# State of the University Address Presented in Fall 1998 by President Shirley Strum Kenny State University at Stony Brook

ow is the time for us to assess where we have been over the past year and where we are going now. We can indeed celebrate what lies ahead, for, having endured the bad years of debt, deficit, and budget cuts, we have before us a year teeming with possibilities for building, growing, and creating the structures of Stony Brook's future.

## Increased Revenue, Increased Performance

This year, for the first time since 1995, State support has noticeably increased (*Graph* 1); for the first time in several years we have salary increases for our faculty and staff (although, of course, we would have preferred greater increases). The State budget actually increased \$13.5 million, from \$177.7 million last year to \$191.2 million this year. Please notice two things: first, that the percentage coming from tuition did not increase, since tuition was not raised; and second, the fact that our enrollments are larger meant

# Our researchers are our glory, and we can certainly exult in their quality.

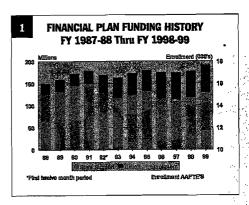
that the State tax levy portion increased. Whether one considers actual funding or inflation-adjusted funding, we have had genuine growth this year after three years of stasis (*Graph 2*). We'd like bigger growth; we hope it will come. But this is the

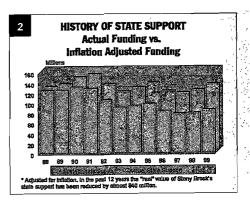
best budget cycle of any in the past four years.

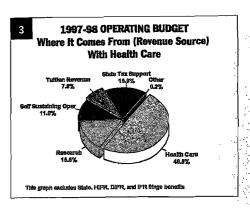
To understand the All Funds Budget, one needs to understand that it encompasses all sources of income; the State appropriation, including tuition, is only 24 per cent of the total of about \$800 million (Graph 3). The health care budget is almost half the total; research brings in 15.5 per cent; and self-sustaining operations such as the residence halls another 11 percent. If one looks only at the non-health care budget. State tax support is slightly more than 30 per cent, tuition slightly more than 15 per cent, research 31 per cent, and self-sustaining operations 22 per cent (Graph 4). These figures do not, of course, include our capital budget, which is really bonding authority rather than allocated dollars.

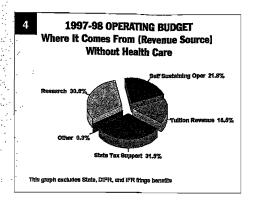
We can be truly proud of our research budget. Since 1980 our research expenditures have increased annually in a beautiful upward pattern, even in years when federal funding was increasingly difficult to acquire (Graph 5). Last year we had expenditures of \$111 million: our next closest competitor in SUNY was Buffalo at \$70 million. And I might add that in a single year last year, we increased by \$6 million as Buffalo, in a very tough vear, declined by \$4 million. Vice President for Research Gail Habicht and the research staff are to be congratulated for supporting researchers' grants activities so well on this campus.

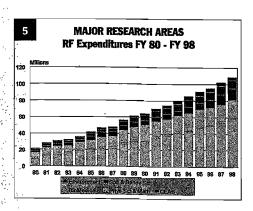
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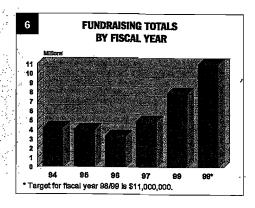


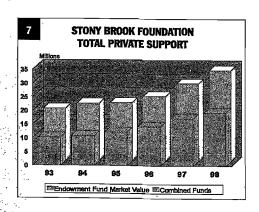












Being one of the top three public research institutions in terms of percapita faculty research productivity, as trumpeted in The Rise of American Research Universities: Elites and Challengers in the Postwar Era, a study published by Johns Hopkins Press, is truly notable. I might point out as additional proof of our ascendancy that SUNY has ten graduate and research programs in the top quartile nationally, according to the National Research Council Survey: nine of those programs are at Stony Brook. Now with our new alliance with Brookhaven National Laboratory and our growing collaborations with Cold Spring Harbor Laboratory, we have truly become the research engine that can spawn another Silicon Valley or Boston Corridor right here on Long Island.

