

**Information and Communication Technology at the University of North Carolina at
Chapel Hill**

**A Report Submitted to the Faculty Council by the
Faculty Information Technology Advisory Committee
(FITAC)**

April 20, 2001

Executive Summary

Advances in Information and Communication Technology (IT) are transforming society and education. IT, when used appropriately, is facilitating the creation, management, and distribution of knowledge and enabling teaching methodologies in positive ways. However, many concerns accompany IT advances, including questions about the effects of IT on personal relations and on knowledge and learning. Judicious integration of IT into the University mission will require informed strategic planning.

By offering this report, FITAC seeks to ensure faculty representation and to encourage strong leadership in the strategic planning process. Understanding and planning for IT integration demands leadership at all levels of the University. A broad view of key IT integration issues and specific recommendations for short-term and long-term actions are also required. This report presents an overview and offers recommendations regarding five key concerns:

- Strategic leadership, planning and coordination is needed at the levels of central administration, academic units, and Information Technology and Information Services (ITIS). An IT Strategic Planning Council should be formed to facilitate coordination and develop a strategic plan for IT integration at the University.
- Faculty incentives and recognition should be expanded to consider expertise with IT as a measure of academic excellence. Faculty interests relating to IT should be represented on key committees, including the Chancellor's Committee on Faculty Appointment, Promotion and Tenure. Initiatives should recognize innovation and expertise with IT, including faculty leaves, grant programs, and teaching excellence awards.
- Faculty professional development must be provided to ensure the diffusion of IT into teaching. We recommend ongoing support for IT professional development workshops, adequate teaching and support facilities, and an intellectual climate that will promote faculty proficiency and creativity with IT.
- Infrastructure and support needs must be addressed in sustainable ways that include faculty input. Access to IT resources must be available for all members of the UNC Chapel Hill community. Along with infrastructure investments, resources must be devoted to support services.
- Funding will be needed for IT initiatives. An IT component should be included in the capital campaign. Resources should promote public and private grant applications and when possible funds should be sought from UNC General Administration and the state.

Both a broad vision and specific recommendations for integrating IT into the many missions of UNC Chapel Hill must evolve in accord with faculty concerns. We see this report, therefore, as initiating a dialog on how we should engage IT in our teaching and scholarship. We also recognize, however, that the University has an obligation to provide timely leadership in addressing the challenges and opportunities raised by IT. To this end, we offer four resolutions

for adoption by the Faculty Council: a resolution recommending representation of IT concerns on key committees and the formation of an IT Strategic Planning Council; a resolution concerning the capital campaign; a resolution concerning faculty incentives and rewards for IT innovation, and a resolution concerning grant programs for IT professional development.

Introduction

Advances in Information and Communication Technology (IT) are having a profound impact on commerce, communication, personal relations, and culture. Along with these societal changes, IT is also affecting education, challenging its culture and how teaching and learning are conducted. Many believe that IT has the potential to transform institutions of higher learning in positive ways by providing opportunities to create, manage, and share knowledge and by enabling substantive, dynamic methods of teaching and learning. These IT advances, however, are accompanied by crucial questions and concerns. The impact of IT advances on human relations, the construction of knowledge, teaching and learning, and the educational mission of universities are examples of the challenges that institutions of higher learning must face as they operate in the context of the information age.

In light of these ongoing and impending IT-based transformations, it is clear that The University of North Carolina at Chapel Hill (referred to as the University) must consciously confront advances in IT. Further, as one of the world's first tier research universities, this institution has an obligation to provide leadership by addressing the concerns and capitalizing on the opportunities afforded by the integration of IT into education. Only with deliberate efforts can we understand and enjoy the full benefit of IT advances while ensuring that what we value most in our scholarly and educational enterprises is preserved and carried forward.

