

Chapter 2 – Challenges and Opportunities of the Current Planning Environment

Duke must operate within a set of challenges common to all universities and must forge its own unique path through them, taking advantage of our own particular ambitions and institutional strengths. These common environmental challenges and opportunities include: increased demand for public trust and accountability; increased globalization of research and education; rising costs of education and financial aid; changing patterns in federal research funding; keener competition for faculty, students, and financial resources; changing definitions and methods of teaching and learning; rapidly changing means of information access and learning spaces; renewed call for ethical reflection and commitment; and heightened expectations by undergraduates and their families for personal services and co-curricular programs. Following each challenge and opportunity described below are principles that help guide our planning and inform the specific strategic initiatives that follow.

Increased demand for public trust and accountability

The United States' leading research universities have set the standard of quality for world-wide higher education. They are distinctive in their scope, scale, governance, and financial resources and in their intertwined, reinforcing missions of education for undergraduates, advanced training for graduate and professional students, discovery and dissemination of new knowledge, and active service to society. In virtually all public opinion polls today, universities are consistently ranked among the most respected institutions. Elements within our society, however, also question whether we are doing our jobs well enough. Indeed, the public sector is demanding more from our graduates to address the problems facing the world and is pressing government to demand increased accountability. And the public – including those who will possibly send their children to our institutions – want assurances that the quality we provide in terms of research and education is worthy of the esteem we are accorded, the costs that we carry, and the prices that we charge. As a result, institutions of higher education must take increasingly proactive steps to strengthen public confidence in our value, purpose, and societal benefit. Indeed, in the current political climate of growing restrictions on all forms of discretionary funding, research universities cannot continue to succeed in either defending the autonomy of our enterprise or maintaining the funding of research projects, unless we articulate more clearly our real value and the return on society's investment.

- We reaffirm our commitment to the high standards and integrity that underscore basic research activities leading to new knowledge.
- We acknowledge our obligation to apply the knowledge we produce to help address societal problems.
- We recognize that a critical task for universities is to foster understanding in the wider public of what universities do and the role they play in society.
- We recognize the responsibility for universities to foster constructive dialogue, thereby providing a model to the broader society of a place that affirms the rights of, and is welcoming to, all and all opinions.

Increased globalization of research and education

Because of increasing globalization, the United States' educational and research missions are intimately tied to that of other countries. Modern communications connect scholars instantaneously and in real-time across borders, nations, and the globe, making intellectual capital an ever more worldwide commodity. Universities are increasingly seeking to find means to connect and collaborate with talent around the world; indeed, we can hardly consider what science and technology in the United States would have looked like in the last century without the steady in-mixing of foreign-born and foreign-trained scholars. The current explosive growth in technological research at academic institutions in countries such as China and India challenges our national preeminence in these areas and our ability to continue to attract students from these countries. Positioning ourselves as a desirable place for foreign students is a critical task made more difficult by restrictive policies following 9/11 and by heightened efforts of foreign countries to develop their own world-class educational institutions.

- We recognize the need to open the minds of U.S.-born students more broadly to the global world they will inhabit.
- We recognize the need to develop and nurture mutually beneficial partnerships throughout the world.
- We affirm the need to draw international talent so that we can attract the best faculty, researchers, and students to Duke.

Rising cost of education and financial aid

As the great source of inward enrichment and the great enabler of worldly success, education is arguably the premier privilege and asset our world has to offer. Concerns over costs and whether access to education is afforded only to families that have the ability to pay, raise the specter of federal intervention or possible tuition regulation. Universities have faced increased pressures to examine more closely what the major drivers are for their rising costs and to articulate more clearly the value of the education they provide, how their tuition and financial aid policies are determined, and what the impact of those policies is on the distribution of opportunity in our society.

- We recognize the need to exercise careful stewardship over our resources, continually control administrative costs, and ensure that new investments bring genuine benefits to our students and to society.
- We affirm our commitment to affordability through an effective financial aid program based on the principles of need-blind admissions and meeting full demonstrated need for undergraduates. This requires significantly increasing the endowment for financial aid support.