The Stony Brook Foundation is another very good story. As the graph shows, fundraising increased by 60 per cent in 1997-98, and we have similarly high aspirations for next year (Graph 6). The endowment funds reached \$19.4 million this year, and combined funds topped \$33.2 million (Graph 7). These figures do not include the Wang gift of \$25 million for the Asian American Cultural Center. Patricia Ondrick, Associate Vice President for University Advancement. and her staff should be congratulated. Many of the staff came only last year, but they hit the ground running. The attachment of fundraising staff to individual colleges, the Hospital, the Staller Center, and Athletics is another important innovation, and the close collaboration of all the fundraisers makes it possible for us to move ahead rapidly.

#### **Building on Strength**

With or without the Health Sciences Center, we spend 61 per cent of our budget on personnel, around 30 per cent for supplies and operating expenses, 5 to 8 per cent for utilities and 2 or 3 percent for equipment (*Graph* 8).

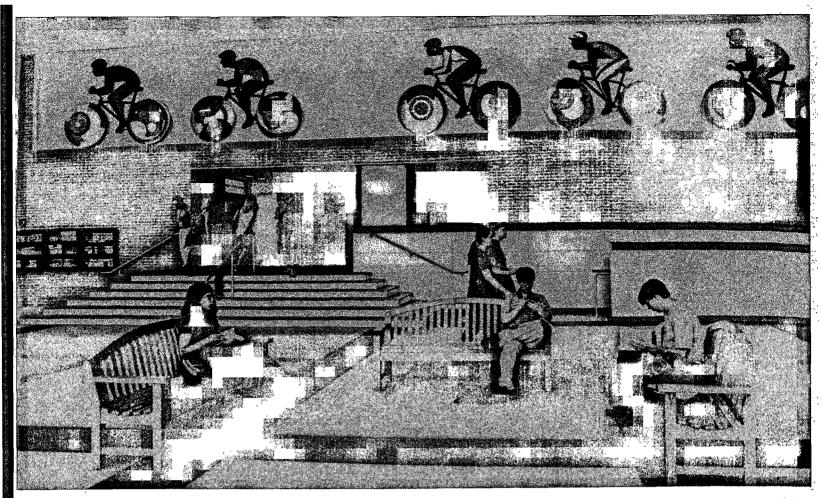
Our long years of being unable to hire are over. You may recall that in 1995-96, after the big drop in the base budget, we hired no one—although we did avoid layoffs and breaking of tenure. Today we are recognizing 86 new full-time tenured or tenure-track and clinical faculty—it is a good feeling. Faculty numbers have diminished over the last decade because of shrinking budgets; now we can again begin to rebuild.

Our capital budget is growing again after a long drought. Over the course of the next five years a building program of more than \$100 million will be realized on this campus (*Graph* 9). We will be able to complete the Centers for Molecular Medicine and the Student Activities Center Phase II; build a stadium for football, soccer, and lacrosse; renovate and expand Heavy Engineering and Humanities; and do major renovations such as repairing the dangerous facades and removing the scaffolding on the Health Sciences



The Paul Simons Memorial Bicycle Path connects the campus and the community.

Center and continuing the updating of classroom spaces in buildings where maintenance was too long deferred. The Wang Building is proceeding rapidly, and should be completed by the year 2000. Beautification has continued, even though at a snail's pace due to our small budgets and major



deferred maintenance. Next spring we will begin removing the dreadful black-top splayed across the Academic Mall and replacing it with landscaping and walks that coordinate with the west end of the mall. The response by faculty, staff, students, visitors, and political leaders to the modest efforts that have been made to improve the walks and landscaping have indicated a new kind of pride in the State University that can enhance everything we do, from

We are recognized as the intellectual engine for economic development, as a willing and very able partner in rebuilding Long Island.

enrollment increases to fundraising to improved working conditions.

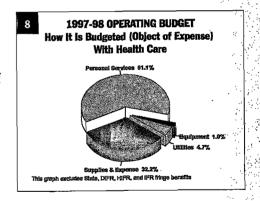
I have been deeply moved by the fact that our volunteer Green Teams, started three years ago to improve the campus in a time of financial crisis, have grown from 11 teams three years ago to 90 this year; the faculty, staff, and students who make their gardens grow have truly shown what we can do, without fanfare, just by caring and getting involved.