FITAC has taken an initial step toward creating a vision of how the University can best integrate IT into its own mission and model effective IT planning as it enters into an unprecedented era of challenges and opportunities. The committee advances this vision in two concerted ways. First, we offer a broad view relating to IT integration at the University. Second, we recommend specific actions to be taken by the Faculty Council and other members of the UNC community. We understand that both a larger vision and specific recommendations for enacting that vision must develop in accord with faculty concerns and ongoing advancements in IT. This statement is provided, therefore, as a living document detailing current concerns and articulating a number of recommendations. We conclude with specific recommendations with the understanding that additional actions will be needed as the University engages with continuing IT advances. An understanding of the potential impacts of IT on the University must begin by considering the following points relating to IT:

- IT is transforming society along a continuum from how students learn, to how business is conducted, to how communities are organized and maintained. Higher education has a responsibility to contribute to the shaping of that transformation.
- Expertise with IT will increasingly contribute to the academic and professional success of higher education in general and of faculty and students in particular.
- The ever-increasing volume of knowledge necessitates the adoption of IT to manage, disseminate, and create new knowledge.

- IT transformations are challenging and expanding definitions of knowledge and literacy and changing the educational expectations of students and society.
- The infrastructure advances made by the Vice Chancellor for Information Technology and Information Services, exemplified by the Carolina Computer Initiative (CCI), are creating a foundation upon which the University can integrate IT into its teaching and learning practices.
- The University has an opportunity to enhance multiple modes of teaching and learning (e.g., presentational, hands-on, student-centered, active, life-long) through the use of IT.
- The University has a unique opportunity to develop a plan to pinpoint and promote appropriate IT adoption throughout its cultures of teaching, research, and service.

Because IT innovation is clearly transforming knowledge and society, the University's mission and underlying strategic objectives must be refined to accommodate IT and, most importantly, must be refined to recognize faculty adoption and creative uses of technology in scholarly, teaching, and service venues. The goal of this document is to promote the creation of policies and practices that will enable the dissemination of IT use and innovation at the University and the acceptance of IT's contribution to education and scholarly endeavors.

In making these recommendations, we recognize that The University of North Carolina General Administration is actively developing plans for the integration of IT into system universities' work at all levels. We also recognize the concerns of the University's faculty who believe strongly that IT will affect student learning positively and that the University should implement a coherent IT integration plan (FITAC 2000 Faculty Information Technology Survey). In the context of unprecedented societal and intellectual evolutions driven by IT, system-wide efforts to develop IT strategic plans, and faculty concerns, it is time for the University to act decisively on the IT recommendations for the UNC system put forth by President Broad:

Each campus will have to evaluate the merits of the IT Strategy recommendations in light of its own mission, objectives, priorities and culture. The IT Strategy process has identified common needs and has outlined broad strategic approaches, but it will be up to the campuses ultimately to determine how these strategies are translated into solutions.

Regardless of what form these solutions take, they all must support this basic objective: To make sure our students, faculty, and staff have up-to-date information technology tools to help them think critically, work cooperatively, reason analytically, communicate effectively and perform well—on campus and in the larger world. (President Broad's Column for ITS Summary Report/Newsletter, emphasis added)

In developing this action plan for IT at the University, FITAC has focused on faculty, the primary key to inculcating IT into the teaching and learning enterprise. We do this acknowledging that successful integration of IT into the University raises issues and challenges for all members of our community which will need to be addressed as a comprehensive University plan is developed. To begin the creation of such a pan-University plan, this report covers the following topics: 1) strategic leadership and planning; 2) faculty incentives and recognition; 3) faculty professional development; 4) infrastructure and support; 5) funding; and 6) initial action recommendations to the Faculty Council.

Section I: Strategic Leadership and Planning

Responding to the technological forces that confront our society and higher education will require substantive cultural change. For this change to be successful, visionary, proactive leadership is required. Leaders have the responsibility for defining a vision for IT and strategic plans for the facilitative role IT will play in advancing our scholarly and educational enterprises. FITAC recognizes that planning for the integration of IT into the University will challenge existing beliefs and practices. However, it believes that at the same time IT proffers new ways of thinking, learning, and teaching that will enable us to preserve those characteristics that we find essential in our teaching and research, while at the same time meeting the demands of a technology/information-based society.

