

Recommendations for Enhancement of NCSU's Commitment to Serving the People of North Carolina

"I see the outreach component of the university as the single most important growth area for land-grant institutions in the years ahead."

Graham Spainer, President,
Penn State University

"[The new model for higher education] involves extending and linking universities with business, with community social and state and federal agencies and with volunteer organizations in order to deal with environmental and other social challenges." C. Peter McGrath, President, NASULGC

The months of preparation for a paper to be presented during Chancellor Fox's Installation Symposium last April, and a talk in a similar symposium during President Spangler's Inauguration in 1986 -- "*Science, Technology, and North Carolina's Economic Future*" -- provided opportunity to learn in depth about **the current state of the State of North Carolina and the potential of North Carolina State University to fulfill its great promise as a "Model Research I University in the Land-Grant Tradition."**

The 1997 report of the North Carolina Progress Board provided one of the most important single background documents that defines the challenges that lie ahead for our State, for NCSU, and for the whole UNC System.

An additional perspective on our state's and NCSU's "Preferable Future" as Alvin Toffler would define it, was provided by the vision NCSU Distinguished Scholar, Thomas Malone, presented to the Watauga Seminar in 1995. In Malone's considered judgment, the State of North Carolina and its University System should be regarded as a "Microcosm and Potential Model for the World," and NC State University should undertake a "Proof-of-Concept Demonstration" for a "Knowledge Based Society."

The enormity of the economic, environmental, social, and public-health damage Hurricanes Dennis and Floyd inflicted on eastern North Carolina, and the negative reaction of the state Legislature to the proposed bond issue to meet infrastructure and modernization needs within the UNC System, have added to the sense of urgency with which many of us have been thinking hard about **the need for greatly enhanced engagement by NCSU and our sister institutions with the needs of the people of our state.**

Thus, with Chancellor Fox's encouragement from last May onward, I began a series of interviews with various campus leaders including deans and associate deans for outreach and extension in all 10 colleges and schools and the NCSU Director of Libraries. My purpose in these interviews was three-fold:

- 1) To share some of the lessons both the North Carolina Progress Board and I have learned in recent years about the current state of the State of North Carolina,
- 2) To learn more about outreach and extension activities as well as leadership and funding mechanisms in each college and the University as a whole, and
- 3) To discuss problems and opportunities for improvement in NCSU's performance in meeting critical needs and both economic and social enhancement opportunities for North Carolina that are within the domains of NCSU's special competence.

Following these interviews, five general recommendations were formulated and shared with the NCSU Extension Operations Council (EOC), the NCSU University Standing Committee on Outreach and Extension (USCOE), many of the 50+ campus leaders with whom I consulted, and with Provost Kermit Hall -- in each case seeking responses about whether these persons and groups agreed, disagreed, or had further suggestions about these recommendations. Responses have been very encouragingly positive with a few suggestions for improvement, which have been incorporated in the following updated draft that is now being submitted for consideration by Chancellor Fox and her executive group of advisors.

1) **NCSU needs a visionary, vigorous, and articulate full-time leader for campus-wide and state-wide engagement with the people of North Carolina.**

This proposed executive leader should be either a Vice Chancellor or a Vice-Provost

The leader's title should include such words as "outreach," "extension," and/or "engagement," but should clearly signify responsibility for working relationships between NCSU and **various external communities** and various aspects of **the quality of life in North Carolina society** (including the state's unique economic, educational, environmental, social, intellectual, cultural, and ethical qualities)

To be successful, the leader must have or develop:

- A new vision for outreach, extension and engagement of NCSU with North Carolina society
- Highly visible support from NCSU's Chancellor, Provost, and Board of Trustees and leaders in the University of North Carolina System
- Substantial financial, moral, academic, and political power both on campus and with a wide variety of external communities
- Both trust and mutual support from the Faculty Senate and the deans and associate deans in all colleges and schools at NCSU and a good working knowledge of the "compacts" developed recently by NCSU departments, schools, and other units
- Effective working relationships with the following organizations and other units on campus
 - NCSU's Cooperative Extension Service including both its on-campus and county-based leaders and staff
 - Other outreach and extension units in all 10 NCSU schools, colleges, and in the McKimmon Center
 - North Carolina Progress Board
 - Emerging Issues Forum
 - Engagement activities within the International Programs Office
 - Centennial Campus Taskforce
- Adequate staff for coordination of:
 - Existing university-based and college-based engagement activities,
 - Development and implementation of new college-based and university-based engagement initiatives,
 - Communication with various public and private, governmental and non-governmental entities about successes and shortcomings/opportunities in outreach and extension at NCSU

