I. Overview and Future Directions

The School of Nursing is an entrepreneurial School that offers exceptionally high quality master’s programs and is known for clinical scholarship, interdisciplinary approach to care and inquiry, commitment to vulnerable and underserved populations, clinically relevant research, and innovative use of technology in distance learning. The School of Nursing has aggressively strengthened its academic position with quality programs of education, research and service. We have developed new advanced practice majors, strengthened interdisciplinary work, initiated service to the community and established innovative programs of research that address critical issues in health care. Our recent success is remarkable; in 1991 we had 5 faculty, 50 students and no research funding; in 2000 we have 30 faculty, 250 students and over 1 million dollars in extramural funding a year. The work of the faculty in the 90’s has been extraordinary and has been recognized nationally by The National Institutes of Health which ranked us 36th in the nation for nursing research funding and by US News and World Report which ranked us 27th in the nation (up from 32th in 1998 and unranked in 1996). The School is well positioned to attain national leadership status in the next decade.

Future Directions

The School of Nursing aims to rank in the top 20 schools nationally in the next five years. Our strategic plan and goals include developing a doctoral program, enhancing faculty research programs, using technology for distance based education, and diversifying our degree offerings to increase the number of professional nurses. We envision the Duke University School of Nursing becoming a leader in education for nurses, recognized for its clinical scholarship, creative use of resources and interdisciplinary approach to understanding health and providing cost effective, humane health care.

II. Internal and External Assessment.

In addition to the rankings issued by NIH and US News and World Report, three deans from top ranked schools conducted an external review of the Duke School of Nursing. The reviewers noted that if Duke School of Nursing is to continue its growth and elevate its national ranking, it must move towards...
offering a Ph.D. in nursing program. Indeed, the external reviewers specifically noted that senior researchers are unlikely to join the faculty of the School without a firm commitment to a doctoral program. Seventy-two universities offer the doctoral degree in nursing; every school ranked above Duke (US News and World Report, 2000) has a doctoral program. Further, our singular focus on master’s level education makes us vulnerable to market fluctuations in health care and consequent fluctuations in the yearly applicant pool.

We selected five private schools as benchmark schools: Hopkins (ranked 5th), Yale (12th), Emory (32nd), Vanderbilt (27th), and Rush (12th). These Schools were chosen because they are private schools in Academic Health Centers and are, for the most part, competitors for students, faculty and research funding. Given our resources, our School competes well with the benchmark schools. These schools vary in size, programs offered, and number of faculty; however, all are larger than Duke. Noteworthy comparisons are listed below.

Academic programs

- While we have diversified majors at the master’s level, we are not competitive with the benchmark schools in regard to degrees offered. All of the benchmark schools offer the doctoral degree and either a bachelor’s degree or a master’s degree for non-nurses. All provide entry into their programs for individuals who are not nurses. In contrast, Duke admits only those who have a bachelor’s degree in nursing.

Students

- We have made diversity of our student body a primary goal and have increased the percentage of minority students from 3% in the early 90’s to 16% in the fall of 1999. The mean age of our current student population is 33. Twenty percent of our students are enrolled in distance-based off-campus programs.
- Compared to benchmark schools, we have a much smaller enrollment than desired. The FTE student count for Duke in 1998 was 108 compared to 246 to 559 student FTE’s in our benchmark schools. This difference is not explained by financial reasons – compared to all benchmark schools we are the least expensive and we provide slightly more scholarship support. More plausible reasons for our smaller number of admissions include our lack of bachelor’s or generic master’s (master’s degree for non-nurses) and doctoral program.

Faculty

- Of our 30 full-time faculty, 14 are on the research or tenure track and 20 have doctoral degrees. All of our doctorally prepared faculty graduated from Research I institutions.
- We have increased the diversity of our faculty, 10.7% are underrepresented minorities and 14.3% are male – a rarity in a school of nursing!
Compared to our benchmark schools, we have fewer faculty. We have no full professors, one tenured associate professor (the dean), four associate professors without tenure; and the remaining tenure-track faculty are assistant professors. Clearly our School needs to increase both its percentage and total number of tenured professors.

Compared to benchmark schools, Duke had the highest percentage of full time regular rank faculty with doctoral degrees. However, our faculty numbers are so small that to achieve our future research and program goals, we must focus on tenure track, research-oriented hires.

We have five open faculty positions; all will be filled by tenure track or senior tenured faculty in areas targeted to enhance the research of the School.

Although Duke has been competitive in salaries, ranking at the 75th percentile nationally, we have recently fallen behind. We must develop more competitive strategies to recruit faculty and restructure our salary scale, particularly for tenure track faculty. There is currently a national shortage of nurse faculty and this shortage is expected to increase in severity. Recruitment competition will be fierce.