Collective leadership at all levels in the University is required to provide support for change. In this regard, FITAC recommends strongly that the University address the leadership issue through a strategic planning initiative carried out at three levels—Central Administration, academic units, and Information Technology and Information Services (ITIS). In considering these recommendations, FITAC stresses the importance of coordination overseen by a committee structure that will maximize quality outcomes with the limited resources the institution will have to achieve IT adoption. FITAC acknowledges the existing committees that are able to assist in providing leadership, including The Academic Planning Committee, The Educational Policy Committee, The Committee on Copyright and Intellectual Property, The Classroom Design and Advisory Committee, and The Distance Education Steering Committee. However, we also believe that additional leadership actions are needed in order for these groups to work together to address IT transformation most successfully. To this end, the following recommendations are put forth.

Recommendations

Central Administration: The following steps should be taken to achieve IT adoption throughout the University.

- *Leadership:* Proactive, strong leadership is paramount to developing and implementing a compelling, visionary institutional strategic plan for IT. The administration needs to publicly state the importance of IT to the University's academic prosperity at all levels.
- *University Mission and Strategic Plan:* The administration must embark upon a planning process that embraces IT in its mission and strategic plan. Such an effort will not only provide a leadership vision for IT but will also lead the University toward alignment with evolving SACS goals for IT.
- *Faculty Input:* Under direction from Faculty Council, FITAC should host forums for discussing issues related to IT integration at UNC Chapel Hill. Sessions should be attended by key committee and administrative leaders and consider topics including the role of IT in the University mission, the professional development needs of faculty, and faculty incentives and rewards for IT innovation. Discussions should inform decision making at all levels of IT strategic planning.
- *IT Strategic Planning Council:* The University should establish a high level administrative IT Council along the lines of the late Chancellor Hooker's Technology Coordinating Council to develop a strategic plan. The group should include in addition to key administrators (e.g., Provost and Deans) representation from appropriate

organizations and committees (e.g., FITAC, The Academic Planning Committee, campus libraries) and faculty innovators in IT-supported teaching and research. The latter constituency is critical for an effective plan because these are the individuals implementing the vision that needs to be articulated.

- *Committee Coordination:* The Academic Planning Committee and other appropriate University committees should integrate strategic IT considerations into their planning. Representation from faculty familiar with issues and concerns related to IT integration should be ensured on the Academic Planning Committee. Members of additional committees concerned with IT (e.g. FITAC, The Distance Education Steering Committee) should also be included on the Academic Planning Committee.
- *Academic Unit Strategic Planning:* IT strategic planning is necessary at all levels of the University. Therefore, academic units should be charged with developing IT plans and specific goals for integrating IT into their teaching and learning and identifying actions for achieving those goals.
- *Timeline, Review, and Assessment:* To be of optimal benefit, the planning process must proceed quickly. Thus the proposed IT Strategic Planning Council should complete a pan-University IT strategic plan by the end of the 2001-2002 academic year. Because of the rapid evolution of IT technology and IT-supported teaching and learning, the administration will need to periodically and comprehensively review and refine the IT strategic plan, e.g., every three years. The process should include analysis of assessment data that must be gathered on the impact of IT on teaching and learning enterprises, particularly for initiatives like CCI.
- *Funding:* Substantive administrative funding decisions are needed to effect meaningful IT adoption by the University. Thus, the planning process needs to include funding strategies that would involve potential new resources, and importantly, the reallocation of extant resources with possible restructuring of programs.

Academic Units: For innovations such as IT to become part of a learning and research culture reform must involve bottom-up in addition to top-down strategic planning. Therefore, FITAC believes academic units must develop strategic plans and that these must be responsive and complementary to a clearly articulated institutional plan. Components of a unit's plan should include the following:

- *Pan-University goals:* A unit's unique plan must accommodate pan-University goals such as faculty incentives and rewards, faculty professional development, infrastructure and support, and funding (covered in the following Sections).
- *Leadership:* Deans, Department Chairs, etc. of academic units need to proactively promote and model the use of IT in teaching and learning.
- *Multi-year Plan and Funding:* Units should develop long-term plans for the utilization of IT which include strategies to use existing personnel and financial resources for implementation as well as to identify additional resources that would be needed. Collaborative initiatives between units could be an effective means of resource pooling to increase operational efficiency.
- *Teaching and Learning Goals:* Academic unit plans need to address central teaching goals and methods, including objectives and priorities for face-to-face, technology-assisted, and online education. While the relationship between IT and learning is

complex, plans should begin with desired learning outcomes, then consider how best to implement IT into curricula to achieve those outcomes.

