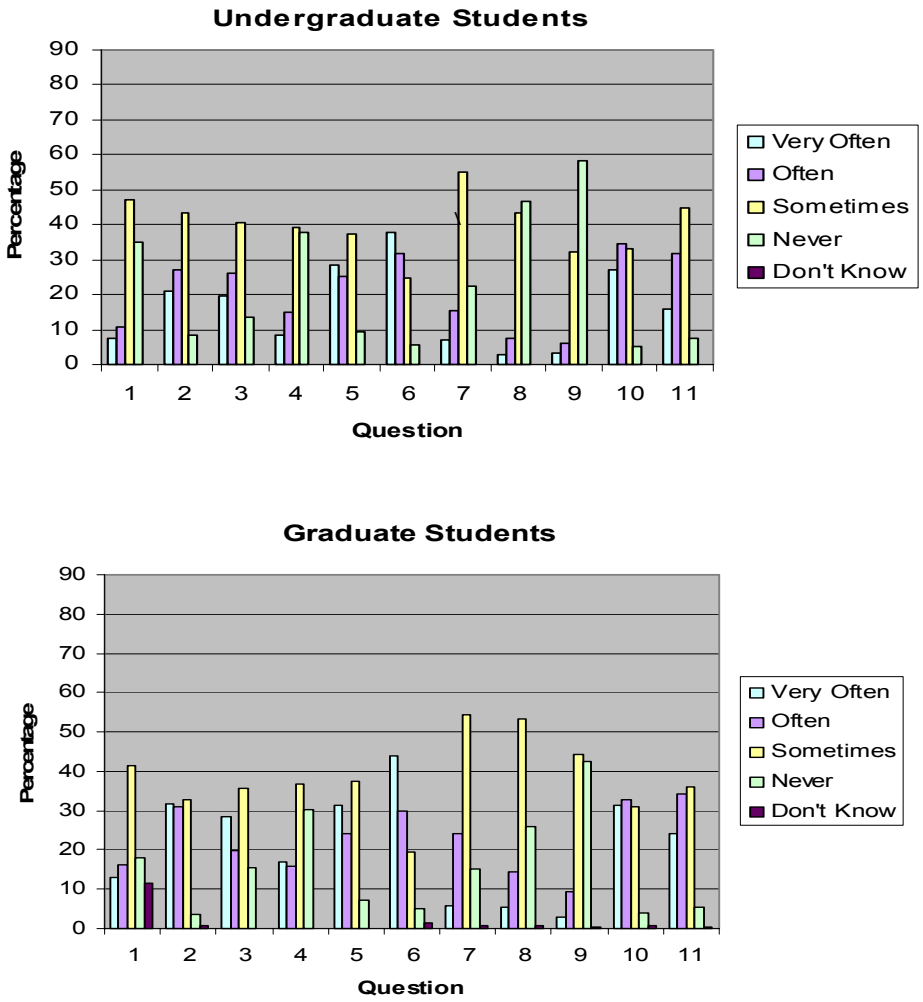

Figure 8: General questions on courses (students)

1. Thinking back to all the courses you took LAST SEMESTER, how often did you make a presentation in class?
2. How often did you ask a question or contribute to a class discussion?
3. How often did you work with other students on projects DURING CLASS?
4. How often did you work with other students on projects OUTSIDE OF CLASS?
5. How often did you use e-mail to communication with an instructor?
6. How often did you read the assigned material or do the assigned exercises or problems BEFORE CLASS?
7. How often did you discuss a course related issue (such as a grade or assignment) with an instructor NOT DURING CLASS?
8. How often did you discuss ideas not necessarily related to a specific assignment or course requirement with an instructor NOT DURING CLASS?
9. How often did you discuss your career plans with a professor NOT DURING CLASS?
10. How often did you discuss your coursework (such as readings or assignments) with other students outside the classroom?
11. How often did you discuss IDEAS from your classes (other than course assignments) with other students outside the classroom?

One issue that often comes up in discussion of classroom learning is the students' degree of preparation. Here there is some room for optimism (though again comparative data would be helpful). Sixty-nine percent of undergraduates reported that they read assigned material or did

assigned work before class either often or very often, while only 6% said that they never did. Instructors were less positive, estimating that only 42% of students regularly did readings and other assignments before class (though it is much more difficult to make such an aggregate judgment).

Two types of faculty-student contact outside the classroom were addressed, e-mail contact and direct discussion of course-related matters. As expected, more than 50% of students reported that they used e-mail very often or often to communicate with an instructor and only 8% said that they never contacted an instructor through e-mail.

Many fewer students report frequent discussion with faculty. Under a quarter of undergraduate students (22%) and under a third of graduate students (30%) report talking very often or often with their instructors about course-related material. This drops to a small minority of undergraduate students (10%) and a somewhat larger group of graduate students (20%) when the topic shifts from course-linked matters to more general ideas.

Discussions about a student's specific career plans are even less common, with only 10% of undergraduates and 12% of graduate students reporting that they had such discussions with an instructor very often or often. Perhaps more disturbing is the large number of students who have never had these types of contact with faculty. Among undergraduates, 23% had never had a discussion with an instructor about course–related material, 46% had never had a discussion about general ideas, and 58% had never spoken to a faculty member about their career plans. These numbers were lower, but still surprisingly high among graduate students; 15% had never had a discussion with a faculty member about course material, 26% had never had a discussion about ideas, and 43% had never discussed their career plans. This leaves considerable room for improvement.

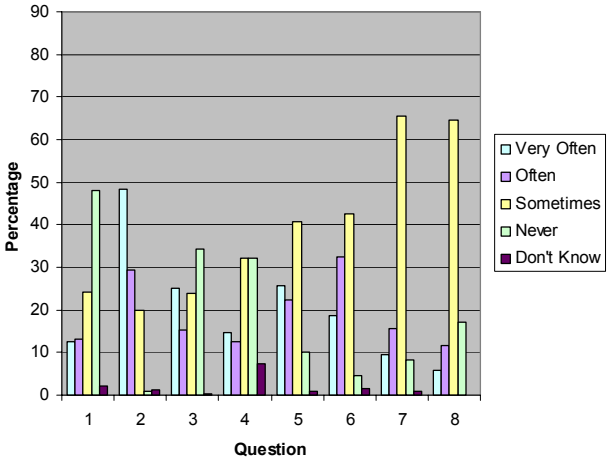

Figure 9: General questions on courses (instructors)

1. Thinking back to the courses you last taught, how often did your students make a presentation in class?
2. How often did your students ask a question or contribute to a class discussion?
3. How often did your students work together on projects DURING CLASS?
4. How often did your students work together on projects OUTSIDE OF CLASS?
5. How often did your students use e-mail to communication with you?
6. How often did you discuss a course related issue (such as a grade or assignment) with a student NOT DURING CLASS?
7. How often did you discuss ideas not necessarily related to a specific assignment or course requirement with a student NOT DURING CLASS?
8. How often did you discuss a student's career plans with them NOT DURING CLASS?

Contact among students was much more common than contact between students and faculty. Undergraduates were most likely to engage in discussion with other students about course-specific material; 62% had done so very often or often in the last semester. Conversations about ideas more generally were less frequent, although 48% reported that they had had such discussions very often or often last semester. There were almost no students who never engaged in such discussions. Graduate students were also well connected with each other and almost equally discussed course-specific and more general ideas.

Like other research universities, Stony Brook relies quite a bit on graduate student instruction. We have expended a good deal of effort both across the institution and in individual departments on training graduate students to teach. Graduate students whose native language is not English who wish to serve as teaching assistants are required to achieve a score of 55 on the ETS SPEAK test (most comparable institutions require no more than 50). Those who do not pass take specially-designed ESL courses that focus on oral/aural skills until they achieve the proper level of proficiency.

Most graduate students who had planned and taught their own course received specific training for the classroom, although a sizeable minority reported that they did not (29%). Of those graduate students who had received some training from their department, just under a half (44%) had received no more than a few sessions. Graduate students who had served as instructors gave their training and supervision a positive endorsement. Thirty-six percent said they were very satisfied with it and another 52% said they were somewhat satisfied.

CURRICULUM DEVELOPMENT

Curricular matters at Stony Brook are determined by faculty and university governance. As part of the SUNY System, though, Stony Brook is subject to SUNY-wide regulation as well, which has become stronger in the last decade. For example, the general education programs of all SUNY institutions must now adhere to system-wide standards, in order to ensure transferability from one campus to another. The curricula of professional programs are also subject to the external requirements of certifying bodies. Graduate curricula are determined largely by individual departments, subject to approval of the Graduate Council. Undergraduate curricula are overseen by the curriculum committees of individual schools, with responsibility for general education assigned to the curriculum committee of the College of Arts and Sciences.

One particularly successful vehicle for curriculum development deserves particular mention: the Academy of Teacher-Scholars, instituted by the University Senate in 1995. Up to five full-time faculty members are chosen competitively each year by the Undergraduate Council of the Senate to be academicians. Selection is based on proposals to invent undergraduate courses or re-invent existing ones, create new curricular concentrations or new majors, create new approaches to traditional curricular offerings, or otherwise innovate in undergraduate education. Academicians spend one year enacting their plans for educational innovation; or, if the project involves a new course, teach that course once a year for two years. They remain members of the Academy for a term of three years.

Recent projects include Tools of Chemistry: Reading, Writing, and Thinking in the Discipline; Establishing a Developmental Genetics Track in the Biology Major; Lithic Technology (a course that introduces students to the identification, measurement, and analysis of stone tools from archaeological sites); and Language Across the Curriculum in Chinese Studies.

RESEARCH AND CREATIVE ACTIVITIES

Stony Brook is a member of AAU, an association of 62 research universities in North America. The university co-manages Brookhaven National Laboratory and is in the elite group of universities that run federal laboratories. In fiscal year 2002, sponsored research expenditures totaled more than $130,000,000, which is easily the largest in the SUNY family. In the same year, research at Stony Brook brought in more than $17,000,000 in royalties. According to the American Association of Medical Colleges, Stony Brook School of Medicine basic science faculty were ranked in the top 5% percent nation wide for the research support generated per faculty member, while clinical faculty ranked among the top 25% percent. The university is home to many special centers and institutes, which not only generate new knowledge but also provide broad diversity of academic and research-oriented pursuits for our undergraduate and graduate students. The Center for Biotechnology, the Howard Hughes Medical Institute in Neurobiology, the Humanities Institute, the Institute for Mathematical Sciences, the Institute for Theoretical Physics, and the Institute for Terrestrial and Planetary Atmospheres are just a small sample of the variety that exist at Stony Brook. As already mentioned, Stony Brook has many distinguished faculty celebrated for their accomplishments in exceptional scholarship, creative activities, and innovative thinking. Many ground-breaking discoveries and inventions have taken place at Stony Brook. A small recent sample includes the identification and cataloging of 328 distant galaxies, the discovery of the cause of Lyme disease, the invention of an ultrasound method to speed up healing of bone fractures, and the invention of technologies for 3-D visualization.

Stony Brook is also on the forefront of engaging undergraduate students in research and other creative activities. The report of the Boyer Commission, chaired by Stony Brook President Shirley Strum Kenny (1998), has been most influential in American higher education since it was issued. Entitled "Reinventing Undergraduate Education: A Blueprint for America's Research Universities," the report envisioned the research university as a community of learners in which undergraduate education must be integrated with the other missions of a research university, research and graduate education. The goal is a new kind of undergraduate experience available only at a research university.

Stony Brook was one of the first research universities nationwide to establish an Office for Undergraduate Research and Creative Activities (URECA, 1987) for the specific purpose of promoting undergraduate research. Students find research projects through URECA (www.stonybrook.edu/URECA), through contacts with faculty, and through annual departmental open houses and programs. Stony Brook was one of ten universities selected by the National Science Foundation to receive a Recognition Award for the Integration of Research and Education (RAIRE).

URECA hosts the "Celebration of Undergraduate Achievements," an annual university-wide event highlighting what 150-200 students working with faculty mentors are doing in fields ranging from robotics to laser physics to signal transduction. Featuring oral and poster sessions, art exhibits, and musical performances, this event is a legacy of the RAIRE grant that has continued to be institutionally-supported and valued.