To be successful, the leader and his/her staff also must develop effective liaison and/or working relationships with the following institutions and organizations off campus:

- Leaders in the North Carolina General Assembly
- Philanthropic foundations with special interests in societal engagement programs and activities
- The major existing and newly emerging businesses and industries of our state
- The new Carolina Center for Public Service and the Institute of Government at UNC-CH
- Engagement activities in our other sister institutions of higher education and especially the Community Colleges of North Carolina
- Federal, state, county, municipal, regional, and non-governmental organizations; and
- Other public service and not-for-profit organizations in the state and region

2) NCSU needs dependable, stable, and long-term increases in financial support for outreach, extension, and engagement activities both at the university level and in all 10 colleges and schools.

If NCSU is to approach its full potential as a significant "agent of constructive change" in the lives of North Carolina's people, both the university as a whole, through the Centennial Campus, NCSU Libraries, and the McKimmon Center, and all 10 colleges and schools will need substantial increases in stable sources of support for long-term engagement with North Carolina society. Potential sources include philanthropic foundations, legislative appropriations, federal agency grants and cooperative agreements, and venture capital groups -- all of which may have matching-fund requirements.

In exploring opportunities for increases in long-term stable support, it probably is worthwhile to review and evaluate (**much more thoroughly than I have so far done below!**) the strengths and limitations of the great variety of modes of financial support and mechanisms for delivery of knowledge resources and engagement services now used in various outreach and extension units at NCSU:

- 1) "Cooperative Extension" mode -- mainly in CALS and CFR
 - Matching federal, state, and county appropriations provided for 5-year renewable purposes
 - Full-time or part-time support for "extension faculty" either on campus or at County Extension Offices in all 100 counties of the state
 - Services provided with or without user fees mainly to farmers, agribusiness interests, 4-H programs, and individual citizens and groups who request advisory services
- 2) "Manufacturing Extension Program" mode -- mainly in CE and CT
 - Matching federal and state appropriations provided for 3-year renewable purposes
 - Full-time or part-time support for "extension specialists" on campus or in regional centers
 - Services provided to specific industries, usually on at least a partial fee-for-service basis
- 3) "Industrial Extension" mode -- mainly in CE and CT
 - Funds and services provided almost entirely on a fee-for-service basis, usually for educational programs aimed at a specific aspect of operations in a given type of industry
- 4) "NC LIVE" (Libraries in Virtual Education) mode -- NCSU Libraries
 - The General Assembly provides nearly \$3 million per year for NCSU leadership of a collaborative outreach partnership by libraries throughout the state. The libraries include those in 7 of the 16 UNC System institutions, all 57 community colleges, and most of the county and city libraries in North Carolina. This partnership provides "on-line" access through the Internet for most of the published English-language knowledge resources of the world -- including a myriad of scholarly and scientific journals, newspapers, reference works, specialized collections of art work, oral histories, etc. Access is provided without charge to all residents of North Carolina and all graduate and undergraduate students in the community colleges and universities of the state. Most of these knowledge resources are outside the budget reach of the vast majority of these institutions.
- 5) "Humanities Extension/Publications" mode -- mainly in CHSS and CEP
 - Specific legislative appropriations to specific NCSU unit for a specific defined product --such as the 4th, 5th, 6th, and 7th grade textbooks titled "Living in Our World" -- "North Carolina," "The Americas," "Europe and Northern Asia," "Africa, Asia and Pacific Realm".
- 6) "University/Industry Cooperative" mode -- mainly in CFR, CE, and CT
 - Several specific industries join together with university faculty to do cooperative studies in a given area of science or technology. The industries provide funds to the university through annual membership fees which often are used to pay some fraction of salaries for participating faculty who work together with personnel from member industries on long-term programs or short-term projects of research and outreach and extension, or both.