Information Technology and Information Services: The nexus for the integration of IT into teaching and learning at the University is Information Technology and Information Services (ITIS), which is presented in detail at infrastructure levels later in this report (see Section IV). Therefore, this section focuses on recommendations that will strengthen collaboration between ITIS and academic units and faculty.

- *Strategic Planning:* The development of plans for infrastructure and services needs to be coordinated closely with strategic planning by Central Administration and academic units. Currently, ITIS planning is limited by the absence of coordination with administrative and academic unit planning. Such coordinated planning is critical for cost-effective, high quality dissemination of IT at both centralized and decentralized infrastructure and service levels.
- *Faculty Involvement:* Key committees involving policy on and funding of computing infrastructure and support services should include faculty representation. Historically, this has occurred episodically and with input from only a few faculty. Broader faculty input would help to ensure that future initiatives like CCI are implemented from a teaching and learning perspective as well as from administration and technology perspectives.

Section II: Faculty Incentives and Recognition

IT has a rapidly evolving and increasingly critical role in teaching and scholarship at the University. Because the nature of IT's impact on higher education over time is certain to grow, incentives for adoption and recognition of accomplishments need to be addressed dynamically as technology evolves. For faculty, IT encompasses a range of innovative tools that allow—and, increasingly, will even demand—new modes of teaching and scholarly endeavor. Hence, the measure of academic excellence needs to be expanded to include the creative use of IT. The role IT must play in the University's learning culture should mirror its role in society beyond academe. In both the educational setting and the work place, an understanding of IT tools and practices and the ability to innovate and apply IT critically to manage, share, and create knowledge are in ever-increasing demand. Therefore, the University must provide its students these skills and strengthen their ability to innovate with IT. In this regard, the faculty who use IT and teach its use should be particularly valued because of the benefit they provide to learners, and hence society at large. However, to promote adoption of IT beyond the innovators, the University must provide faculty incentives for creative teaching using IT; define the relationship of IT to scholarly endeavors, and reward faculty who excel in this area. Only then will adoption across the University's culture take place, with students being the beneficiaries. The following recommendations form a framework for such a plan.

Recommendations

Administration Leadership: The University administration in its strategic planning needs to make IT innovation by faculty a high priority. Initiatives must be developed to recognize faculty who use IT and to provide them with resources to excel at IT utilization in teaching and learning.

Faculty Role in Policy: Successful IT integration at the University will depend upon informed decisions made at the highest leadership levels. Therefore, faculty—particularly those who are early adopters of and innovators in IT—need to be present on administration and Faculty Council committees that influence IT policy. Examples of such committees include any technology committees (see Section I), the Chancellor’s Budget Committee, the Academic Planning Committee, the Chancellor’s Committee on Faculty Appointment, Promotion, and Tenure (currently being constituted), the Faculty Council Education Policy Committee, and FITAC’s proposed IT Strategic Planning Council.

Recognition of Innovators/Risk Takers: Because tradition, in many ways, constitutes the accepted measurement of academic excellence, the users of non-traditional methods—the early innovators, the risk takers—are rarely recognized for their achievements. Therefore, initiatives must recognize these individuals and provide opportunities for them to continue to lead the University forward in the information age.

Faculty Leaves: To accelerate the adoption of IT, sabbaticals should be designated for faculty seeking to advance IT’s role in teaching, learning, and scholarship. Sabbaticals could provide both opportunities for faculty to adopt and conduct research into the use of IT in teaching and learning and avenues for collaboration with ITIS programs and IT support personnel. Such action would communicate to the University community the importance of IT integration and of staying at technology’s cutting-edge.

Grant Program: A substantial, sustained grants program for faculty should be created to advance the diffusion of IT in teaching. Such a program, if coupled with initiatives like CCI and focused on faculty adoption of IT, would ensure the use in the classroom of the IT infrastructure (in particular, the increasing number of students equipped with laptops for in-class use). An effective grants program should be designed based upon successes and lessons-learned from the late Chancellor Hooker’s IT grants program and the IBM-supported CCI grants program (which will lose funding with the 2002-2003 academic year) administered by FITAC. A commitment to ongoing funding for faculty training and development is critical for the diffusion of IT throughout the University culture.