The Boyer Commission called on research universities to make research-based learning the standard and to establish opportunities for participation in research and creative activities an important component of undergraduate programs. Research-based learning takes place during the completion of specific projects or whenever faculty and students share the act of discovery.

The widespread use of inquiry-based pedagogy is another Boyer Commission recommendation. The Boyer Report suggests that universities need to extend the opportunities for research and creative activities to students in the social sciences and humanities and this discussion needs to expand at Stony Brook.

The Boyer Commission also called for faculty rewards to promote excellent undergraduate teaching. We still need to find answers to questions like "What would encourage departments with very low student participation to become more involved with a student's efforts in this area? Student motivation and the availability of a supervisor are often problems in the humanities, where this tradition is lacking, and this is true for other universities. In the arts, by contrast, students work closely with faculty on a regular basis. There is value in considering establishing requirements that would institutionalize Stony Brook's commitment to research and creative activities.

Reinventing Undergraduate Education: Three Years After The Boyer Report states that responses from a survey of administrators responsible for undergraduate programs indicate that undergraduate research and other topics "has become embedded in the rhetoric and practice of the research universities. Most efforts have been directed at the best student: the challenge for almost all is to reach a broader spectrum of students." A discussion of some of our survey questions concurs generally with this finding, and, in particular, that Stony Brook undergraduates who participate in research and creative activities tend to be satisfied with their undergraduate experience.

In our surveys, we have found that a large number of undergraduates have never had any discussion with faculty outside of class. It would be helpful to get more information on these students, for example, what departments were they affiliated with. Other questions are also important: What can we do to motivate students to take advantage of the research opportunities while they are at Stony Brook as undergraduates? How do we teach students to be more assertive about seeking out opportunities? If we know that students value job skills highly, should we explore explicitly linking the relation of research to those skills. The URECA Director notes that sometimes, even when there are opportunities to perform funded research, students seem to be reluctant to apply for fellowships without coaxing or strong faculty encouragement. Also, students interested in research and creative activities could be encouraged with information as freshman as how to best prepare themselves to be eligible to participate in this area. They should know the courses that faculty might see as prerequisites for students they advise and when the best time would be to approach faculty for a positive outcome.

While our programs that promote undergraduate research and creative activities are generally very good, we still need to improve on them by clearly defining their mission, objectives, and requirements within specific academic areas such as the physical sciences, biological sciences, engineering, social sciences, humanities, mathematics, and the arts. We need to make them accessible by integrating them into the undergraduate culture and the mission of the academic departments on campus. We may also want to integrate them into specialized undergraduate programs such as the honors college, the learning communities, living learning colleges, and the undergraduate colleges.

How can we involve more faculty in providing this motivation and these opportunities to more students? About 8% of respondents were unsuccessful in their requests to work with a faculty member. Students can be turned down who have poor academic records or are missing a subject necessary for conducting research, for example, organic chemistry in chemistry research.

Survey Results on the Research Experience

Our survey results show that research at Stony Brook influences graduate students to come to Stony Brook considerably, whereas it does not affect undergraduates much. Forty-six percent of the graduates responded that the ability to participate in research greatly affected their decision to come to Stony Brook, as opposed to the 8% of undergraduates.

The survey results affirm that undergraduates who are involved in research tend to be generally satisfied with their experience. The survey also suggests that many students are uninvolved or unengaged in seeking out research opportunities. Among undergraduates, 14% of the respondents were involved with independent research or creative projects. Although this may at first appear to contradict the finding reported elsewhere that 42% of Stony Brook undergraduates are involved in research, the discrepancy could simply be a result of the phrasing of the question (students might have assumed that the question addressed only the current semester).

To the question "Have you ever asked to work with a faculty member to conduct an independent research or creative project," only 8% of the students stated that they had asked to do research. The communication problems between faculty and students must surely play a part in the success of increasing research opportunities for undergraduates. Of the students who reported that they were seeking to work with a faculty member, 56% said that a faculty member had agreed to work with them in the future. It would seem that faculty are generally amenable to being approached and that the majority of students who do assert themselves and seek out research opportunities are successful.

Of the 76 undergraduate students who were asked about the helpfulness of their faculty research advisors, the results strongly show that the faculty advisors were "very helpful" (60%) or "somewhat helpful" (30%). The answers indicate that those students who are involved with research have satisfying experiences. Assessment studies at Stony Brook indicate that students who participate in research have a good experience and feel that it had long and short term value for them. This tends to corroborate other published studies at other universities – including the major assessment studies at the University of Delaware (J. of Engineering Education, July 2002) that indicated that students who participated in undergraduate research experiences perceived a greater benefit vs. other out of classroom educational experiences.

Undergraduates who engaged in independent research rated it as an important experience. In the survey, 69% deemed it somewhat or very important in encouraging them to continue in that field of study, and 76% found it somewhat or very important in advancing their careers. These are strong hints that when undertaken, research opportunities significantly benefit undergraduates. Overall, 81% of undergraduates who engage in independent research stated that it met their expectations somewhat or a great deal.

Within the independent research experience, undergraduates gave high marks to their faculty advisors. Ninety one percent adjudged them somewhat or very helpful. Graduate students or post-doc supervised about half (54%) of the undergraduates. Eighty nine percent of the undergraduates considered themselves somewhat or very well prepared.

Since independent research and creative projects are effective ways to build faculty/student academic interactions, this important experience in teaching and learning is critical to undergraduate education. In the survey question "How often have you supervised an undergraduate student in an independent research or creative project?" a relatively significant

percentage of faculty respondents (19%) claimed to have supervised several or more students per semester; about 24% supervised at least one student per academic year; slightly more than a quarter (26%) supervised at least one student every few years. Only one percent of faculty responded that they had never participated in this critical academic experience.

Over a quarter of the faculty respondents claimed that their research students are "very well prepared"; over 50% claimed that their students are "somewhat well prepared." Conversely, a relatively low number of faculty respondents (13%) rated their students as "not very well prepared," while a mere 1% noted that their students were "not at all prepared." Based on this data we conclude that a relatively high percentage of the faculty respondents (80%) claimed that their students were "somewhat well prepared" and "very well prepared." Given the high caliber of teaching and scholarship among Stony Brook faculty members, we can conclude that a relatively high percentage of students who register for these important academic projects generally perform well. However, the faculty survey noted that about 14% of students still perform poorly. Since tutorials and creative projects are most popular among juniors and seniors, we need to find a more effective way to reduce poor performance.

Faculty response to the question "How well prepared were the students to complete a project they planned but who you did not supervise?" suggests that many faculty members decline to supervise students they believe are likely not to perform well in directed research and creative projects. Thirty six percent of faculty respondents answered that they believed the students they declined "were not very well prepared," and 31% of faculty respondents answered that they declined to supervise the directed research and creative projects of students they considered "somewhat well prepared." We can conclude that a significant percentage of promising students do not have the opportunity to work with faculty members on directed research, directed readings, and creative projects.

Figure 10 shows faculty response to question "When you think of the undergraduates who have done research with you at Stony Brook – to what extent do you think the experience encouraged them to continue in their field of study and plan future projects?" More than half responded that research experience gave students "a great deal" of encouragement. This positive response confirms what educators have known for a long time—a personal intensive academic and intellectual experience between a university teacher and an undergraduate student in a tutorial format is invaluable to quality undergraduate education.

The survey clearly shows that undergraduate research and creative projects have become an integral part of the university's mission in excellence in undergraduate teaching and learning. We must ensure that the gains reflected in the survey can be sustained in the long term. The survey confirms the assertion that Stony Brook is now attracting better prepared undergraduate students. Conversely, the survey also suggests that we need to pay attention to many of our students who are still behind. We may want to improve on departmental advising and mentoring for freshmen and transfers so that we can reach those that need help early.

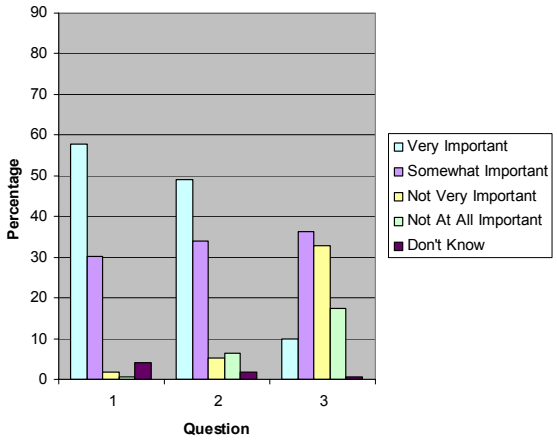

Figure 10: Research expectations and experience (instructors)

1. When you think of undergraduates who have done research with you at SBU, how important do you think the experience was for the advancement of their career goals?
2. In your decision to work with undergraduates on research projects, how important was the desire to influence the career of talented young students?
3. How important was the potential contribution of the students' work to your own research?

GRADUATE RESEARCH AND CREATIVE ACTIVITIES

The accomplishments of Stony Brook's graduate students are quite extraordinary. They have won numerous prestigious national and international fellowships and research grants. Many students have established an impressive presence in the literatures of their disciplines with publications in scholarly journals and books. They have achieved recognition in the creative arts with acclaimed exhibitions and performances. Stony Brook's graduate students also won awards for their excellence as teachers. Our students participate fully in the intellectual activities of their field of scholarship by participation in conferences and workshops. In addition to external recognition, the best graduate students are recognized by Stony Brook itself through programs that include the President's award for excellence in teaching, the President's award to distinguished doctoral students, a purchase prize in fine arts, and dissertation fellowships.

Finally, graduates of Stony Brook's programs leave us to take up a wide variety of professional appointments, including postdoctoral fellowships and faculty positions at some of the nation's finest universities. In addition, Stony Brook's graduates carry the knowledge and expertise that they gained here to many prestigious institutions overseas, thus enhancing Stony Brook's international reputation as an outstanding research university.

The success of Stony Brook's graduate enterprise is rooted in the success of the faculty of the university in research, scholarship and creative activities. The international reputation of Stony Brook's faculty attracts outstanding students to our graduate programs from across the country and around the world. Our educational programs and the opportunities to work with dedicated faculty mentors develop the potential that students bring with them so that they become independent researchers and scholars.

Since 1991, the Graduate School has documented the achievements of Stony Brook graduate students annually. These documents are available online at http://www.grad.sunysb.edu/GSA.HTM.

ACADEMIC RESOURCES

There is a shortage of classroom space at the university and students are dissatisfied with classroom facilities (Student Opinion Survey 2003). The recent increases in enrollment, coupled with the loss of classrooms for special purpose use, have resulted in insufficient space for instruction. Additionally we have only one lecture hall that can accommodate over 300 students. This is currently aggravated by the construction project that has taken the Humanities Building out of service for the next two to three years. One example of the ripple effect of this shortage is the lack of space for organized tutoring services (Student Opinion Survey 2003). Another difficulty is that our classrooms have not been equipped with the latest teaching technology. Only seven of our classrooms are so-called "technology classrooms" with built in electronics, computer podia, extensive video capabilities, and high resolution data projectors. This frustrates the instructors who wish to incorporate these technologies into their lectures and presentations.

We have tried to alleviate the classroom shortage by adjusting the class schedule, starting classes earlier on Monday, Wednesday and Friday and reducing some gaps between class periods to make more class meeting slots available. A revised schedule was put into effect this fall, with some positive results in classroom availability. A classroom utilization committee is looking to make additional changes for the 2004-2005 academic year.

Long-term solutions to the shortage of well-equipped classrooms are also being considered. We are hopeful that in the next SUNY Capital Plan we will receive funding to renovate, and possibly expand, the Old Chemistry building. A complex plan is being formulated to relocate the chemistry laboratories and administrative space that currently occupy much of the building and recreate it as a building of "technology classrooms" of various sizes, including a large lecture hall.