- 7) "NCSU Centers, Institutes, and Laboratories (CIL)" mode -- in all schools and colleges at NCSU
 - Faculty in all schools and colleges at NCSU develop specialized units that emphasize specific research, technology development, and/or educational activities. At present, NCSU houses 55 UNC-System-approved and about a dozen other CILs. CILs usually are funded by a combination of NCSU, state, federal, industrial, foundation, and venture capital funds collectively totaling \$50 to 60 million per year. Examples include: CALS Integrated Pest Management Center, SD Community Development Group, CEP Literacy Systems Center, CFR Industry Cooperative Programs, PAMS State Climate Center, CT Nonwovens Cooperative Research, CVM Equine Research Center, NCSU Encore Center for Lifelong Enrichment, NC Sea Grant Program, and Center for CO₂ in Manufacturing. Most CILs focus on research or educational goals but include important engagement activities as well.
- 8) "Vet School Hospital" mode and/or "Center for Urban Affairs" mode -- mainly in CVM, the McKimmon Center, CE, CFR, and CEP
 - Specialized units of NCSU provide direct services to citizens or state-organization clients that request specialized services which are paid for mainly on a fee-for-service or contract basis
- 9) "Integrated Teaching/Research/Extension Case Study" mode -- mainly in CM, SD, and CEP
 - Individual and small groups of faculty and graduate or undergraduate students complete case study projects in cooperation with specific commercial, industrial, or municipal/county enterprises, sometimes on a fee-for service and other times on a non-fee basis
- 10) "Specific Outreach Grant" mode -- mainly in PAMS
 - NSF or other federal agencies provide short-term but renewable support for a specific outreach program such as PAMS's highly successful Science House program
- 11) "Keenan Institute" mode -- mainly in CE and PAMS
 - Philanthropic foundation or venture capital organizations provide endowment funds or seed money for general or specific innovative programs of research and industrial development
- 12) "Emerging Issues Forum" mode -- Gov. Hunt and NCSU Deans invite nationally prominent speakers to address major economic, educational, environmental, and social issues at annual public forum
- 13) "Center for Earth Observation" mode -- mainly in CFR, SD, CE, CEP, PAMS, and NCSU Libraries
 - NCSU faculty, governmental and private agencies, and NCSU libraries pool resources to develop a Geographic Information Data System for use in addressing regional planning and development issues for sustainable NC industries and communities. This System provides integrated maps of natural resource, environmental, social, economic, transportation, and demographic aspects of parts of NC. The maps are used by: federal, state, regional, county, and municipal government officials; industrial, residential, environmental, and recreational development planners; interested citizens; and K-16 students seeking GIS information for a wide variety of decision making and case study purposes. Current projects include maps of flood prone areas within counties, surveys of drinking water quality, choosing sites for industry and recreational developments, and habitat analyses for wildlife species.
- 14) "Centennial Campus Pre-College Educational Cluster" mode -- Developed by the Centennial Campus Taskforce in consultation with CEP, CALS, CE, CT, PAMS, Wake County Public School System and Economic Development Commission, NC Community College System, and several industries of the Research Triangle area. This "Educational Cluster" will include:
 - 1) A "Centennial Campus Magnet Middle School" and its associated "Partners-in-Schools Research and Development Center,"
 - 2) A NASA-based "Challenger Learning Center" for middle school students who will develop their imaginations by planning imaginary explorations of space and the Universe, and
 - 3) A "High-Technology Academy" aimed at maximizing educational attainment by students who (at least initially) prefer to pursue technology-based educational and vocational opportunities rather than "go to college" in the usual sense of that term.

3) NCSU needs a mutually agreed upon re-definition of "scholarship" and a reward system that proactively encourages innovative faculty and student involvement in programs to enhance the quality of life in our society.

Progress toward fulfilling this need is already underway at the direction of Chancellor Fox and through a series of general principles recommended by Provost Kermit Hall. Associate Provost Frank Abrams has been given the responsibility to work with the Academic Affairs and Personnel Policies Committees of the Faculty Senate in a thorough review, update, and revision of promotion and tenure criteria and guiding principles for NCSU.