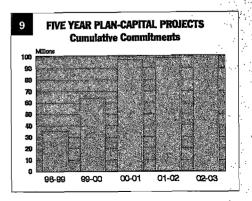
The new bike path under construction is an example of the cooperation of the private and public sectors. The Paul Simons Memorial Bicycle Path, named in memory of Jim Simons' son, who was a world-class cyclist, was built at a cost of \$1.5 million. The money was a combination of a federal grant of \$400,000, plus philanthropic gifts of \$728,000, plus some Campus Initiatives funding. The path will benefit students, staff, and faculty alike. It encompasses the University, connecting the east and west sides of campus, and will also connect with the Brookhaven path when that is built.

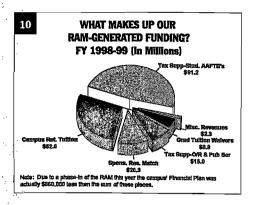
#### **Enrollment Is on the Rise**

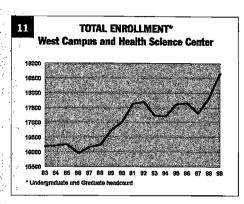
Under the new Resource Allocation Model or RAM, our formula will depend increasingly on tuition; in other words, we generate more money for all the campus missions if we gen-

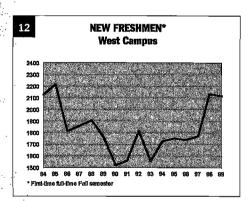
"Duchamp's Bicycle Race," a kinetic sculpture, rides above the Student Activities Center lobby.

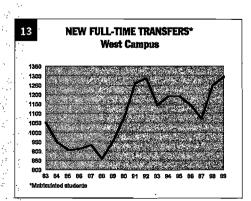


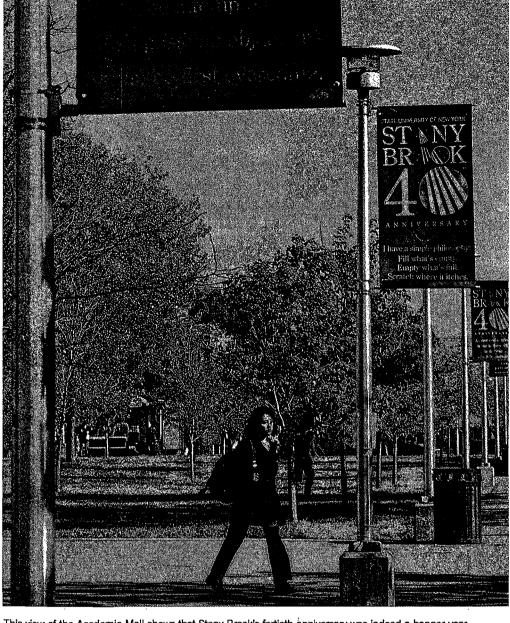












This view of the Academic Mall shows that Stony Brook's fortieth anniversary was indeed a banner year.

erate more enrollments (*Graph* **10**). After long discussions in which our Provost Rollin Richmond was deeply and energetically involved, a formula was reached in which a match for research dollars is a significant part. For us, increased enrollments mean \$91 million this year; campus-retained tuition totals \$53 million, and the match for sponsored research \$20 million. Because we actually performed better than the collar used to minimize the effects of RAM in Year 1, our allocation would have been \$660,000 greater if the RAM

had been fully implemented.

This year's enrollments are another part of our good news. Although freshman and transfer enrollments have not significantly increased, our total enrollment jumped by 800 students to 18,647 (*Graph* 11), our highest enrollment ever (following a record 1997-98). The patterns were a little surprising: Freshman enrollments actually declined slightly from last year (*Graph* 12), and transfers were barely up (*Graph* 13). West Campus new graduate student enrollments also declined (*Graph* 14). But overall, the enroll-

ments were significantly up, because of a larger number of continuing students. Health Science enrollments continued to rise, although of course Medical School enrollments must be kept stable (*Graph* 15).

Simultaneously with the increase in students, SAT scores for our freshmen increased 17 points (*Graph* **16**). If we look at the last two years, we have

In the last two years, we have increased enrollments by 1,300 students and SAT scores by 42 points.

increased enrollments by 1,300 students and SAT scores by 42 points. Although most universities show about a 10-point differential between math and verbal scores, Stony Brook's differential tends to be 35-40 points.