Those departments that need them all have standard instructional laboratories. There are also a number of laboratories specifically designed for innovative instruction. Stony Brook Biology recently moved into a new state-of-the-art facility, the Biology Learning Laboratories (BLL). This new undergraduate facility is linked structurally and thematically to the research laboratories in the new Centers for Molecular Medicine and the existing Life Sciences building. The BLL houses instructional laboratories, fully equipped support facilities, and advising and administrative offices. The 16 instructional laboratories in the BLL offer research-grade equipment and close proximity to scientists working to solve the most important and exciting questions in Life Sciences.

Stony Brook has two electronic music studios equipped with analog, voltage-controlled and digital equipment for electronic music production. This facility allows graduate students and faculty in music to work with electronic sound generation, modification, storage, editing, and sound manipulation. It also has equipment for instruction in basic acoustics and electronic music composition/experimentation.

E-media studies benefit from excellent facilities that include several state-of-the-art multimedia computer labs. These laboratories are used extensively for instruction in Art, Music, and Theatre and they include the e-media SINC site, Collaborative Laboratory for Technology and the Arts, Art Laboratory, Video Editing Suite/Art, Computer Music Studio, and Theatre's Electronic Classroom.

In many of Stony Brook's laboratories, education takes place alongside top-notch research. High resolution DNA fluorescence detection for different applications; design of polymer thin film properties through precise control of interfacial structure; electromagnetic interactions with living cells, tissues and organisms; understanding the mechanism responsible for the growth, healing, and homeostasis of the skeletal system; applications of low-power lasers for precision measurements and diagnostics, detection and molecular analysis of cancer; synthesis and characterization of materials at high pressure are just a few examples of ongoing efforts in some of these laboratories.

Stony Brook libraries have a total of about two million bound volumes and four million publications in microformat. They also provide a large amount of electronic content that is easily accessible to the community by Internet from anywhere at any time. The libraries have adopted strategies to improve current offerings by concentrating its resources on electronic content. The mission of the libraries is "to provide a gateway to intellectual discovery." The main library building on the West Campus serves the fine arts, humanities, social sciences, engineering, biology, music, and geosciences. The Science Libraries including the Mathematics/Physics/Astronomy, Computer Science, Marine and Atmospheric Information Sciences Center are located in departmental buildings, and the Health Sciences Library is in the Health Sciences Center.

The university has a large number of computing facilities. Two divisions of information technology (one on each side of campus) manage computing and network services. The computing and networking environment is composed of an ever-changing array of hardware, software, and network devices. Most buildings on campus are networked with fiber optic cabling. General computing resources are available to students at various sites through the Office of Instructional Computing, where students can use personal computers or Unix based stations. Many departments offer to their students departmental computing and networking facilities.

As at most universities, Stony Brook's university bookstore has experienced difficulties in the last decade, partly because of competition from internet sales. Locally, the bookstore is also hampered by its isolated location and a tradition among some faculty members of placing their book orders off campus, both of which might lie behind students' relative dissatisfaction with the bookstore (Student Opinion Survey 2003). The availability of books has improved, though, in recent years, as the result of campus-wide efforts. We also hope to eventually build a more inviting bookstore in a more central new facility.

Survey Results on Academic Resources

The campus community is reasonably satisfied with the library (see Figs. 11 and 12), although there is somewhat greater satisfaction with the electronic collection among all groups. In all three groups, there was a small minority that never used the library, ranging from 7% of graduate students who never used the print collection to 12% of undergraduates who never used library electronic resources. The library received moderate use in undergraduate class assignments. Thirty-four percent of students reported having had an assignment that required the use of library resources very often or often in their classes last semester, whereas 21% did not have any classes that required library use.

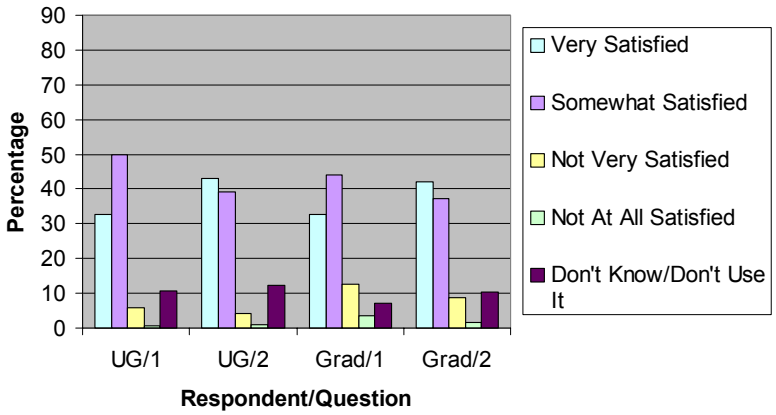

Figure 11: Library satisfaction (students)

1. How satisfied are you with the University Library's print collection?
2. How satisfied are you with the University Library's electronic collections, including access to on-line journals and databases?

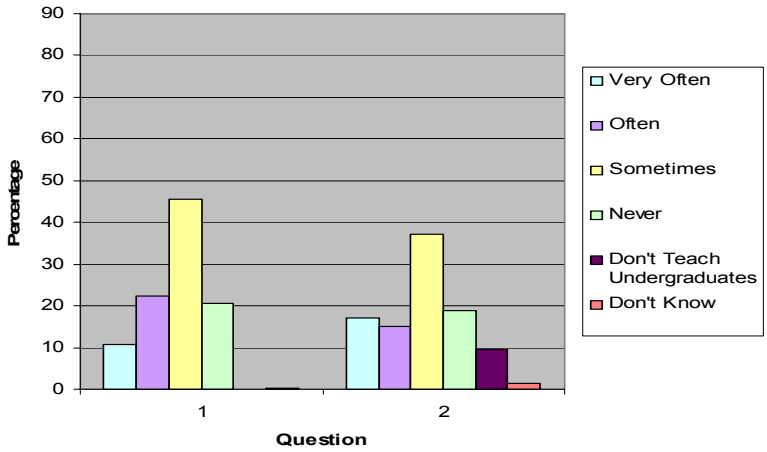

Figure 12: Assignments requiring use of library resources (instructors)

1. For undergraduate students: Thinking back to last semester's courses, how often did you have assignments that required you to use library resources such as on-line or physical journals, books or databases that were not part of your required course readings?
2. For instructors: Thinking back to your undergraduate courses, how often did you give your students assignments that required them to use library resources such as on-line or physical journals, books or databases that were not part of their required course readings?

Satisfaction with the library did not extend to the campus bookstore. Only 14% of faculty and graduate students and 16% of undergraduates reported being very satisfied with it; a sizeable minority of undergraduates were somewhat or very dissatisfied (37%). There was reasonable satisfaction with access to computer labs and other lab and performance spaces (e.g., science, language, or music). Figure 13 shows responses to questions about facilities.

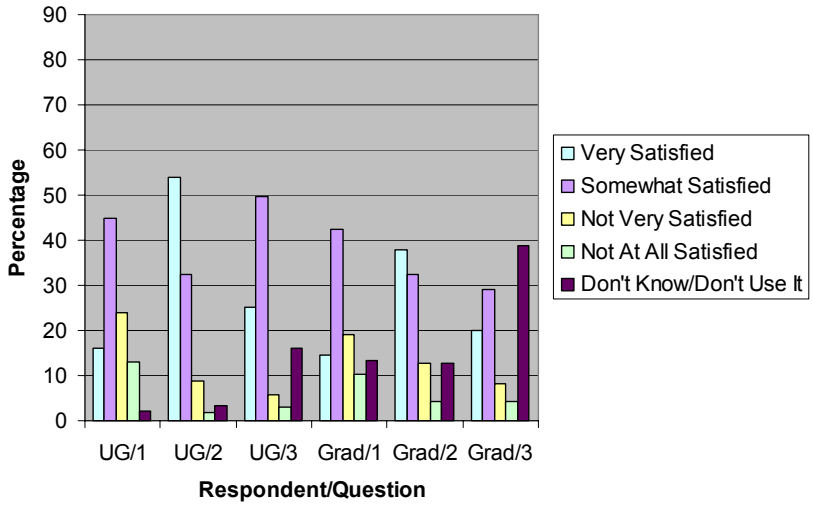

Figure 13: Satisfaction with facilities (students)

1. How satisfied are you with the University Bookstore?
2. How satisfied are you with the access you have to computer labs on campus?
3. Other than computer labs, how satisfied are you with the access you have to any laboratory or performance space you might need, such as science, language, or music labs?

RECOMMENDATIONS FOR THEME 3: EDUCATION AND SCHOLARLY ACTIVITIES

15. Improve communication between teachers and learners. We intend to promote active learning by providing instructors with opportunities to improve their communication skills and hence their teaching effectiveness. Since communication is a two-way process, students should similarly be encouraged to use tools and resources that will permit them to excel (e.g. Blackboard, workshops, tutoring services).

16. Provide incentives to departments to improve TA training and performance. We must ensure that our TAs are appropriately trained to communicate with our student body. Associated with TA training is the strong need to ensure that best practices are made available to Stony Brook's community at large. For example, regular workshops could be arranged where TAs, instructors, and faculty who have been recognized for their excellence in teaching can meet within a common forum to exchange information about those practices that had an impact and those that did not. Web-based dissemination of successful practices might also be useful.

17. Evaluate curricular offerings regularly to ensure that they meet the needs and interests of our students. The academic enterprise lies within a changing world. Colleges, schools, and departments should therefore examine their courses and curricula on a regular cycle to ensure that they fit the needs of students and society, within the resources available. Curriculum and student demand should be important factors in hiring and planning at all levels.

18. Improve recognition and rewards for faculty, staff members, and graduate students who have demonstrated excellence in directing undergraduate research and creative academic projects. We must recognize and reward the effort that a faculty member, staff member, or graduate student devotes to directing undergraduate research and creative activities. This

will both encourage their willingness to participate and enhance the overall quality of students' research and creative academic projects.

19. ***Increase the number of students who undertake independent research and creative activities.*** The incorporation of undergraduate students into the research and creative enterprise is highly desirable. Because such students are an extra load on the resources of the host, it is appropriate to create mechanisms whereby faculty and staff can access resources that will induce them to mentor more undergraduates.

20. ***Support further expansion of the electronic library.*** Surveys of university students demonstrate a strong preference for electronic content which they can search on the Internet and download to a disc or printer. The library's role is to acquire and display these resources and to instruct students on their use. The very accessibility of these resources makes them valuable, and costly. In its drive toward an excellent student experience, the university needs to support these high cost/high benefit resources. Use of these resources is not intuitive. Expanding the library's instruction program would help the university give students life-long information skills.

21. ***Improve library access.*** Even as more and more information is going online, student use of the library's reading rooms is increasing. The university will open a 24-hour-a-day study space in spring 2004, an important step toward the larger goal of an information commons staffed twenty-four hours a day. The type and quality of all facilities within the physical boundaries of the main library building needs to be kept in mind, as well.

22. ***Assess, update, and expand instructional facilities regularly.*** The quality of the educational process is directly related to the quality of the teaching environment. Classrooms and laboratories need to be assessed regularly and, where needed, upgraded and expanded to a common standard that facilitates the learning process. This leads to a more efficient setup and delivery of instructional materials by the instructor, and a learning-friendly environment for the students. Because laboratories have specific needs that depend on the academic discipline (e.g., music vs. biology vs. engineering), considerable care is needed to ensure appropriate changes. The possible need for a broader range of classroom sizes should be studied.

7. THEME 4: STONY BROOK UNIVERSITY AS A COMMUNITY

FOCUS AND SCOPE

The sense of community has profound influence on students' academic experience. Their perception of community influences their decision to come to Stony Brook in the first place, the nature of their learning while here, their pride in the institution once they've left, and the nature of their interaction with Stony Brook as alumni. The role of community in shaping students' academic experience was recognized in Ernest Boyer's landmark report, *Campus Life: In Search of Community* (Boyer 1990). Boyer defined six desired aspects of a university community. Such a community should be educationally purposeful, open, just, disciplined, caring, and celebrative. In this section we examine the strengths and weaknesses of Stony Brook in light of Boyer's six criteria. Our fundamental question is: How good is the Stony Brook community as an environment for the intellectual growth of our students?