Research

- Key areas of faculty research are in explicating the dynamics of prevention and management of chronic illness, especially in the areas of aging, pediatrics, and care at the end of life; growing strength is evident in cardiovascular disease. The School is a nationally recognized leader in clinical therapeutics and in interdisciplinary approaches to inquiry.
- Recently, the School of Nursing has developed relationships with the Center for Aging, Institute for Care at the End of Life, the Perinatal Institute and the Center for the Study of Medical Ethics and Humanities. Current faculty research, particularly that related to chronic illness in children and the elderly, is germane to these institutes.
- School of Nursing faculty have worked to bring together scholars from throughout the medical center and university to work on an exploratory center on trajectories of aging and care. This work is particularly germane to the establishment of a doctoral program.
- Compared to the benchmark schools, Duke faculty had the highest total grant dollar production per faculty

Information Technology (IT)

- The School of Nursing is a leader in the use of technology in education. We offer online family nurse practitioner programs to nurses in medically underserved areas, provide contract service in online education for other departments, and offer continuing education modules for health professionals through contracts with the North Carolina AHEC.
- We are clearly ahead of all benchmark schools in using instructional technology. However, maintaining a leadership position in on-line distance
based education requires continued development and the School of Nursing is now a leader in offering distance based degrees.

Space

- The School of Nursing is small – total space including shared classroom space in Hanes House is around 14,000 square feet. We currently have two urgent needs -- additional office space for new faculty and study carrels for students. Within the next five years, the limitations of a small one-story building must be faced and consideration given to the construction of a new School of Nursing.
- All benchmark schools are considerably larger than Duke. Hopkins built a new school (over 92,000 square feet), which opened in 1999, and Emory is building a new school, which will open in January 2001.

Financial Assessment

- The School has made remarkable progress in the management and growth of financial resources. The annual budget has increased $2,862,765 in FY 1999, a 233% increase over 1991. Similarly, the endowment funds have increased 584% to $6,720,520 and reserve funds 331% to $4,656,425. Despite this growth the School is still fiscally vulnerable; the endowment is small and the reserve fund is not capable of handling major fluctuations in yearly budgets.

Compared to benchmark schools, Duke

- Garnered the smallest percent of revenue from tuition
- Generated the greatest percent from grants
- Had a substantially smaller budget
- Had a substantially smaller endowment. Our success in the Campaign for Duke is critical.

Community Service

- The School currently engages in a variety of service initiatives; they include providing health exams for pre-school children in conjunction with the Durham County Health Department, increasing breast screening for minority women in rural areas, running the National Myasthenia Gravis Hotline, participating in the Durham Wellness Partnership, and collaborating in local recruitment of minority students for the health professions. We have also partnered with the Durham Public School System to run two school-based primary care clinics/wellness centers in Durham. Both of schools have diverse populations and a very high percentage of students receiving free or reduced priced lunches – a marker of economic need. The School of Nursing and the Department of Community and Family Medicine operate a joint division, the Division of Community Health, which collaborates with community partners to improve the health of the community. Our partnerships have also provided...
III. Goals and Major Initiatives

Our internal and external assessment has led us to identify major goals for the next five years, with an eye to the years that follow. Our goals include preparing graduates for leadership in health care, developing a small but exquisite doctoral program, diversifying our degree offerings to increase the number of professional nurses, enhancing our faculty research programs, and building on our leadership in using technology for distance based education.

Major initiatives

- Our highest priority is the initiation of a doctoral program. This is critical to our ability to educate new nurse scholars for the academy, recruit high caliber faculty, and enhance our research mission. We are currently the highest ranked School of Nursing in the country without a doctoral program.
- Our second priority is to strengthen the research base of our faculty. This initiative is closely linked with the establishment of a doctoral program and will require hiring additional mid-career faculty, and strengthening our interdisciplinary ties with university and medical center colleagues in aging, pediatrics, ethics, and end-of-life-care.
- Our third priority is to expand our market for on-line Internet-based educational programs. We are already leading in this area, but the creation of a Center for Distance Based Learning is crucial if we are to expand our on-line offerings and maintain our leadership nationally.
- Finally, we plan to open new markets by recruiting students who are not already prepared as baccalaureate degree nurses. We have two opportunities. The first is to develop an innovative program for a second bachelor’s degree in nursing for college graduates from other fields, and the second is to respond to requests for a non-nursing master’s degree for baccalaureate graduates seeking admission to the major in clinical research management.

IV. Benchmarks and Assessments

Establish a doctoral program in nursing by Spring 2002. The program will admit 4 to 6 students per year and will have a strong interdisciplinary focus. Evaluation criteria will include successful initiation of the program, recruitment of highly qualified students, attainment of National Research Service Awards, and placement post graduation in top ranked schools. The strategies needed to reach these goals are fully articulated in the body of the strategic plan; many have already been implemented.
Strengthen faculty research. Our priorities are to promote our successful faculty, to recruit doctorally prepared mid-career faculty whose expertise will enhance the research strengths of our faculty, and to increase our interdisciplinary work in aging, pediatrics, ethics, and end-of-life care. Our experience indicates that until we have a doctoral program, we will not be able to recruit senior faculty. We lack additional research space. Over the course of the next ten years, if our fiscal status permits, we plan to grow our faculty to 40 and, as noted in the assessment section, space will become even more critical. Evaluation of faculty research will include quality of faculty hires, scholarly contributions in the field, our rank in total NIH research dollars, and development of interdisciplinary research. One key initiative is the development of an exploratory center to address research on trajectories of aging and care. Our campaign goal includes an additional endowed chair in gerontology to be housed in the center, but thus far we have had limited success in raising the funds. Many of the strategies are already in place; however, a critical need is financial support to develop the center.