I have always believed that we could—and must—increase enrollments and academic qualifications (such as SAT scores) simultaneously; clearly we are doing just that. The additional students, of course, will improve our budget significantly in the future because of the RAM.

This year we increased our budget by exceeding the tuition target and increasing summer school revenue.



Green Teams help keep our campus beautiful.

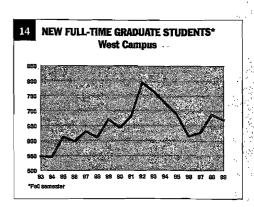
For the past couple of years I have committed the budget increases due to tuition beyond the SUNY target, as well as any summer school profits, to the Academic Affairs budget. Earnings in 1997-98 amounted to an additional \$2.2 million for Academic Affairs; this year we hope to do as well or better.

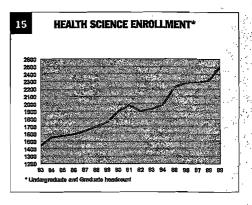
#### Who Are Our Students?

Forty-two per cent of our freshman come from New York City, mostly Brooklyn and Queens. Thirty-two per cent come from Suffolk. Nassau County sends 14 per cent, actually a slightly lower number than the Borough of Queens. Four per cent come from other parts of New York, and 8 per cent from other places (Graph 17). The freshman demographics represent a change, significantly in the number from the five boroughsand from Suffolk—since 33 per cent of all undergraduates hail from New York City and 44 per cent from Suffolk (Graph 18).

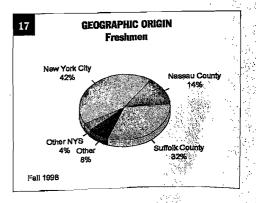
With graduate students, it is a different story. A total of 58 per cent of all graduate students reside in Suffolk County, and only 17 per cent are foreign (Graph 19). This reflects the many master's degree programs, fulland part-time, including those in the School of Professional Development, which appeal to local residents, as well as the fact that graduate students relocate close to campus after they begin their studies. However, our new fulltime graduate students include 46 per cent foreign students, 24 per cent outof-state, and only about 30 per cent from New York, including 16 per cent from Suffolk (Graph 20).

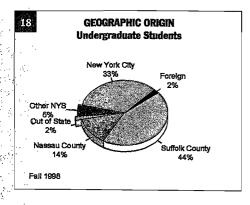
We have more trouble determining authentic ethnic data for this year's freshmen because of a rewording of the SUNY forms which resulted in fewer students providing ethnic data—18 per cent did not, as opposed to 9 per cent last year (*Graph* 21). But of the 82 per cent who did, 37 percent are white, 24 per cent Asian and Asian American, 7 per cent African American, and 7 per cent Hispanic. Fifty-one per cent of undergraduates and 57 per cent of graduate students are female now, as are 32 per cent of the faculty.

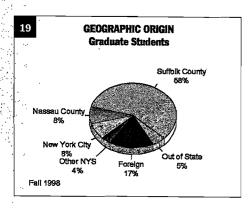


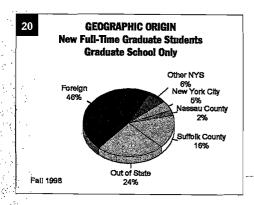


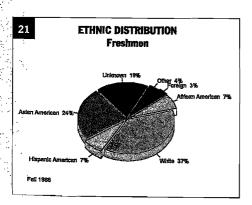
16	FULL-TIME FRESHMEN Fall 1996, Fall 1997 and Fall 1998			
		1996	1997	1998
SAT Math SAT Verbai		554 516	566 529	579 533
SAT Combined		1,070	1,095	1,112
High School Average		88.0	88.1	88.4
Students		1,770	2,135	2,115











#### Where Do the Students' Interests Lie?

For freshmen this year, the most popular area is "Undecided/Other," perhaps not surprising when we have so much to offer (Graph 22). Interest in Biological Sciences, still leading, has dropped slightly. Computer Science has increased, followed by Social Sciences, the rest of Arts and Sciences, Business, and Engineering. But Psychology is actually our largest undergraduate major, followed by Biology, Business, Computer Science, English, Biochemistry, Economics, Social Science, Multidisciplinary Studies, and Political Science (Graph 23). The ten leading graduate programs for full- and part-timers are Liberal Studies, Nursing, Medicine, Social Work, Music, Physics, Computer Science, Dental Medicine. Chemistry, and Psychology (Graph 24).