Based on premises of the Boyer report, and interpretations of previous Stony Brook and national surveys, the committee first sought to assess the existing programs, activities, social and religious organizations, and events at Stony Brook that were likely to influence students' sense of community. To that end, the committee posed a number of questions, designed as data gathering instruments to identify existing programs, activities, and organizations that revolve around the general theme of community. A focus group on this issue was run at the SFS Retreat. This was followed up by a survey of undergraduate and graduate students, which was part of the comprehensive Student and Faculty Telephone Survey, Spring 2003. In addition to descriptive statistics, a partial correlation analysis was performed using the telephone survey data to examine the most influential factors that contributed to a Stony Brook student's sense of community.

Our fundamental question was: How good is the Stony Brook community as an environment for the intellectual growth of our students? For the most part, responses to the survey questions on community were positive and the overall student and faculty experience at Stony Brook was positive, although students are less satisfied than other SUNY students with social activities and facilities (Student Opinion Survey 2003). Still, compared to geographically close Columbia University, Stony Brook students clearly have a stronger sense of community than comparable students at Columbia. But there are clear signs that there is a room for improvement in planning activities and events, and informing campus constituencies about these activities.

QUESTIONS ADDRESSED

Our study revolved around two very general topics, building community and sense of community, with a number of subtopics and specific questions, as enumerated below:

BUILDING COMMUNITY

Campus and Wider Community Activities

1. What mechanisms have been used to build community and how effective have they been? (*Standards 9, 13*)
2. What types of interactions exist among the academic campuses, schools, and colleges that comprise Stony Brook? (*Standards 9, 13*)
3. What kinds of activities do students, faculty, and staff want that could be provided by Stony

Brook? (*Standards 9, 13*)
4. What tangible actions have been taken to improve facilities and the physical beauty of the campus? (*Standard 7*)
5. How are faculty and staff involved in communities outside their departments? (*Standard 10*)
6. What programs are designed specifically for international students? (*Standard 9*)
7. How do weekend events influence campus life and the sense of community? (*Standard 13*)
8. What mechanisms have been used recently to connect Stony Brook to the wider community?

Communication
1. How do we solicit and convey information to and from different Stony Brook communities? (*Standards 9, 13*)
2. How does Stony Brook handle crises, such as the 9/11 terrorist attack, that affect all of its constituents? (*Standard 9*)

Pride and Tradition
1. How successful has Stony Brook been in developing campus traditions, especially in the last decade? (*Standards 9, 13*)
2. How has the move to Division 1 athletics influenced campus life? (*Standards 9, 13*)

SENSE OF COMMUNITY

Identity
1. What is the number, categories, and range of activities designed to develop students' sense of identity? (*Standards 9, 11,12,13*)
2. What specific student communities have been organized at Stony Brook outside the traditional academic departments? (*Standards 9, 13*)
3. What characterizes the community of commuters at Stony Brook?
4. What are the religious organizations at Stony Brook and how do they interact? (*Standard 13*)

Diversity
1. How many diversity programs are there on campus and what are their funding, interactions, and emphases? (*Standards 9, 13*)

WHAT WE KNOW

Stony Brook is a dynamic and diverse community. This is an undeniable strength that also poses a number of social challenges. Further, its geographic location relatively close to New York City yet situated in a small town has strongly influenced students' perceptions of community. Over the past decade, and especially during the last five years, the number of on-campus programs, especially those that are student initiated, has remarkably transformed and improved the social milieu that is Stony Brook. Our students feel that there is an atmosphere of cultural, political, and religious understanding and that Stony Brook has contributed to their appreciation of diversity and differences (Student Opinion Survey 2003).

BUILDING COMMUNITY

Campus and Wider Community Activities
We have identified over forty-five formal and informal interactions among Stony Brook communities. Although they vary in scope and nature, they all share the objective of bringing together various SB constituencies. Salute to Stony Brook, for example, is a campus-wide

celebration of Stony Brook achievements, kicked off at the beginning of the academic year with a wide range of activities such as dancing, music, magic acts and food. The Year of Community, a series of events spanning the academic year, is designed to build community and address important issues—in 2002–2003 the theme was ethics in leadership. Every year around Halloween, the SFS Retreat weekend brings these groups together to address important issues and to foster communication among them. The joint meetings of Hospital/HSC and Office of Communications web teams promote cooperation and pooling of resources for developing resources such as web sites and the campus map. Campus Life Time, another important campus activity, is dedicated time set aside at midday every Wednesday for interaction among students, faculty, and staff through their various clubs, offices, events, and services.

The Staller Center for the Arts offers a wide variety of performances from September through May and a summer film series in July and August. Over fifty professional performances by entertainers and approximately 450 events generated by the departments of Art, Theater Arts, and Music, are supplemented by those outside presenters such as the Long Island Philharmonic and the Seiskaya Ballet, which presents *The Nutcracker*. Since its opening in 1978, the Staller Center has presented an ever-expanding schedule of live music, dance, theatre, and fine art exhibitions in its five theaters and five-thousand-square-foot University Art Gallery. In 1994, the center introduced 35mm film presentations in the Main Stage Theater, complete with Long Island's largest screen and a Dolby sound system. There are now regular presentations of art, foreign, and popular films year round. The Main Stage theater seats approximately 1,050, the Recital Hall seats 380, and the three "black box" theaters have a seating capacity from 75 to 225.

The Charles B. Wang Center, celebrating Asian and American Cultures, opened in spring 2003 and is dedicated to presenting the students, faculty, staff, and public at large with a multifaceted, intellectually sound and humane understanding of Asian and American cultures and their relationship to other cultures. With an array of theatres, lecture rooms, galleries and open-air spaces, the center's mission will be to present cultural programs in music, theatre, dance, art and film; host talks, lectures and conferences; provide the campus with delicacies from around the world and provide a comfortable and welcoming space for students, faculty, staff, and the community to think, learn and explore.

In the last decade, Stony Brook's once famously drab campus has been turned into a place that we all can be proud of. Most noticeable in these efforts has been the transformation of the central mall, but close behind is bringing the HSC plaza to the state originally envisioned by its architect. A number of significant building projects have been completed or are underway:

- All campus residences have been completely renovated, at a cost of over $160 million; new apartment-style residences have been added and more are being added.
- New buildings include the Student Activities Center (phases I and II), Charles B. Wang Asian American Center, the Ambulatory Surgery Building, the Centers for Molecular Medicine and Biology Learning Laboratories, LaValle Stadium, the Long Island High Technology Incubator, Stony Brook Manhattan, the Heavy Engineering Building (ready by fall 2004), the Humanities Building (ready by fall 2004), the Childs Mansion, and Sunwood.

Stony Brook has a large population of international students, especially among doctoral students on West Campus. In the last decade, we have taken important steps to help these members of the university community adapt more easily and more quickly. We have instituted a program to meet newly arrived international students at area airports, providing transport and a first-day welcome; we provide workshops on immigration, social security, and income taxes; and a

variety of cross-cultural education programs. Our host family program is a flourishing tradition. There is also a large number of international student clubs, catering largely to Asian nationalities, including Chinese, Indian, Japanese, Korean, Philippine, Taiwanese, Thai, and Vietnamese.

A number of mechanisms have been used recently to connect Stony Brook to the larger community. These include the use of the athletic stadium and field house as the prime venue for entertainment and sporting events, including many Suffolk County high school championships; representation at local chambers of commerce; Community Resource Guide, distributed at realtors, libraries, chambers of commerce, and online; exhibits at Smithhaven Mall; shuttle bus to Port Jefferson and Smithhaven Mall; Habitat for Humanity; blood drives in conjunction with Long Island Blood Services; a variety of open lectures, most prominently the Provost's lecture series and Science Fridays; Staller Center events.

Survey results on campus activities

Students and faculty were asked how often they attended events at Stony Brook, both during the week and on weekends. Figure 14 summarizes their responses. Thirty-seven percent of respondents often or somewhat often attend events during the week, with undergraduates attending at a slightly higher rate than graduate students of faculty and resident students attending far more often than commuters (46% vs. 28%). Remarkably, almost 10% of faculty reported that they never attend these events and more than 40% responded that they rarely attend. Female undergraduates were slightly more likely to attend than males (44% vs. 36%). Field of study produced minimal differences as did GPA, with one stand-out: undergraduates with the highest GPAs (3.4–4.0) reported the highest percentage of never attending an event (31% vs. the median average for all undergraduate respondents, 22%). These results will be discussed below.

Students were also asked about weekend activities and events for students only. Nine hundred and sixteen students responded:23% often or somewhat often attend, 34% rarely do, and 42% responded that they never attend. Undergraduates tended to attend more programs than graduate students and fewer had never attended a weekend program (39% undergraduate vs. 46% graduate students never attending a weekend program). Resident undergraduates attended two and half times more often than commuters, with all other categories resulting in fairly close responses. Once again, the students in the highest GPA group (3.4-4.0) were the least likely to attend events: 48% reported that they had never attended a weekend event vs. the average of 39%for all students. When asked why they don't attend, 36% reported they go home on the weekends (almost two-to-one undergraduates vs. graduate); 16% said they were not interested in the events; 12% did not know of the events; 36% gave various other answers. Female students were almost twice as likely to respond that they didn't know about events (13% vs. 8%). Since the total number of responses in that category was low (only 41 males and females), perhaps the numbers are too small for this finding to be significant.

Student, faculty, and staff responses about what kinds of activities they want ranged quite widely, and include: fairs, outdoor carnivals, more concerts, multicultural events, free transportation to Port Jefferson, late night transportation (especially on the weekends), late-night food service (including a café), increased library hours (especially during finals). Some of these suggestions have already been addressed: The graduate student club, The Spot, has been moved to a central location in the student union and will provide a late-night gathering place for the entire adult community: The library will be open on a 24-hour basis during final exam periods.

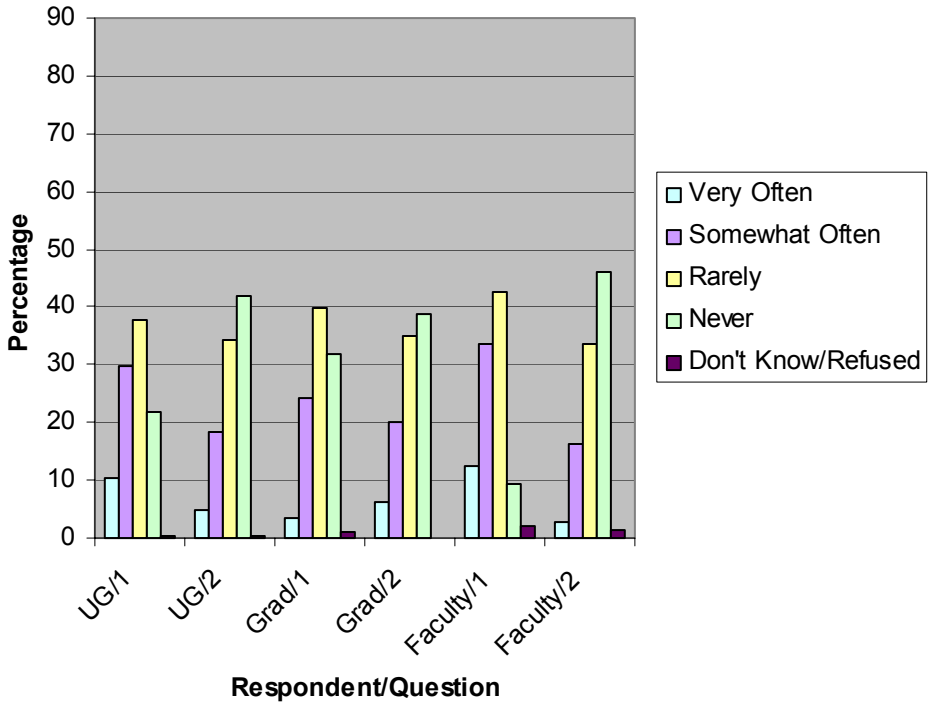

Figure 14: Participation in campus activities

1. Thinking back on last semester, how often did you attend a campus event or activity during the week, including special speakers, cultural performances, athletic events, etc?
2. Thinking back to last semester, how often did you attend an event or activity on campus during the weekend?