Changing patterns in federal research funding

Federal funding for higher education is changing in significant and often unpredictable ways. For example, over the past decade funding has declined for the humanities, the arts, and the interpretive social sciences; at the same time, funding for the basic medical sciences (and departments such as biology, biomedical and electrical engineering, chemistry, computer science, mathematics, physics, and psychology that pursue the fundamental research on which medical science is based) has grown dramatically, largely due to the doubling of the budget of the National Institutes of Health. This growth has led to an expansion in programs of biomedical research and an increase in personnel supported on soft money – changes which may, or may not, be sustainable long-term. In addition, the current earmarking of funds for specific multi-disciplinary initiatives indicate that federal agencies, the staples of academic funding, will have fewer funds to distribute to top individual research scientists. These trends have significant implications for the role of research within the academy, the distribution of faculty efforts between teaching and research, and the role of cross-disciplinary and interdisciplinary collaborations as models for scientific inquiry. These funding patterns also dramatically impact institutional budgets and indirect cost recoveries. As a consequence, faculty find it harder – and have to expend more effort – to acquire funding for pure research upon which major advances might be made, and universities increasingly struggle to manage and model unpredictable short- and long-term budgets. In spite of these obstacles, the funding climate will nevertheless support the kind of collaborative work that leads to knowledge in the service of society.

- We recognize the need to provide our researchers the facilities and other infrastructure support they need to succeed, to foster research collaboration, and to create an environment that encourages risk-taking and innovation.
- We reaffirm our commitment to foster and support interdisciplinary and multi-disciplinary initiatives that will be attractive to external funding.

Keener competition for faculty, students, and financial resources

Top-tier research universities in the United States increasingly compete for faculty, students, and financial resources. Faculty of national prominence – those particularly sought by leading research universities – often find themselves in a seller's market, and universities strain to woo and retain outstanding candidates, particularly faculty in specialized fields and minority faculty. Top-tier universities expend tremendous effort trying to recruit faculty from the same small pool, often pursuing the same candidates. Moreover, raiding of one another's faculty has become commonplace, with institutions often deriving prestige from their ability to attract key faculty away from peers. This increased competition for faculty serves to drive up salary, generate higher startup costs, and create greater pressures to construct new facilities or renovate old facilities on an ever-accelerating time scale. It also can lead to neglect of the faculty who make enormous contributions to the quality of the university but who are unable or unwilling to move, thereby creating fissures which endanger faculty morale. In addition to contending for faculty, top-tier schools intensely vie for the same top students in the undergraduate

and graduate applicant pools and promote competing, and often parallel, programs. This competition, however, does not take place on a level playing field, because institutions with greater endowments are significantly advantaged in their ability to attract the best faculty and students and to develop signature programs.

- We recognize the need to enhance our competitiveness for the best faculty.
- We affirm the need to develop and nurture innovation in fields and offer programs of distinction.
- We recognize the need to support existing faculty, creating ways for them to sustain their scholarly activities, move in new directions, and balance the multiple expectations of them.
- We acknowledge the need to continue our efforts to expand and matriculate the most selective undergraduate, graduate, and professional students through distinctive programs.

Changing definitions and methods of teaching and learning

Undergraduate education has experienced an intensive period of transition and renewal, particularly at research universities. This period has been characterized by both curricular and pedagogical change stimulated by, and reflected in, a series of national organizations, conferences, and publications, such as the 1998 Boyer Commission's *Reinventing Undergraduate Education: A Blueprint for America's Research Universities*, intent on altering the shape of the undergraduate curriculum. As a result, pressure has been brought to bear to more closely integrate teaching and research, rather than hold each as separate and competing. Significant curricular reform has been undertaken to emphasize general education, blur the dichotomy between general education and the major, foster coherency as well as depth and breadth, sequence learning across the curriculum, cultivate interdisciplinarity and fluency across the domains of knowledge, and promote civic responsibility. Moreover, no longer is the model for teaching and learning the passive receipt of transmitted knowledge, best stereotyped by a professor lecturing at a podium. Rather, students increasingly are engaging as partners in the inquiry enterprise, an enterprise characterized by greater active, student-centered learning, problem-based and experiential learning, and learning guided by mentoring.

- We affirm the need for our schools to continue to renew their curricula, both individually and in partnership.
- We recognize the need to provide opportunities for faculty to reinvigorate their teaching.
- We believe in promoting innovation in teaching and in how students learn.