Our more than 11,000 employees, excluding undergraduates, are employed primarily as support staff and professionals, largely, of course, because of the Hospital (*Graph* 25). We have about 1,000 tenure track faculty, more than 700 not on track, 800 on the doctors' professional plan, more than 1,000 on the Research Foundation payroll, and about 1,400 graduate students. We still have a gender gap, and we lack faculty diversity to compare favorably with our student enrollments, but this year there is significant improvement in both areas.

#### **Success for Our Graduates**

A study of our 1996 and 1997 undergraduate alumni in the year after graduation found that 39 per cent are in a career job, 25 per cent are in school, and 10 per cent are both in a career job and in school (*Graph* **26**). Of the total of 35 per cent in school, 60 per cent are working on master's degrees, and 8 per cent on doctoral programs (*Graph* **27**). Eleven per cent are in medicine, dentistry, etc. Ten per cent have gone to law school. Thirty-one per cent have returned to Stony Brook and another 19 per cent have gone to other research universities. Of those

employed, 38 per cent stayed in Suffolk, 16 per cent in Nassau, and 30 per cent are in the City (*Graph* 28).

### A Major Force for Growth

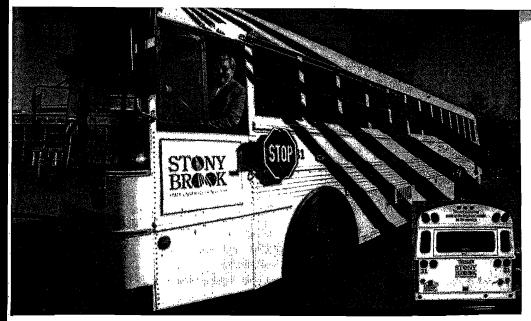
Our biggest news for the year was taking over the management of Brookhaven National Laboratory, a move that made Stony Brook, already the biggest user of Brookhaven, a player in a different league, part of that elite including Berkeley, Chicago, Princeton, and Cornell that run federal laboratories. The appointment of our John H. Marburger as Director, Peter Paul as Assistant Director, and Robert McGrath as Vice President for Brookhaven Affairs has assured excellent leadership in this enterprise, leadership already recognized by the Department of Energy as well as the faculty of the Lab. Many links already exist. For example, the testing of the drug Ritalin used for attention deficit disorder is a project of Stony Brook Professor Robert Hitzemann and Nora Volkow at BNL. A number of new col-



Brightly colored, well-lit signs mark all entrances to the campus.

laborations are beginning, including a Data Intensive Computing Initiative, activities in Structural Biology, Science Studies, and Environmental Science and Ecology.

Now we are engaged in our next great enterprise, the creation of the Cancer Institute of Long Island.



ABOVE: President Kenny at the wheel of one of the freshly painted campus buses. INSET: Imprinted on the back of the bus: "You are following some of the brightest minds in the country."

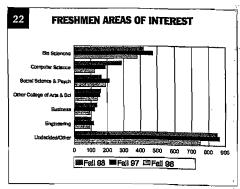
Recently, with the announcement of a \$2-million grant acquired by Senator Alfonse D'Amato and Congressman Michael Forbes from the federal government and \$500,000 secured by Senator Kenneth LaValle from State government, we launched an effort that has been carefully considered. designed, and developed for several years. The world-class National Advisory Board had its first meeting at the time we announced. An editorial in Newsday lauded the Cancer Institute development as very important to Long Island, the right thing in the right place at the right time. The combination of cancer research, much of which will occur in the new Centers for Molecular Medicine, and excellent clinical care, which will involve building a new ambulatory care center, will be invaluable for Long Island and particularly Suffolk County. We need great cancer care "in our own back yard."

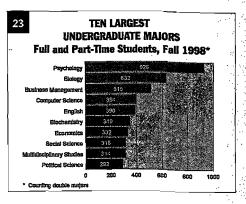
We have also made tremendous strides this year in furthering economic development of Long Island, particularly in the high technology and biotechnology areas. We created a new software incubator on the South Campus, supported by a \$500,000 grant from Governor George Pataki and corporate support from Computer Associates. The facility is already full, and we clearly need additional space. The startup companies, often the result

of research within our own laboratories done by our own creative faculty, will be important for Long Island and important for our faculty and students. We received a second State-supported Center for Advanced Technology at Stony Brook, making us the only institution in the state to have two. We also have two NSF-funded Centers established here. Moreover, we have corporate and State support to double the number of Computer Science students in four years. The proposed MBA program in Technology Management, added to the incredibly productive activity in the College of Engineering and Applied Sciences, will make us essential to the growth of high technology industries on Long Island.