Communication

We identified over twenty-five different vehicles to convey information to and solicit it from different Stony Brook communities. Several publications provide regular institutional communication with the community: student newspapers, most prominently *The Statesman*, which appears twice each week during the semester; *Happenings*, a campus newsletter distributed biweekly throughout the campus and beyond; *The Brook*, an alumni magazine published three times a year; *Community Resource Guide*, distributed to all faculty and staff and thousands in the outside community to promote awareness of programs sponsored or hosted by all areas of the campus community; *Online Campus Announcements*, a weekly, comprehensive, electronic digest of Stony Brook events, deadlines, and programs. The university's radio station, WUSB, now more than twenty-five years old, has a wide audience throughout Long Island and Connecticut. Campus Cable Television Service (CATV) broadcasts material of local and educational interest to an audience of students, faculty, staff, and community.

Information and student views are solicited through a number of mechanisms, including student government at both the undergraduate and graduate levels, regular residence hall meetings, the residence hall legislatures, and the Commuter Student Association.

Stony Brook has prepared for future crises by establishing an organizational response structure. The university has established an Emergency Management Team and an Emergency Operations Center. The Emergency Management Team consists of ranking individuals from a cross-section of departments who are needed to make decisions in an emergency or crisis. These departments

include university police, environmental health and safety, facilities, telecommunications, media relations, support services, and other key areas. These individuals operate out of the Emergency Operations Center, which may be staffed 24/7 as the situation requires and is equipped with all necessary items to centralize and coordinate a response.

Stony Brook's crisis response is focused on ensuring the safety of the campus population, providing a forum for students, faculty, and staff to express and share grief, emotions, and concerns. Stony Brook acts as a crisis resource for both the campus and the surrounding community. Stony Brook has a professional and well-trained university police force, whose primary responsibility in a crisis is to ensure the safety of the campus population. The department is closely aligned with all appropriate government agencies, so that the university has access to current information, government response plans, and guidance from other agencies.

Stony Brook has been very successful in establishing forums in which all members of the campus community can express themselves during and after a crisis. Recent forums have taken the form of panel discussions, memorial services, vigils, educational endeavors, and the like. The resources of the entire campus, including the Health Sciences Center and the University Hospital, are enhanced and promoted during a crisis. These resources are available to all faculty, students, and staff, as well as to the surrounding community, and can include counseling, housing, food service, and medical care.

Survey results on communication

The 1151 survey respondents (526 undergrads, 390 grads and 235 faculty) were asked how well informed they felt about campus events. Figure 15 shows the results. Most respondents felt well informed (21%). or somewhat informed (48%). Twenty-two percent reported that they felt not very well informed and 8% said they were not at all informed. Graduate students seemed slightly less informed than undergraduates; faculty were much better informed (86% either somewhat or very well informed) On the undergraduate level, 73% of resident students answered very or somewhat well informed compared to 61% of commuters. Students with GPAs between 2.5 and 3.0 seemed to feel slightly better informed than students with lower or higher GPAs. Students in the 3.4 to 4.0 GPA range had the highest percentage of "not very well informed" or "not at all informed" (40% vs. the 30% average for all undergraduates).

As a follow-up, the survey participants were asked how they got information about campus events and activities. Figure 16 gives the results . The numbers are skewed heavily by faculty, who receive information through e-mail nearly ten times as often as undergraduates do (59% vs. 6%). A third of graduate students get information by e-mail, making e-mail by far the most frequent source of information for graduate students and faculty. In contrast, undergraduates report that they get most of their information through bulletin boards on campus (34%) and by talking with students and faculty (31%). Clearly, undergraduates are getting information visually while walking on campus and by word of mouth. With fewer than 2% of students and just over 2% of faculty responding that they get their information from campus newspapers, it is clear that these publications are not very helpful in getting across information about events and activities on campus. Interestingly enough, undergraduates' answers varied only slightly for commuters vs. residents, males vs. females, field of study, and years at Stony Brook. Answers were also fairly constant across GPAs, except for students with 3.4–4.0 GPAs, who were almost twice as likely to receive information via e-mail (campus announcements) than were students with lower GPAs.

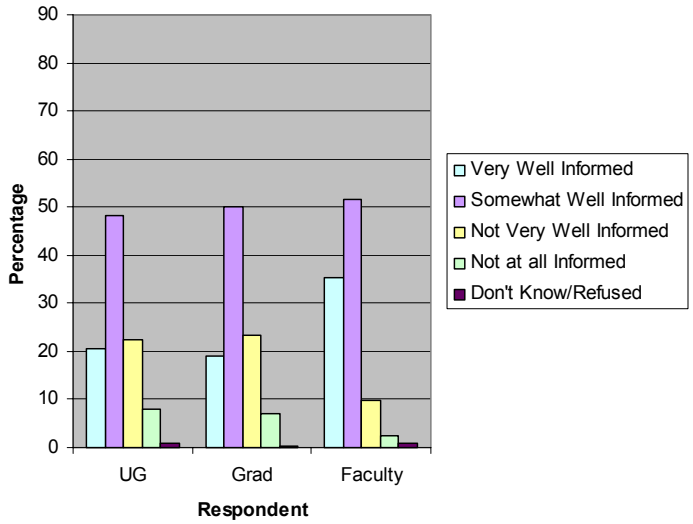

Figure 15: Communication about campus activities

1. How well informed do you feel you are about campus events and activities?

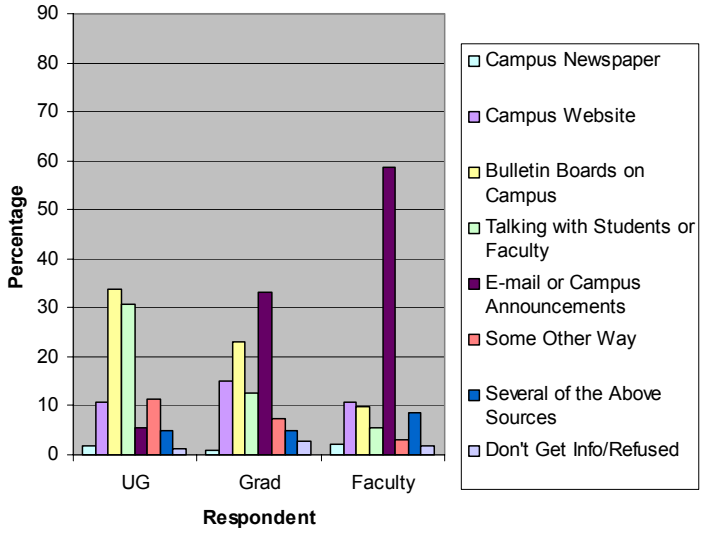

Figure 16: Source of information about campus activities

1. Where do you get the most information about events or activities on campus?

Pride and Tradition

Ernest L. Boyer's *Campus Life: In Search of Community* (1990) and the subsequent Boyer Commission report, "Reinventing Undergraduate Education: A Blueprint for America's Research Universities" (1998) identify caring, pride, and traditions as important components in building community. Stony Brook's youth as an institution means that it has fewer strong traditions than do comparable schools. In the last decade, though, deliberate efforts to build tradition have paid off, with several events in the fall and spring semesters that attract larger numbers of participants each year. In the fall, Homecoming and Midnight Madness have grown each year, and in the spring, the Roth Pond Regatta has become our most important home-grown tradition, one that

galvanizes the entire community. The annual Strawberry Fest on the Campus Mall draws a considerable crowd.

Stony Brook has also been very successful in building academic traditions. School opens each fall with a full formal convocation for all first-year students. The President's convocation is another highlight of the first month of the school year. And for several years, the May graduation ceremony has been augmented by a December ceremony for summer and fall graduates.

Stony Brook's athletic program is in its fifth year at the Division 1 level, in the America East Conference. This year, the Division of Athletics was made independent of the physical education department and a new athletic director was hired. Since the early 1990s, the athletic facilities at Stony Brook have also undergone major expansion and improvement, beginning with the opening of the SB Sports Complex in 1990. A new outdoor athletic stadium opened in September 2002, to house football, lacrosse, and soccer.

There are a total of twenty teams, ten men's and ten women's, with a total of 420 athletes playing an average of 370 contests per year. A calendar of events is made available on the athletics website and events are also announced in *Happenings* and *Campus Announcements*. Marketing efforts for athletics have included promotional events, giveaways, and honorary kid-captains, to name a few. The number of season ticket holders has increased tremendously since athletics became Division 1. The administrators of the athletics department place great importance on generating and maintaining a high level of enthusiasm within the campus community towards athletics. Attendance at games by both the campus community and local residents has been increasing. Right now, the goal of the athletic teams is to win the Conference Commissioners Cup. Clearly, a high-profile and cohesive community has been fostered through the successes of the athletics division.

Survey Results on Pride and Tradition

Students were asked how proud they feel about being a Stony Brook student when they speak with people outside of Stony Brook. Eighty- eight percent responded that they were either very proud or somewhat proud, with only 2% saying they were not proud at all. Undergraduates were slightly prouder than graduate students (89% vs. 85%) and there were only very slight differences across the board for field of study, gender, length of time at Stony Brook, and residential status. Again, there was a fluctuation in responses by GPA level, with the most pride coming from undergraduate students with 3.0–3.4 GPAs (93%), followed by students with 2.5 or lower GPAs (91%), then students with a GPA of 2.5–3.0 (87%). Students who responded with the least pride (albeit still a very positive response) were those with the highest (3.4–4.0) GPAs (85%).

The third question in that series focused on traditions and asked students and faculty how important a role traditions and celebrations, such as Homecoming, graduation, and convocations, play in campus life at Stony Brook. The 1151 respondents (526 undergraduates, 390 graduate students and 235 faculty) broke down as follows: 68% feel traditions play a very or somewhat important role, 20% felt they did not play a very important role and 6% responded that traditions were not at all important. For faculty, 64% found traditions very and somewhat important; for graduate students, 65%; and for undergraduates, 73%. There were significant differences in undergraduate responses: 76% of female undergraduates felt traditions very or somewhat important vs. 69% of male students; resident students, 75%, vs. commuters, 68%. The GPA discrepancy appeared again in the area of pride and tradition. Students with the lowest GPAs (2.5

and below) felt the role of tradition was either very or somewhat important (73%), while undergraduates with the highest GPAs came in at only 66%. Students with GPAs between 2.5 and 3.4 averaged around 72%.

SENSE OF COMMUNITY

Identity

As at many research universities, academic departments often form strong communities for faculty members and graduate students, who spend most of their waking hours in their departments. It is difficult to bring undergraduates into these departmental academic communities, though one positive side effect of Stony Brook's strong push over the last decade to involve undergraduate students in research has been the introduction of these students into departmental communities. Overall, though, while Stony Brook undergraduates are quite satisfied with their education, they do not feel a strong sense of belonging, likely due in part to their relatively high levels of stress and financial concern (Student Opinion Survey 2003).

A variety of offices, especially in Student Affairs, see community building as central to their mission. The Office of Student Activities includes program advising for student clubs and organizations, leadership development, and student media. The activities staff offers assistance in organizational development and program advisement to over 200 student clubs and organizations and 32 fraternities and sororities. The office coordinates many traditional campus-wide programs such as Campus Life Time, opening week activities, ChillFest, student activities fairs, and the commencement speaker selection process.

The goals and objectives of Campus Residences include creating an environment that fosters a sense of belonging and celebrates the traditions of the university. This office plans activities that create hall and building community and support campus traditions. Over sixteen hundred social and educational programs are offered throughout the residence halls, including more than five hundred and fifty activities on weekends.

The Office of Campus Recreation enhances the quality of life on campus for students, faculty, and staff by providing them a wide variety of programs and opportunities, including an extensive intramural sports program, sports clubs, open recreation, fitness activity classes, noncredit instruction, special events, and equipment rental. With recent reductions in credit-bearing physical education courses, campus recreation has stepped in to take up the slack in that area as well.