Develop a Center for Distance Based Learning to increase and coordinate distance-based on-line degree offerings. We have successfully brought two programs/majors on-line and are beginning to implement a third. Our success is predicated on careful selection of majors, preparation of faculty and the ability to provide support services for our distance-based students. A central place for support services for students and faculty is essential for our continued success. The Center for Distance Education will be initiated in winter 2000/spring 2001. Evaluation criteria will include provision of core services, coordination of student services with constituencies within the school and university, number of on-line quality majors benchmarked against DHHS criteria, quality of students, performance of students in the majors, graduation rate, and cost. The center will be evaluated after one year of operation, and refinements and adjustments made in mission, goals, and priorities; these will be reassessed yearly. Specific strategies to reach these goals are fully articulated in the body of the strategic plan; many have been implemented but one critical need is additional space to house the center.

Open new markets by enrolling non-nurses in the School of Nursing. We are considering two possibilities:

The first option is to develop a second-degree bachelor’s program or generic master’s degree for non-nurses who wish to become nurses. This model is one used by our benchmark schools and it provides them with greater fiscal stability. Nationally, we are currently entering a nurse shortage, which by all analysis is unlike any of the past, unlikely to improve, and hold serious implication of the delivery of health care. The School of Nursing, in conjunction with the Medical Center, is prepared to offer a second degree bachelor’s in nursing for non-nurses. Students in this program would not be part of the undergraduate program of the university nor require any academic support form the university. Our program would respond to a societal need, develop a future pool of candidates for our master’s and doctoral program, and provide relief for nurse shortages within our own Duke University Health System.
A second option is to develop a Master of Health Science (MHS) in clinical research management to meet the increasing demand for staff by the industry, service and governmental agencies that are increasing the number of clinical trials on drugs, devices and biologics. Duke University School of Nursing is only one of two graduate programs in the country to offer this major. In the School of Nursing, the clinical research management major is in its first year of operation and has the second largest enrollment of any program in the school. In the last six months we had 87 non-nurses requesting entry into our program. Evaluation data will include quality of students, student performance, credentialing exam pass rate, and employment positions. We will conduct market analysis and financial modeling to determine the feasibility of admitting non-nurses to programs in the School of Nursing. Strategies to reach these goals are fully articulated in the body of the strategic plan.

Critical to the success of this goal is additional space for the second degree bachelor’s program and initial start up funds for the program.

**Ongoing Goals.** We will continue to implement strategies that meet ongoing goals that hold high value for our School. These include collaboration with community partners to improve the health of the community, diversity of faculty and students, innovative high quality master’s programs, interdisciplinary approaches to education, exploration of international programs and partners, and philanthropic support for the School.

V. Financials

Given its size and limited resources, the School of Nursing has been a good fiscal steward. In anticipation of meeting operating costs in years when financial projections are not achieved and financing a new building in the future, the reserve fund has been carefully built. It is however, still small.

**Doctoral Program**

A small amount of university funding for the doctoral program ($250,000 per year for four years) has been set aside and will off set most start-up initial costs of that program. In later years, the doctoral program will be subsidized by master’s program revenues and research grants revenues that support program faculty.

**Faculty Research**

We are requesting one time start up central funding to renovate space for faculty research. We recently acquired 1750 square feet of space in the sub-basement of Baker House, Orange Zone. This space, which requires extensive renovation, will house the Exploratory Research Center on Trajectories of Aging and Care. The exploratory center brings together faculty from different disciplines to study the influence of biopsychosocial and environmental factors on patterns of health and care in later life as a basis for improving the efficacy of interventions to prevent disease or declines in function, promote recovery from illness and restoration of function, ease dying and help older adults attain or maintain a high
quality of life. The Center strengthens our relationship with other Duke Centers and Institutes as well as our planning for a doctoral program.

- We are requesting $300,000 for renovation of this research space. The School of Nursing will assume the operating costs of the space annually.

Center for Distance Learning:

Start up costs for the Center for Distance Based Learning have been partially subsidized by grants (Robert Wood Johnson and The Duke Endowment) which supported initial development of our online platform. Additional start up costs are small and will be borne by the School. We do not however, have space for the Center.

- We are requesting additional space (9 offices) in Hanes House for the Center for Distance Learning. Costs will be determined once office space has been identified.

Second degree Bachelors in Nursing

A planning and recruitment year is needed for this program. Six new faculty (four full time and two part time) and support personnel will be hired during the first year. The first year deficit is projected at $861,323. The School of Nursing will subsidize half of this expense from its reserve fund. In addition, new space is needed for the program.

- We are requesting $432,000 as one time start-up costs for the second degree bachelors program and the following space requirements: 10 offices, 2 classrooms, and 4 student study rooms.

Masters of Health Science

Initial start up costs for the MHS are small and will borne by the School of Nursing from the reserve fund. The program will be self-sufficient in subsequent years.