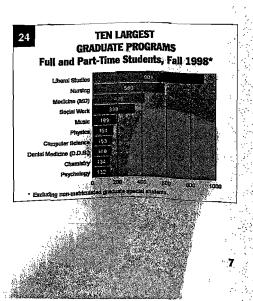
# **Emphasis on Undergraduate Education**

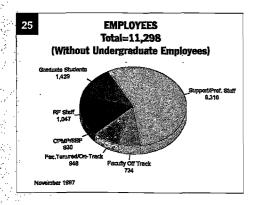
With these giant leaps in research efforts, we must also look toward becoming world-class in our student experience, both within the classroom and laboratory and without. It was because of the needs of Stony Brook that I became intensely interested in undergraduate education. I went to Ernest L. Boyer, President of the Carnegie Foundation for the Advancement of Teaching, of which I was a Board member, and asked him to tackle the problem. He did, and chaired the National Commission on Educating Undergraduates in the Research

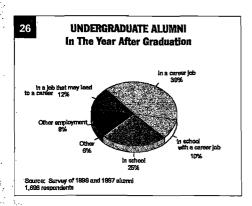


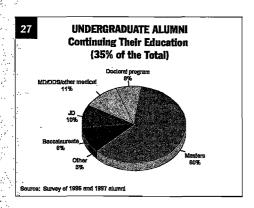


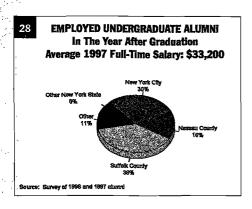
Our biggest news was taking over management of Brookhaven National Lab, a move that made Stony Brook part of that elite including Berkeley, Chicago, Princeton, and Cornell.











University until he died. After that, I took over his work. The members of the Commission (now called the Boyer Commission in memory of Ernie) were outstanding, the best in their fields around the country, including our own Nobel Laureate Chen Ning Yang. We met for two years or so, sadly impoverished by Ernie's death but determined to finish the task.

The results have been startling. The report, Reinventing Undergraduate Education: A Blueprint for America's Research Universities, resounded around the world. After an astonishing initial splash in all the major newspapers and news broadcasts across the country following its publication last April 20, the report has continued to be the center of conferences, discussions, and serious attention, not only from research universities but also from every other sector of American education. We are well into the second printing, and more than 46,000 "hits"

We are realizing my dream of becoming both a great national university and a great local university, rooted in our community, but extending that community worldwide.

on the Internet have led to many, many copies pulled off our Web site, and recopied in large numbers. The presidents and provosts of the top research universities, boards of trustees, state boards of higher education, legislators, and congressmen have requested quantities of copies. Internationally the report has been equally important, inspiring interest and efforts at change from Sweden to Korea.

The report recommends ten ways to change undergraduate education and lists 56 specific recommendations, which have become a framework for many universities working on the undergraduate experience. It is based on research as the key to undergraduate education at research universities, starting in the freshman year and building to a capstone senior experience. It emphasizes the first-year experience, graduate education, and faculty reward structures.

I am pleased to say that Stony Brook is working very hard at this agenda and is nationally recognized for its efforts, first through being one of ten universities to receive the National Science Foundation's Recognition Award for the Integration of Research and Education. The new Center for Learning and Teaching is under way, learning communities are flourishing, the Alliance for Minority Participation is involving other SUNY campuses, and the WISE (Women in Science and Engineering) Program has been recognized as a national model. There is a lot of excitement and a lot of progress on campus.

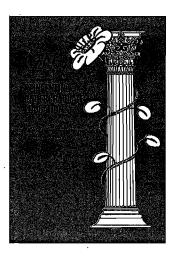
We also plan to initiate a new Center for Innovation in Undergraduate Education that will publish national surveys and, through a Web site and publications, be a clearing house for national and international ideas on undergraduate education, following up on the Boyer phenomenon. Emily Thomas, Director of Institutional Research, will be acting director.