Teaching Excellence Awards: The University's Teaching Excellence Awards Program, or other similar programs, should be revised to include awards specifically for "Outstanding Teaching with Technology." Again, such a program would send a clear message of the importance of IT and would contribute to the rate of IT adoption. One or two of the current awards could be allocated or additional funding could be provided for these awards.

Compensation: University administration, schools, and departments need to commit to developing compensatory incentives for faculty involved in the development, implementation, and evaluation of teaching with technology. Designation of a percentage of annual raise funds for this purpose could be one means of providing compensation.

Promotion and Tenure: Electronic scholarship (e.g., electronic publications and courses on-line), like other forms of scholarship, needs to be evaluated as an academically viable alternative and an integral part of faculty accomplishments when decisions are made regarding promotion and tenure. In fact, as we move further into this technological age, considerations for employment should increasingly include prowess at technology. To this end, the Chancellor's Committee on Faculty Appointment, Promotion, and Tenure should address this topic by establishing clear criteria for the evaluation of excellence in the use of IT in promotion and tenure decisions, taking advantage of the evolving national dialogue on this topic fostered by organizations like the American Association of Higher Education. In addition, if the Chancellor's committee does not include faculty with IT expertise this situation should be rectified.

Criteria for IT Innovation: The Faculty Council should charge FITAC with establishing criteria for recognizing achievement and creativity when IT is used in teaching and research. This process would include defining and measuring IT achievement. These criteria should then be forwarded to the Chancellor's Committee on Faculty Appointment, Promotion, and Tenure for inclusion in its report.

Section III: Professional Development in Instructional Technology

True innovation in IT and wide spread adoption in teaching and learning can occur only with a creative, cutting-edge portfolio of IT professional development programs for faculty. Many universities are aggressively moving in this direction (e.g., UCLA, Virginia Tech., University of Iowa, University of Michigan, and University of Maryland). The University has not adequately committed to the professional development of its faculty in innovative fields like IT. Generally, the University has relied upon individual faculty to see to their own professional development, with some support through small grants and over-extended campus services. However, technology and information are evolving at such a rate that faculty cannot be expected to keep abreast of and adopt IT in teaching and learning unless they have access to adequate professional development resources and services.

Professional Development in IT is a life-long process of adopting and applying 1) communication methods, 2) information transmission, storage, creation, and dissemination methods, and 3) analytical and theoretical tools that function via computer hardware and software. Such development requires personal motivation, institutional support, and available resources. Given the required investment of time and energy on the part of the faculty, an institutional environment that supports and values such endeavors is essential. Therefore, FITAC submits the following recommendations to advance the diffusion of IT innovation in the University's teaching and research. In some instances these recommendations are inextricably connected to those made for academic units (Section I) and faculty incentives and recognition (Section II).

Recommendations

Pan-University Efforts:

- *Support Facilities:* To facilitate faculty adoption of IT, the University needs to increase support resources. Currently support resources include the Center for Instructional Technology, the Center for Teaching and Learning, The Friday Center for Continuing Education, and the campus libraries. Working together, the proposed IT Strategic Planning Council, central administrators, and ITIS should evaluate and review the effectiveness of such services given the unique needs of academic units and the changing demands of an IT enabled campus.
- *IT Workshops:* To accommodate diverse learning styles and different levels of IT proficiency, the University should offer a variety of goal-directed workshops on IT-supported teaching and learning. This summer, for a second year, FITAC will have allocated IBM funds provided through CCI to conduct workshops to help faculty develop IT-supported courses. The success of this model here and at peer universities (e.g., University of Iowa and Virginia Tech.) leads to the recommendation that the University identify resources to fund these workshops on an ongoing basis (CCI-related funds will end with the 2002-2003 academic year).
- *Conferences, Symposia, Etc.:* Effective dissemination of IT innovation throughout the UNC Chapel Hill environment will depend upon the timely acquisition of cutting-edge information. To this end, the University needs to establish a competitive grants program that enables faculty and others involved in teaching at the University to attend IT-based conferences, symposia, etc. that will advance the University's leadership in IT-supported teaching and learning.