Copies of Oregon State University's thoroughly researched principles which they titled "*Scholarship Unbound*" and the associated "*Promotion and Tenure Guidelines*" which were recently adopted unanimously by the faculty and administration of OSU have been distributed by Frank Abrams to all members of these two Faculty Senate Committees.

Thus, a thorough redefinition of scholarship in all three realms of faculty performance and responsibility is now underway at NCSU. Hopefully, this process will lead NCSU faculty and administration to a similarly strong consensus view of "parity" among all forms of scholarship. Such effort is absolutely essential at NCSU -- so that the pervasive and long-standing perception of "third class citizenship" among existing outreach and extension faculty can be dispelled, and more faculty can be attracted to- and rewarded for- making an important difference in the lives of the people of North Carolina, the southern region, the nation, or the world.

4) NCSU needs an "executive taskforce" or "upper-level strategy group" that is advisory to the Vice Chancellor or Vice Provost for outreach and extension activities. Its primary purpose should be to identify (and possibly also help implement) a limited number of primary goals and strategies for university-wide engagement of NCSU with the people of North Carolina.

This group might resemble the present Centennial Campus Taskforce. But it should be cognizant of outreach, extension, and engagement opportunities for **all parts of NCSU** and receptive to "**bottom-up**" as well as "**top down**" suggestions for engagement initiatives. Suggestions should come from individual faculty members, small groups of faculty and graduate students, as well as from the senior leadership of the institution. The activities and deliberations of this group should be developed in part through interactions with the deans of various colleges and schools as well as the executive leadership group within the university administration.

5) NCSU's Extension Operations Council (EOC) and NCSU's University Standing Committee on Outreach and Extension (USCOE) should work closely with the proposed Vice Chancellor or Vice Provost, the North Carolina Progress Board, the Emerging Issues Forum, and the International Programs Office. Both the EOC and the USCOE should strive to improve the infrastructure for Extension and Engagement activities at NCSU and to increase cooperation with other institutions and organizations in North Carolina, the southern region, the nation, and abroad.

Having the Emerging Issues Forum, and now also the North Carolina Progress Board, headquartered on our campus offers NCSU unique opportunities for statewide leadership in identifying: 1) critical economic, social, educational, environmental, and other needs within the state of North Carolina, and 2) quality-of-life enhancement opportunities for North Carolina society.

NCSU has a remarkably diverse array of ongoing outreach and extension activities in each of its 10 colleges and schools and the University as a whole -- especially through the Centennial Campus Taskforce, NCSU Libraries, and the McKimmon Center. Some of these programs are highly successful. Others are doing reasonably well. Still others need to be reorganized, revitalized, or replaced. They all need very much more effective leadership as indicated in Recommendation 1 (above).

The Extension Operations Council is currently updating a very forward looking "white paper" titled "*A Future View of Extension and Outreach at N C State University.*" Also helpful in the short run would be a series of "success stories" illustrating how different funding and delivery mechanisms have led to important beneficial outcomes for specific external constituencies. Such "success stories" could lead to more widely shared understanding of the variety of funding, liaison, and delivery mechanisms by which these activities are now functioning and how they could be better targeted, organized, coordinated, and funded in the future. In the long run, and especially in connection with the search for the proposed Vice Chancellor or Vice Provost, a comprehensive inventory and assessment of the effectiveness of existing outreach and extension activities would be extraordinarily helpful.

Infrastructure-improvement efforts by the EOC and the USCOE should continue to be concentrated primarily on improving the extent and effectiveness of cooperation in engagement activities among NCSU's 10 colleges and schools and the university as a whole. Attention also should be given, however, to enhancing NCSU's capacity for collaborative engagement activities together with:

- 1) The newly formed Carolina Center for Public Service and the Institute of Government at UNC-CH,
- 2) Our sister land-grant university, North Carolina Agricultural and Technical University in Greensboro,
- 3) The 57 Community Colleges of North Carolina, and
- 4) Other public and private universities in our state and region.

Increased collaboration, both internally and externally, will greatly enhance the capacity of NCSU to ensure the success of the North Carolina Progress Board, increase our institutional responsiveness to issues identified in our NCSU Emerging Issues Forums, and add to our capacity for institutional learning from faculty and student participation in NCSU's International Programs.