Stony Brook has taken very deliberate steps to build a series of undergraduate academic communities outside the departments. The most important of these are the Living Learning centers, the Learning Communities, the Honors College, the Women in Science and Engineering program (WISE), and the new Undergraduate Colleges. (These initiatives are described in section 5 of this report.) Our challenge for the next decade will be to integrate these programs into a coherent whole.

Commuter students have always comprised a large fraction of the Stony Brook undergraduate population, though more so in the upper division. Currently, almost 80% of incoming first-year students reside on campus, but transfer students, over twenty-one hundred of whom enter Stony Brook every year, are much more likely to commute.

Religion plays an important part in campus life. We identified fifteen religious groups on campus, some of which have been part of our history for a long time: Hillel, Chabad, Muslim Student Association, Baptist Campus Ministry, Brothers & Sisters in Christ, Campus Crusade for Christ, Catholic Campus Ministry, Chi Alpha Christian Fellowship, Intervarsity Christian Fellowship, Protestant Campus Ministry, Stony Brook Gospel Choir, Buddhism Study and Practice Group, Chinese Christian Fellowship, Korean Christian Fellowship, and the Unitarian Universalist Fellowship. Stony Brook ranks high among all SUNY institutions in student satisfaction with religious activities and programs (Student Opinion Survey 2003).

Survey results on Identity

Students were asked whether they belong to any organizations, teams, clubs, fraternities/sororities or residential programs on campus, and how active they are in these groups. Undergraduate students were almost twice as likely to belong as graduate students (45% vs. 26%). Participation in campus organizations is strongest among students with declared majors (46%); only about 28% of undeclared undergraduates belong to a club, team, or other campus organization. Resident students were more involved than commuters (51% vs. 32%) and students who entered as freshman were more involved than those who entered as transfer students (50% vs. 33%). GPA plays an interesting role: activity increases significantly from lowest GPA to highest, beginning with a rate of 39% for those with GPAs under 2.5; 43% for GPAs between 2.5 and 3.0; 45% for students between 3.0 and 3.4; and an increase of over 10% to a 55% involvement rate for students with GPAs of 3.4 to 4.0. Figures 17 and 18 summarize the participation in campus organizations of undergraduate and graduate students.

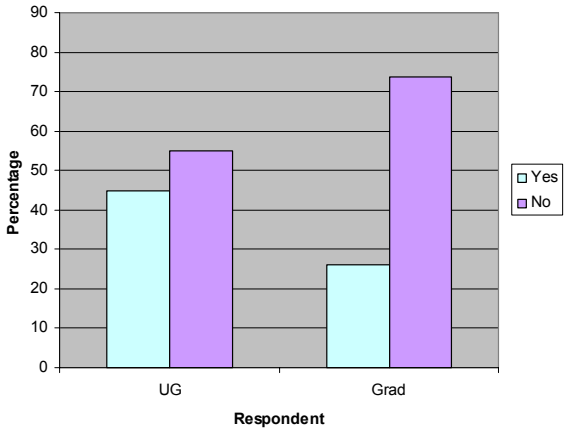

Figure 17: Participation in campus organizations

1. Do you belong to any organizations, teams, clubs, sororities, fraternities, or residential programs on campus?

How active are members of campus organizations? Of the total 338 respondents (236 undergraduates and 102 graduate students), 81% characterized themselves as very active or somewhat active. Undergraduates were more active than graduate students (84% vs. 72%), with the greatest difference in the very active category (48% vs. 27%) and residents were more active than commuters (very active 53% vs. 33%), but it became less significant when the very active and somewhat active responses are combined (86% vs. 78%). Females were more active than males (89% vs. 79%) and field of study did play a role in this category: 92% of undergraduates in the social sciences/humanities were active, 89% of students in the Harriman School; 84% of natural sciences and health sciences students, 83% of undeclared undergraduates were active, but

only 68% of students in engineering and applied sciences were active. Once again, this was a small sample of students overall (236), and a very small number in engineering and applied sciences (47), but the difference in those disciplines are markedly lower than the other disciplines and the mean average. GPA is less of a factor than it was in the preceding question, but students with GPAs between 2.5 and 3.0 appeared to be the most active, at 91%, compared with the mean average of all GPAs, 84%. One possible hindrance to greater commuter participation on campus is the scarceness of nearby parking facilities (Student Opinion Survey 2003).

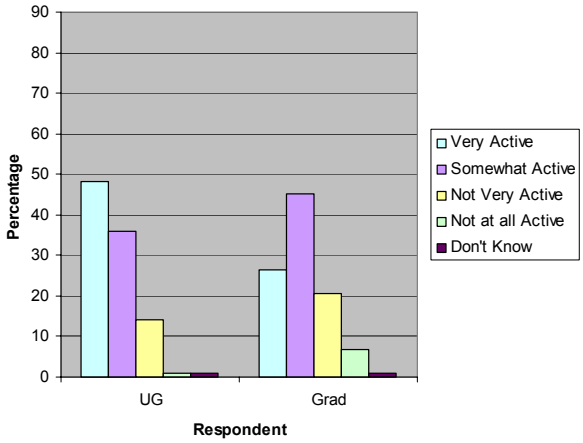

Figure 18: Frequency of participation in campus organizations

1. Overall, how active are you in these organizations?

The survey did not specifically address students' involvement in the wider community through community service and other outreach, but a number of campus programs have focused their efforts on this important component of university education. For instance, one of the undergraduate colleges with center around leadership and a new living learning center will be devoted to community service.

A series of questions focused on the ability to make friends at Stony Brook and asked how connected students feel to the university. Eighty percent of students found it either very easy or somewhat easy to makes friends, while only 5% replied that it was very difficult. Friendship was easier for undergraduates than graduate students (82% vs. 78%) and undergraduate resident students made friends more easily than commuters (85% vs. 75%). GPA was interesting factor. Students with lower GPAs seem to have less difficulty making friends: students with GPAs lower than 2.5 had a combined response of 87% in the very easy and somewhat easy categories; those with 2.5–3.0 GPAs came in at 81%, 3.0–3.4 GPAs were at 80%, and students with 3.4–4.0 GPAs were at 75%. Additional statistics about friendships can be seen in figure 19.

When asked "How connected do you feel to Stony Brook?" 73% of the students felt either very or somewhat connected with only 5% feeling not connected at all. Undergraduates and graduate students did not differ significantly in their responses and residents' feeling of connectedness was only about 10% stronger than that of commuters (76% vs. 65%). Female undergraduates felt slightly more connected than males (76% vs. 69%). In fields of study, most groups came in above the median with the two least connected fields being engineering and applied sciences (68% connected) and undeclared undergraduates (67% connected). Ironically, once again, students with the lowest GPA felt the most connected: GPA under 2.5, 75%; 2.5–3.0 G.PA, 71%;

3.0–3.4 GPA, 70%, and 3.4-4.0 GPA, 74%. Students with the lowest and highest GPAs feel the most connected.

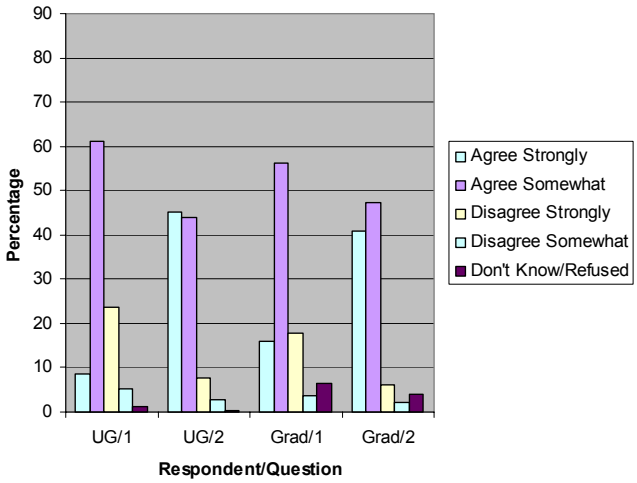

Figure 19: Friendships

1. Please tell me whether you agree or disagree with the following statement: Students at Stony Brook care about each other.
2. Please tell me whether you agree or disagree with the following statement: I have a group of friends at Stony Brook who share my interests and values.

The final question to the survey group in this area aimed to tie in all the questions and respond to the mission question of our subcommittee. After a series of questions on their activity level, involvement, and sense of connection, students and faculty were simply asked how strong a sense of community they feel exists on the Stony Brook campus. Among the respondents, 55% felt a very or somewhat strong sense of community, 40% reported a not very strong or no sense of community at all. The breakdown had faculty at 48%, graduate students at 52% and undergraduates very or somewhat strong at 60%. Field of study for undergraduates showed engineering and applied sciences below the average at about 53%, with insignificant differences among all other fields. Gender and commuter/resident status were not significant role for this question, but, once again, a fairly significant difference was found in underclassman, 66% positive towards community compared to 56% for upperclassman. GPA again played a significant role in the findings. Students with GPAs 2.5 and lower were 66% positive; students with the highest GPAs (3.4–4.0) were the least positive at 49%. The middle GPA students round out the picture: 2.5–3.0 GPAs responded positively at 64%, 3.0–3.4 GPAs have a 58% positive response. Ironically, the sense of community decreased as GPA increased. Clearly this GPA pattern clearly merits further examination. In figure 20 we can see the comparison regarding a sense of community among undergraduates, graduates and faculty members.

What affects a student's sense of community at Stony Brook? In order to assess the impact the variables had on a student's sense of community at Stony Brook, a partial correlation analysis was performed. This analysis, in essence, examined the strength of the correlation between students' sense of community with each of the examined factors. Two sets of partial correlation statistics, both controlling for and not controlling for commuter/resident status, were obtained for each factor holding all other factors (variables) constant. Statistically significant findings indicate

a strong relationship between a student's sense of community and the independent factor (variable).

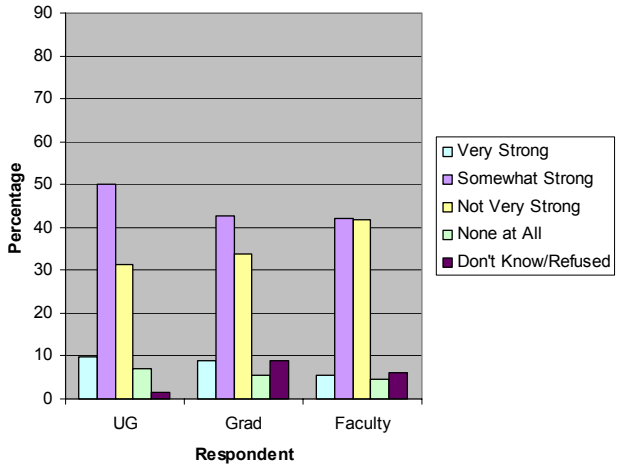

Figure 20: Campus community

1. How strong a sense of community do you feel there is on the Stony Brook campus?

Without controlling for the commuter/residential status, five factors significantly influenced 74% (i.e., 74% of the variability could be explained by these factors) of the students' positive sense of community. They were as follows ($p < 0.05$ for the first three factors): (1) being well informed of campus events and activities (0.25); (2) interaction with students who were of a different ethnicity, race, or held different political beliefs (0.16); (3) caring and concern for other students (0.13); (4) pride in being a Stony Brook student (0.10, $p = 0.06$); and (5) how easy it was to make friends at Stony Brook (0.10, $p = 0.09$).

Controlling for commuter/residential status, there were again five factors (94%), but there was some reshuffling of what was significant (all with $p < 0.05$), as follows: (1) being well informed of campus events and activities (0.23); (2) attendance at Stony Brook events on the weekend (0.20); (3) pride in being a Stony Brook student (0.19); (4) caring and concern for other students (0.19); and (5) interaction with students who were of a different ethnicity, race, or held different political beliefs (0.13).

Thus, the strongest single factor influencing a Stony Brook student's sense of community, regardless of residential status, was how well informed they were about events and activities at Stony Brook. This was also, by far, the major conclusion of the focus group at the SFS Retreat. Students are, by and large, very interested in what's going on at Stony Brook but perceive it difficult to obtain the information that they desire. Based on the focus group results, students believed that improving communication about events and activities would increase their sense of community.