Academic Unit Efforts:

- *Faculty Responsibility:* While faculty should be individually responsible for their professional dedication to and interest in IT adoption, the significance of IT in the culture at large argues that the University should promote base-line expectations for IT skills and use in teaching. In this regard, University administration and Faculty Council should work with Departments and Schools to characterize these expectations at skill and classroom levels and link them to the appropriate incentives and recognition recommendations noted above. Such a program can exist only if the institution provides adequate professional development services to faculty.
- *Time for IT:* As with any scholarly endeavor, proficiency and creativity in IT demand the availability of time and an optimal intellectual climate. Therefore, faculty IT professional development should include competitive faculty leaves (e.g., sabbaticals, as well as lightened teaching loads). However, faculty should have targeted goals for bringing those IT developments back into the classroom and for sharing them with other faculty.
- *Physical Space and Support Facilities:* Academic units need to determine their own support needs in light of the availability and appropriateness of centralized support resources. Units should coordinate with campus resources while planning and budgeting to provide necessary support facilities. Units should also review and coordinate with campus resources in planning for and addressing physical space needs related to IT.

Section IV: Information Technology Infrastructure and Support

Universal access to IT infrastructure and support services has become a prerequisite to the transfer and transformation of learning. In fact, this access is increasingly an around-the-clock demand (e.g., access to the campus network and central systems like e-mail, department and individual data archives, and libraries). In this context, a robust, up-to-date communication network with associated technical and applications services is critical for the effective integration of IT into teaching and learning within a defined social system like UNC at Chapel Hill.

The CCI, from an infrastructure vantage point, marks the first systemic effort to provide faculty, students, and staff with access to the central computing infrastructure. Here, computing infrastructure is defined as the computing devices, transmission media, software, and facilities that enable computing at the University. While CCI must be assessed within a larger framework of IT and University priorities, the advantages of universal access to standard computing tools and resources are quickly being realized. When complete—and with life cycling that will include the addition of cutting-edge technology like wireless devices—this infrastructure will position the University to be a leader in IT-supported education and research.

A leadership position in higher education will also demand adequate support services to maintain the infrastructure and to facilitate faculty adoption of IT. Here, support is defined as the people and systems that provide for the maintenance, optimization, reliability, and effective application of technology. While the use of IT at the University has greatly increased and is destined to increase even more into the foreseeable future, the scale of the support services has not kept pace. This shortfall is the result of dramatically limited resources, particularly in the areas of support systems and staff. The professionals working in the libraries, technology-support units, and instructional design services are the fuel for the University's learning engine. They provide the maintenance, training, documentation, and personal consultation that enable effective use of the infrastructure. Following any acceptable timetable, IT will not become a foundation for teaching and learning if the University does not have an adequately prepared and supported professional staff.

The following recommendations cover issues that must be addressed to ensure that infrastructure and services will meet faculty needs and promote a rate of IT diffusion that keeps pace with technological innovation.

Recommendations

Technology Life-Cycling and Maintenance: The University must develop a long-term financial commitment to the CCI concept in terms of periodic upgrades of infrastructure (e.g., instructional labs, faculty/staff computers) to take advantage of prevailing technologies and applications that will advance teaching and learning. In addition, funding needs to be committed to cover the ongoing maintenance of technology resources such as multimedia classrooms, which has in the past not been addressed adequately. Success here will require a commitment of additional resources and periodic review of needs in response to IT innovations.

IT Support Beyond CCI: The CCI addresses the computing needs of many of the faculty and most of the students on campus. However, professional schools and graduate students have not

been included and this must be rectified. The University has a clear obligation to strive for equity of resource allocation and, in doing so, must ensure equity of IT access.

Leveraging Institutional Resources: The University has ties to a number of regional and national consortia, professional organizations, and corporations that have similar or complementary IT goals. At the same time, corporate and other collaborations must be approached critically to ensure the integrity of our educational and scholarly endeavors. In this regard, the University should do more to address concerns regarding these collaborations and where appropriate to leverage these external infrastructure resources and know-how to achieve IT integration.

Support Services: The diverse IT-focused organizations across campus are, in terms of both infrastructure and support, at best a loose confederation. In addition to not being cost-effective, such a structure is inefficient at technology dissemination. The University should review these services and develop an organizational structure that provides incentives for collaboration. A review would also define roles that play to the strengths of each.