Problems of student housing have been temporarily solved for the year but are still a very high priority for permanent solution. Because I accelerated the rehab schedule from 12 years to 5 years, we have 400 beds out of use (down from 500 in previous years). Yet our demand for housing, perhaps in part because of the rehabs as well as increased enrollments, is significantly up. In the past we had a problem of empty rooms; now our problem is not enough rooms. For this year the solution necessitated the omission of certain categories of tenants-hospital residents, Intensive English Program students, and participants in the Executive Management Program. We have also planned, beginning next year,

# The Boyer Commission Report, "Reinventing Undergraduate Education: A Blueprint for America's Research Universities"

# TEN WAYS TO CHANGE UNDERGRADUATE EDUCATION

- Make research-based learning the standard
- 2 Construct an inquiry-based freshman year
- 3 Build on the freshman foundation
- 4 Remove barriers to interdisciplinary education
- 5: Link communication skills and course work
- 6 Use information technology creatively
- 7 Culminate with a capstone experience
- 8 Educate graduate students as apprentice teachers
- 9 Change faculty reward systems
- 10 Cultivate a sense of community



#### IMPLEMENTING THE BOYER COMMISSION RECOMMENDATIONS AT STONY BROOK

- NSF Recognition Award Integration of Research and Education (RAIRE)
- Women in Science and Engineering (WISF)
- Undergraduate Research and Creative Activities Program (URECA)
- · Learning Communities Project
- Inquiry-based curricula in introductory biology, chemistry, economics and other new courses
- · Revamped freshman composition course
- Center for Excellence in Learning and Teaching
- Faculty and graduate student training programs in active learning strategies
- · Community building and diversity initiatives

to exclude students after their eighth semester if necessary. However, these problems can be avoided if we can fast-track new residence halls to supplement the return of rehabilitated rooms. Therefore, the Housing Committee that worked all last year is still hard at work to add rooms to our inventories, and some very creative ideas are coming forward. One must always be careful, of course, not to overbuild; we will continue to work hard to solve—but not overshoot—the problem.

#### Student Involvement

The new Student Activities Center has energized the Academic Mall. I delight in the fact that on Friday nights, the place is full of activity, thanks to the efforts of the Student Affairs staff and the Dean of Students' Office. The second phase will now be constructed to house ballrooms and more meeting rooms. We move to Division I athletics next year, and both the campus excitement and the fundraising have reached new heights already.

We have become more user friendly—this was the best opening of school ever, thanks to many people. Students and their parents felt it. For the first time we welcomed our international students at the airport—

thanks to the enterprise of graduate student Chao Gao. The Library has become much more student friendly, and a great deal is happening within departments to develop better relations with students.

## **Strong Community Ties**

Our relationships with the community continue to mature. We are recognized now as the intellectual engine for economic development, as a willing and very able partner in rebuilding Long Island. But we are also recognized as a cultural center, thanks to the extraordinary efforts of Alan Inkles and his Staller Center staff, who have not only raised the number of live artistic events higher than it has ever been, but have also created a film center and film festival that pack 'em in. Students are coming to Staller Center, certainly for the films, and we are building student audiences for all artistic events. We are realizing my dream of becoming both a great national university and a great local university, rooted in our community but extending that community worldwide.

#### **Moving Forward**

This is a key year for Stony Brook, because for the first time in a decade we have no cuts, no financial crisis; indeed we have an increase in our budget. We could look at the past, when we were better funded, known nationwide for New York's commitment to public higher education, and more because those years are gone. Or we can say we have a chance here, a chance to move forward, and we are not going to miss a minute of it. I vote for the latter because I prefer to be part of a growing, burgeoning institution that knows it is good and energetically on the move. We have more students, better students, growing research and fundraising budgets, capital projects, and a stunningly fine faculty. The world needs to know we are on the move again. An advertising campaign will help get that word out, but the true impetus comes from you and what you think and feel and say about Stony Brook.

I believe that if we seize the day, build on the remarkable accomplishments of the last four years and the great new initiatives that have been launched, we can propel ourselves to worldwide recognition. In my inaugural speech, I said that only by daring, ingenuity, and the willingness to take risks for greater rewards will we in fact reach our remarkable potential. This year should be a year of daring, ingenuity—and great rewards. \*