Diversity

One of Stony Brook's hallmarks has been an emphasis on diversity, but the university does not rest on its laurels. Stony Brook invests great effort and substantial funds to promote and maintain campus diversity. Several of our most prominent programs and events are described here, but they represent only a small sample of our regular offerings.

Annual Diversity Conference (since 1993)
The theme of the 2003 conference was "The Challenge of Diversity on Long Island".

Internal grant programs
The university sponsors internal grant programs designed to promote diversity across the community. These include Dialogues Across Differences and the Diversity Challenge Grant, which provides support for cross-cultural exchange within Stony Brook.

Diversity calendar and events
Every academic year, six of the months are identified with a specific group and events are coordinated with a particular theme. October is Hispanic Heritage Month; November, Diversity of Lifestyles; December, Diversity of Religions and Cultures; February, Black History Month; March, Women's History Month, and April is Asian Heritage Month.

Diversity councils
Multicultural Advisory Council–Community Leaders, Asian American, African-American, Latino, and Native American community leaders provide advice on multicultural issues. In turn, the university assists these leaders in providing information and resources to their constituents about Stony Brook. The Student's Diversity Council is an advisory group composed of presidents/leaders of student organizations. This council has developed events including the annual Diversity Day celebration.

President's Lecture Series
This series presents speakers who address diversity. Two to four lectures per academic year draw a large audience.

Cultural events at Staller Center for the Arts and the Charles B. Wang Center
Many of the events held at the Staller Center each year highlight cultural diversity. In 2002-2003 these include the following: Anoushka Shankar, sitar, the Georgian State Dance Company, the dance/theatre production of New York City's Urban Bush Women and the National Company of Song & Dance of Mozambique, Tango Buenos Aires, and a large number of foreign films in the original language. The newly opened Wang Center has just begun its programming and has announced a series of events for fall 2003 that include an Asian/ Latino theatre production; a concert of classical Indian music; a film program to include films from Japan, India and China, a series of talks focusing on Asian-American issues and a collaborative concert with the Department of Music featuring Chinese, Japanese and Korean folks songs sung by the Stony Brook Camerata Singers.

One of the areas discussed by our committee and also brought up at the SFS Retreat was the diversity of our students, faculty, and staff. We were interested in whether race, ethnicity, and the political and religious beliefs of our campus community had an effect on students' sense of community. Two survey questions addressed this issue. The first focused on whether students had had a serious conversation outside of class with a student (or students) of a different race or ethnicity than their own. The second question asked whether students had had a serious conversation outside of class with a student (or students) with very different religious beliefs, political opinions, or personal values. The results of the survey are shown in figure 21. The responses indicate that on a casual level, our students interact freely within the diverse community. Over 85% of undergraduates and more than 74% of graduate students cross race and ethnicity in conversations outside of class somewhat or very often and more than 75% of undergraduates and over 63% of graduate students polled interact with students with very

different religious, political, or personal values somewhat or very often. Only about 6% on both questions said they never cross these "lines of interaction" and, on the whole, undergraduates seem to interact more diversely than graduate students. and resident students were more likely to interact than commuters. Field of study, gender difference, GPA and years of schooling had little bearing on responses.

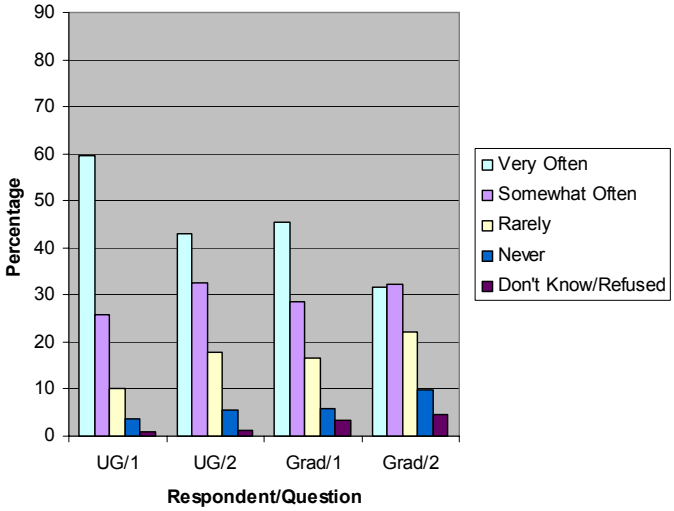

Figure 21: Diversity

1. Thinking back on last semester, how often did you have a serious conversation OUTSIDE OF CLASS with a student (or students) or a different race or ethnicity than your own?
2. Thinking back on last semester, how often did you have a serious conversation OUTSIDE OF CLASS with a student (or students) very different from you in terms of religious beliefs, political opinions, or personal values ?

In contrast, students were asked about other students with similar interests. The interviewer asked if the student agreed or disagreed with the statement, "I have a group of friends at Stony Brook who share my interests and values." Students overwhelmingly agreed with the statement: 89% of the undergraduates and 88% of the graduate students polled agreed strongly or somewhat with the statement; only 3% of undergraduates and 2% of the graduate students disagreed strongly. Undergraduate resident students agreed more strongly than commuters (93% vs. 82%) and undergraduates who had entered as freshman felt more strongly about similar friends than undergraduates who entered as transfers (94% vs. 79%). All other areas, including gender, field of study, and GPA, showed little or no difference in response to this question.

RECOMMENDATIONS FOR THEME 4: STONY BROOK UNIVERSITY AS A COMMUNITY

23. Provide regular timely information on community activities. Stony Brook has a wealth of activities and events but students, faculty, and staff perceive that it is more difficult than it should be to get information about these, despite the fact that the information is disseminated in a wide array of formats at considerable cost (web-based, e-mail, bulletin board, kiosks, university/student newspaper, television, radio, flyers). A mechanism should be found for disseminating information to both the university and the wider community in a timely and simple fashion.

24. ***Encourage student community service.*** Students gain an appreciation of the value and relevance of their education and their potential as human beings through participation in community service activities, both inside and outside the university. Community service also improves students' perception of belonging and hence the health of the entire community. Although we have made progress in this direction, we need to find ways to reach a greater number of students.

25. ***Improve the integration of graduate and upper-level undergraduate students into the wider community.*** The survey data indicates that incoming students feel themselves to be more a part of the wider community than do upper-level and graduate students. Ways should be found to improve the engagement of these sectors of the university. We also need to look carefully at our highest-achieving students, who appear to be less connected and to feel less sense of community.

26. ***Institute ongoing assessment of the sense of community.*** The sense of community is created through many factors, all of which have temporal components and reflect the evolving local culture. Mechanisms need to be established for assessing changes. A periodic assessment survey focused on community would enable us to find the specific factors that might improve the sense of community.

27. ***Promote community pride.*** The focus groups and survey results confirmed the finding of the Boyer Report that pride in one's institution or the celebratory aspects of belonging are a vital aspect of the Stony Brook community. Undergraduate students in particular seem strongly influenced by celebratory events as a way of demonstrating and instilling pride in Stony Brook.

8. THEME 5: LIFE BEYOND STONY BROOK

FOCUS AND SCOPE

The last two themes of our self-study, community and life after Stony Brook, are intimately related. If we create a sense of community for our students, then the students will become more involved in creating a campus environment that is welcoming and caring. Such an environment will be more likely to produce graduates who are ambassadors, who become lifelong members of the Stony Brook community.

In this section we review alumni reflections on their educational experience at Stony Brook in reference to their preparation for graduate study or the workforce. We describe the genesis of the student's reflections about life after Stony Brook: How early did they begin thinking about it? What kind of advice did they get about career paths or graduate schools while at Stony Brook? How did they select their careers or graduate schools? Finally, we present our findings about whether our alumni still feel a part of the Stony Brook University community.

QUESTIONS ADDRESSED

1. When do students begin thinking about life after Stony Brook and what are they doing to prepare for it? (*Standards 11, 12, 13*)
2. How do our students get advice for career path or graduate school? (*Standards 1, 3, 9)*
3. How do students select their careers? (*Standard 9)*
4. Do our students have what they need to be successful in their chosen career? (*Standards 7, 11, 12,13,14)*
5. Which employers are hiring our students and what are they looking for in recent graduates? (*standard 13*)
6. What graduate schools are accepting our students and what programs are students pursuing?
7. Where are our alumni, how do they feel about their Stony Brook experience, and to what extent do they still feel part of the Stony Brook Community? (*Standards 7, 14)*

WHAT WE KNOW

The college experience as a whole includes many parts: the classroom component (major/minor, DEC courses), pre-professional work experiences (research, internships, related part-time jobs), extracurricular activities (clubs/organizations, leadership, community service), and the personal connections that students make to advisors or mentors (faculty, professional advising staff, supervisors, mentors) and peers. Each of these experiences plays a special role in shaping the student's life students after Stony Brook.

First reflections on life after Stony Brook

Many Stony Brook students have a career direction in mind when they apply to Stony Brook, yet a much smaller percentage of students actually engages in career planning activities (for example, learning about major–career connections, the value of part-time jobs and community service to skill development, self-assessment and career exploration) during their first and second years. Although our data show that students come to college to prepare for graduate school or to get better paying jobs, yet many do not seem to understand that going to class and doing homework is not enough.

Liberal arts majors in particular have difficulty understanding the connection between their academic programs and related career possibilities. They do not recognize the transferability of skills they develop through coursework (for instance, that problem solving and writing skills developed through study of political science can apply to any industry and any position that requires a candidate with these skills). Many limit themselves to the age-old assumption, "If I major in, say English, and I don't want to teach, there's nothing out there for me." Students need to see the bigger picture: the skills and abilities they develop as part of their whole college experience—courses, activities, jobs, internships—are transferable skills. Other students have trouble articulating their accomplishments. Unlike nursing or mechanical engineering students, whose academic programs are geared toward a specific career path, liberal arts majors, and to a large extent, business management majors, need a context in which to apply subject-specific knowledge. Internships or related pre-professional work experience greatly enhance students' transferable skills like problem solving, written and verbal communication, and analytical skills. Students need more opportunities to reflect on their classroom and out-of-classroom learning experiences with faculty advisors.

Advising

A number of campus entities provide academic and career advising services. The Academic and Pre-Professional Advising Center provides advising about major and degree requirements for undecided students and those in the College of Arts & Sciences, and it houses the university pre-medical and pre-law advising functions. The pre-med advisor is a full-time professional staff member, who, as of spring 2003, also carries responsibility for pre-law advising. The College of Engineering and Applied Sciences offers academic and internship advising to its students. Their staff works closely with corporate partners and with the Career Center to develop internships for CEAS students. The School of Health Technology Management offers academic and clinical placement advising to its students. In addition, the Faculty Student Association (FSA), the campus auxiliary service, provides mentoring and training for student employees, management development and entrepreneurial assistance. FSA maintains an informal alumni network—including a newsletter, Workscapes, and special alumni networking events.

The Career Center offers career advising to all students on campus relative to career decision making, major-to-career connection, access to and preparation for part-time jobs, internships, full-time jobs, and graduate school. In addition to individual advising, the center's annual offerings include four career fairs for jobs, internships, and graduate school, more than a hundred programs and workshops, two credit-bearing career development courses, an internship program, a corporate interviewing program, and a dynamic website. A small but growing number of alumni are involved as informal career advisors and as recruiters, internship sponsors, and mentors. The center is not adequately staffed—it currently employs eleven professional advisors and three support staff. In contrast, the University of California-San Diego's center has twenty-four staff members. Nonetheless, students are satisfied with job assistance (Student Opinion Survey 2003).

The subcommittee was curious about the availability and quality of advising. HSC students sought and received advice more often from a faculty member than non-HSC students. Regression analysis shows that satisfaction reported with advising quality (major/course or career advising) was affected by the amount of faculty contact. HSC alumni were significantly more satisfied with the quality of academic and career advising, and the amount and quality of contact they had with a faculty member.