Rapidly changing means of information access and learning spaces

The accelerating pace of technological change is having an impact on all facets of universities, altering and influencing how students, faculty, and staff interact with the university, with information, and each other. Savvy and visually-oriented students, conversant with technology, expect to interact with peers and professors 24/7 and to have

immediate access to digital resources, instructional technology, and interactive learning. Moreover, online information, sophisticated search engines, digital libraries, and streaming video are transforming where and when students work and what constitutes a classroom. Indeed, learning that was once closely held in designated spaces now becomes available from any location where there is computer access. This ease of access to information, coupled with students' facility with technology and their ability to multitask, puts increasing pressures on faculty and universities to rethink what learning spaces look like and whether current lecture halls and associated approaches to teaching are still as effective. The explosion of information and the complexities of access to it also heighten the importance of teaching not only how to get information but how to evaluate its worth and how to use it appropriately. This only underscores the importance of the roles of faculty and librarians as guides to knowledge-seeking and critical analysis for research in an information-saturated era.

- We acknowledge the importance of developing new classrooms, laboratories, and workspaces to accommodate changes in fields and pedagogical approaches.
- We recognize the need to provide the infrastructure and training so that faculty and students can learn and easily take advantage of new instructional technologies.

Renewed call for ethical reflection and commitment

One of the most pressing challenges of contemporary culture in the United States is to develop understanding about the meaning of ethics and its application to individual and collective behavior. Universities have the responsibility to ask, and to help our students ask, what knowledge is good for and what values are worth pursuing. These questions have taken on an even greater urgency as technology and globalization complicate the ethical environment, magnify the effects of human choice, and raise perennial ethical challenges with renewed force. Universities aspire to shape an institutional culture in which students, faculty, and staff reflect critically on assumptions, deliberate together about ethical issues, and experience what it means to make meaningful ethical commitments. Universities aim to prepare students for lives of personal integrity and engaged citizenship by nurturing reflective judgment and discernment, compassion and courage, and a concern for truth, justice, order, and freedom. The formation of such capacities requires the most open and extensive exposure to the range of ideas and experiences, the mentoring and the embedding of ethical teaching, learning, scholarship, and experiences across the curriculum and in the everyday policies and practices of campus life. It is our firm conviction that this lived aspect of ethics education during the college years is a crucial element of preparation for leading an ethical life.

- We affirm the importance of infusing ethical inquiry and service-learning in the undergraduate, graduate, and professional curriculum.
- We foster a highly active and intellectual culture built around a broad diversity of opinion and widespread opportunities for debate.
- We believe in advancing scholarship that supports and deepens ethical reflection and understanding within and across disciplines.

- We strive to foster personal integrity and accountability.

Heightened expectations by undergraduates and their families for personal services and co-curricular programs

Parents and students, particularly those at private, top-tier universities, have heightened expectations for institutions not only to provide learning in the classroom but also to develop the “whole” individual and to offer an expanding array of personal services responsive to students’ interests, aspirations, and development. The dynamics and relationships between students and parents and the university have altered and become more complicated. “Helicopter parents” and Generation X and Y students have quite different expectations for university services from those of previous generations. Moreover, these services – as well as the baccalaureate degree itself – are all too often viewed as consumer commodities necessary for advancement to professional schools and/or top paying jobs.

With the expectation that our students will become leaders in the future world comes greater need to reinforce learning opportunities for teamwork and ethical and leadership development through residential and co-curricular programming, often linked to what happens in the classroom. With the increasing diversity of our student bodies comes greater need to support cultural and affinity groups and to provide second language services, inter-group education, and funding for student programming. This heightened demand to provide student services places growing pressures on the infrastructure of academic and student affairs.

- We recognize the need to give coherence to the co-curricular undergraduate experience.
- We affirm the need to provide academic and personal support services so that all students can be successful.

As the above critical factors clearly underscore, the environment in which universities plan and the landscape we have to traverse is constantly shifting, filled with challenges that are evolving and not fixed in time. No one university alone can fully meet all these challenges, each has to map and cut its own unique path through them. Our ability to achieve our vision for Duke’s future will be influenced by our acuity in recognizing these evolving trends and by our agility to address them, taking advantage of our own institutional strengths and enduring themes.