More specifically, results of the spring survey indicate that faculty advising on career and graduate school is limited (33% of faculty reported "frequently" advising students about careers and graduate programs, and 38% say that advising students about life after Stony Brook is a "closely related" role). Only 10% of non-health undergraduates and 12% of graduate students reported having discussions about career plans "very often" or "often" with a faculty advisor.

Career/Graduate School Selection

Many alumni enrolled at Stony Brook with a purpose—98.3% entered HSC with plans to enter the health field, and 71.2% of these say that their decision to attend was influenced by the strong academic programs. More than 30% of non-HSC alumni reported an interest in health fields (35%), 9.5% in computer science, 41.1% as something else, and 15.2% undecided. Most HSC students (91.5%) did not change their major or career plans while at Stony Brook; 31% of alumni in non-health fields changed their major at least once (59% say their interests changed; 18.4% say the field was too difficult or their grades were not high enough). We were curious about whether the availability of majors affected their decision to change, but data suggest that this is not a factor in the decision to change major. No students reported changing a major due to difficulty in registering for classes.

Preparing Our Students For Successful Careers

Many surveys show that gaining career experience prior to graduation is an important factor in career entry. Our students' participation in out-of-class activities of varies. More than 40% of non-health alumni joined a campus club, less than 20% of HSC and 23.5% of graduate students joined. More than half of undergraduate alumni who were involved in a campus organization reported that this experience help prepare them for a career. Fewer than 30% of the alumni reported working off campus while in school, yet more than three-quarters of those indicated that the experience was valuable to their career entry. A striking difference appears in the area of internships – 81% of HSC alumni completed an off-campus internship, and 94% indicated this was very valuable to their career entry. Only 30% of non-health alumni and 23% of graduate alumni completed an internship, yet those who did reported high value to career entry (75% and 59% respectively).

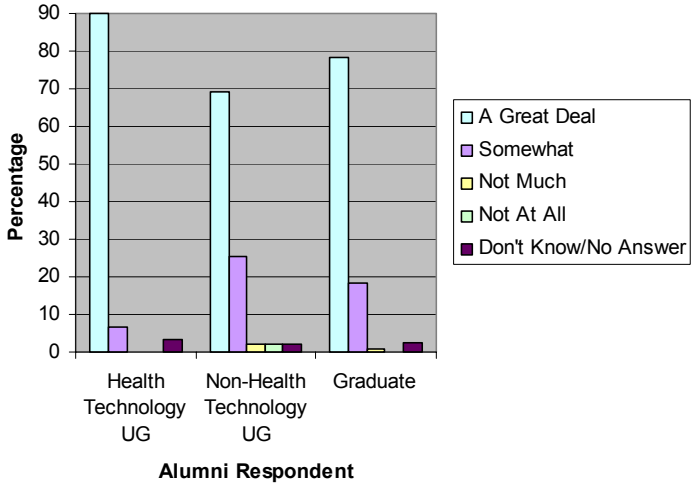

Figure 22: Value of SBU degree

1. How much do you value your degree from Stony Brook?

We asked alumni to rate the quality of the Stony Brook education and tell us if they would enroll at Stony Brook again if they had the chance to do it over. Just under 60% of HSC alumni rated the quality of their education as excellent, as opposed to 25% for non-health and 42% for graduate alumni. Similarly, HSC alumni were much more likely to enroll again than non-HSC alumni or graduate alumni (75% of HSC would definitely enroll again; 45% of non-health and 54% of graduate). Close to 90% of HSC alumni value their degree a great deal; 69% of non-health and 78% of graduate alumni responded the same way. The difference between health and non-health alumni is striking. HSC alumni were more satisfied with their Stony Brook education than non-health alumni. Figure 22 displays the difference in appreciation of the value of a Stony Brook degree among our alumni. What is happening at HSC that results in greater student and alumni satisfaction? Can we identify specific HSC practices that other departments can use to help them improve the satisfaction of their students and alumni?

Employers

Employers look for more than major and GPA (although a 3.0+ GPA is important). They want well-rounded students who have had related work experience (internships, projects, part-time jobs), and regardless of field, for students who understand the big picture of the industry. Employers with specific needs look for a fit with curriculum (for example, Stony Brook's reputation in the sciences/healthcare gives these students an edge), but over all, employers want candidates who have good grades, interpersonal skills, communication abilities, flexibility, and team skills (source: the National Association of Colleges and Employers (NACE) 2003 Job Outlook Survey). Employers want students with a clear focus/goal, and high levels of initiative. Leadership is important, but more relevant is pre-professional work experience, ideally in the industry to which the students is applying. Activities that give the student meaningful accomplishments and transferable skills are also valued. According to a 2003 employer survey conducted by NACE, the top five places employers find new hires are: (1) internship programs (close to 30% of interns were converted to full time employees, and this rate has doubled in five years), (2) co-op programs, (3) on-campus interviews, (4) employee referrals and (5) career fairs. The NACE data clearly confirm what alumni report about the critical importance of internships. Students, too, appreciate the value of internships (Student Opinion Survey 2003).

We conducted two focus groups of employers for this Middle States review, one held on campus in December 2002, the other held at the Stony Brook Manhattan facility in February 2003. Despite an invitation list that included a diverse pool of organizations, those who attended represented only the engineering, health care, and financial industries. Our students are clearly a good fit for such organizations, as evidenced by their continued presence on campus to recruit for internships and full-time career positions. When asked to offer ideas for improvement, employers offered these suggestions. Employers want students to know the bigger picture of the job market—not just the job they apply for, but how the position fits into the organization. Memorial Sloan Kettering, for example, is a hospital and research center, but it also needs students with financial and technical abilities to contribute to business and technical support functions. Employers say that most newly minted college graduates are not adept at speaking or writing. Many lack maturity and knowledge of business etiquette and have unrealistic expectations of the world of work and a poor grasp of work ethics. Stony Brook students in particular do not show enough initiative in the area of self-directed work, employers note. According to the NACE 2003 Job Outlook, the top ten personal qualities/skills employers seek are: (1) communication skills (verbal and written), (2) honesty/integrity, (3) teamwork skills, (4) interpersonal skills, (5) motivation/initiative, (6) strong work ethic, (7) analytical skills, (8) flexibility/adaptability, (9) computer skills, (10) organizational skills.

Alumni and Their Connections to Stony Brook

Stony Brook has several mechanisms to collect information about the current employment of our alumni. Each November the Office of Institutional Research mails an annual alumni destination survey to the permanent addresses of graduates. The School of Health Technology and Management, School of Nursing, School of Social Welfare, School of Medicine, the College of Engineering and Applied Sciences, and the Career Center, also collect destination data for internships, clinicals, full-time jobs and graduate school for students in their programs. In the College of Arts and Sciences, some departments also collect such information. But there is no coordinated campus-wide effort to collect and share this information with campus and community stakeholders. Graduates' contact information is not tracked after they leave the university.

We used the Alumni Telephone Survey, Spring 2003 as our primary source of comparative information about alumni outcomes. According to the survey, most alumni made a successful transition to work and career. Most are employed, many in their chosen field. Sixty percent of non-health undergraduate alumni went on to pursue a master's degree. The non-health undergraduate alumni were spread across health (23%), education (24%), business /management (23%). Fifty-five percent of graduate alumni work in education. Over all, internships were said to be critical for career entry, yet only 30% of non-health undergraduate alumni had completed an internship. Off-campus work experience was very valuable (reporting: 64% HTM, 56% UG) for career entry. HSC alumni were more satisfied with and rated the quality of their education higher than non-health undergraduates.

It is interesting to note that although more than half of the undergraduate alumni feel very little or no connection at all to Stony Brook now, our alumni continue to interact after graduation (65% report contact with our grads and 63% have visited campus since graduating.) This indicates that Stony Brook would benefit from consistent communication with its alumni, and increased opportunities for alumni involvement. Some academic departments, for example, report involving alumni in mentoring and advising students about career and graduate school plans, however, there is no one source of information about departmental alumni involvement. The Career Center has revived its Career Contact and Advisory Network, and is heavily recruiting alumni to join the network and share career information and advice with students on an as-needed basis. The Alumni Office has expanded its staff over the last two years, and now offers a homecoming event in October for alumni and students. There are plans to begin hosting an annual reunion in June. An alumni magazine is published periodically, but ultimately there is no consistent and effective communication with alumni on a university-wide level.

RECOMMENDATIONS FOR THEME 5: LIFE BEYOND STONY BROOK UNIVERSITY

28. Increase opportunities for individual advising. Mechanisms should be found to encourage students to meet regularly with faculty members and professional advisors who will listen to their concerns and talk with them about academic programs, course selection, internships, and career plans. These connections would help students reflect on their experiences and understand the transferability of their skills, especially in the liberal arts, to a variety of post-college options in graduate study, research, and employment.

29. Promote internships and other pre-professional work experience. Students must be better informed about career and internship opportunities. This can be accomplished by better interaction with academic departments and the Career Center. Invited professionals from the

community can provide career scenarios in specific majors (e.g., high school chemistry teacher). Corporate internship programs are the first source for hiring at the entry level, yet few non-Health Sciences Center students participate. Credit and non-credit internships should be tracked and opportunities promoted by departments. Alumni could help us identify internships within their organizations.

30. ***Improve alumni record keeping and communication – especially post-graduation destination data.*** Available alumni data are fragmented and often difficult to obtain. Stony Brook needs a campus-wide effort to assemble post-graduation destination data on a regular basis and report the results in a timely manner. Maintaining regular communication with alumni and getting them involved will strengthen their commitment to the university.

31. ***Leverage existing models of success.*** We should make a concerted effort to identify departments and schools whose alumni feel a greater sense of connection to Stony Brook. The striking satisfaction of HSC alumni, for example, should prompt us to examine what results in such great satisfaction. We benchmark with other institutions on a variety of measures. We now have an internal model, elements of which may be used to improve the student experience for all areas of campus and result in greater attachment of alumni to the Stony Brook community over the long term.

9. INDEX OF RECOMMENDATIONS AND INVENTORY OF SUPPORTING DOCUMENTS

RECOMMENDATIONS:

SUPPORTING DOCUMENTS INCLUDED ON DISK (in reverse chronological order):

Middle States Steering Committee Student and Faculty Telephone Survey, Spring 2003
Middle States Steering Committee Alumni Telephone Survey, Spring 2003
SBU Institutional Self-study: The Student Experience Survey, Spring 2003
Graduate Director's Survey, Spring 2003
Winter Post-Orientation Survey, Spring 2003
Faculty Zoomerang, Spring 2003
Middle States Document Roadmap, Spring 2003
General Education Assessment Plan, Spring 2003
Student Opinion Survey, Fall 2003 & 2002
Findings from the 2002 Administration of Your First College Year (2002 CIRP Survey)
New Student Survey, Fall 2002
Summer Orientation Evaluation, Fall 2002
Experience Stony Brook Evaluation, Fall 2002
Student/Faculty/Staff Retreat Session Notes, Fall 2002
Middle States Design for Self Study, Summer 2002
Student Retention Survey, Spring 2002
Student Services Survey, 2002
New Student Telephone Survey, Fall 2002 and Fall 2001
Survey of Graduate Student, Medical Student, and Medical Residents' Housing Needs at Stony Brook, Spring 2001
Declination Study, 2001

National Survey of Student Engagement, 2001 and 2000

Fall Telephone Survey, 2000

10. PUBLIC DISCUSSIONS OF THE SELF-STUDY

1. Student/Faculty/Staff Retreat, October 31 – November 1, 2003
2. University Senate, November 3, 2003
3. Directors of Undergraduate Studies, November 13, 2003
4. Student Life Advisory Council of the University Senate, November 18, 2003
5. Chairs Forum, November 21, 2003
6. University Senate Executive Committee, November 24, 2003
7. Council of Distinguished Teaching Professors, December 5, 2003
8. United University Professions Stony Brook Chapter, December 15, 2003
9. Undergraduate Council
10. Graduate Council, December 18, 2003
11. Arts and Sciences Senate Executive Committee, January 30, 2004

February 5, 2004