Multimedia and Technology-Fitted Classrooms: For meaningful IT adoption to occur, adequately equipped classrooms must be available. The development of such facilities is occurring across campus in a disorganized fashion without consideration of platform compatibility and serviceability. The university needs to allocate resources to increase substantially the number of technology-fitted classrooms with an emphasis on wireless technology for student laptop use. These rooms should be configured to meet instructional goals with input from faculty and University committees like the Classroom Design and Advisory and Intellectual Climate Committees. By building to meet teaching and learning goals, instead of building comprehensive state-of-the-art facilities, the University would be able to create far more multimedia and technology-fitted classrooms with available resources.

Faculty Awareness: IT infrastructure and support services need to develop a portfolio of strategies to make faculty aware of available IT resources. In addition, they need to get faculty guidance on IT teaching and learning goals and needs.

Section V: Funding

Garnering resources for the above-proposed initiatives will be critical for success, and FITAC recommends funds be secured in several ways.

Recommendations

Capital campaign: The campaign should be employed to secure the funds required to provide faculty substantive recognition and incentives. The Faculty Council should charge FITAC with developing a plan in collaboration with Administration, University Advancement, and the Vice Chancellor for Information Technology and Support Services that will secure funds to put the University at the forefront of IT use in public higher education. Examples of initiatives for funding include Vice Chancellor Marian Moore's "KnowledgeWorks@Carolina", CCI, chaired professorships acknowledging scholarship in IT, and a sabbatical program stressing IT scholarly activities.

Grants: The University should provide support and resources to enable faculty collaborations with campus IT units to submit grant applications to public and private organizations. An example would be to provide additional resources to the University's Proposal Development Initiative that are targeted for this purpose.

General Administration and State: When possible, additional funds should be sought from UNC General Administration and the State. FITAC recognizes that current fiscal stringency could preclude obtaining significant resources from this source at this time, but a compelling long-term plan could yield resources.

Reallocation of Resources: The University's administration should strengthen its review of programs that directly and indirectly involve IT for possible reallocation of resources. An example would be redundancy of IT infrastructure and support services (technical and instructional/learning) between divisions in Health Affairs, Academic Affairs, and Information Technology and information Support Services.

Section VI: Recommendations to the Faculty Council

In addressing strategic needs for successful integration of IT into the University, FITAC has identified both short- and long-term priorities. FITAC acknowledges that achieving all of the recommendations at once is unreasonable, but assertive action on some will set a tone indicative of IT's importance to the University's prosperity. Therefore, FITAC has prioritized key recommendations from among those listed throughout this document and will present them to the Faculty Council for action over the coming year or two. It is our belief, however, that the Council needs to act quickly on four recommendations. To this end, FITAC puts forth the following resolutions for immediate action predicated upon Faculty Council adoption of this document.

Resolution 1—Committee Representation and IT Strategic Planning Council: FITAC proposes adoption of the recommendation that Faculty Council request that the Chancellor include on the Chancellor's Committee on Faculty Appointment, Promotion, and Tenure and on the Academic Planning Committee faculty innovators in IT. FITAC also proposes adoption of the IT Strategic Planning Council concept by Faculty Council followed by a request to Central Administration to move immediately on its formation so that an IT strategic planning process can begin the 2001-2002 academic year.

Resolution 2—Faculty Incentives and Rewards: FITAC proposes adoption of the recommendation that measures of academic excellence be expanded to include creative uses of IT in educational and scholarly endeavors. We recommend representation of IT innovators on key committees including the University Committee on Teaching Awards and the Chancellor's Committee on Faculty Appointment, Promotion, and Tenure. We recommend the designation of faculty leaves for IT development and teaching awards that consider teaching innovation with IT as criteria for excellence.

Resolution 3—Capital Campaign: FITAC proposes adoption of the recommendation that Faculty Council request that Central Administration and University Advancement include an IT component in the capital campaign. FITAC and the proposed IT Strategic Planning Council should be charged with the responsibility of helping to determine IT priorities that have high prospects for fund raising. Immediate action on this resolution is important due to the advanced planning stage of the campaign.

Resolution 4—Replacement Funding for Faculty IT Professional Development : FITAC proposes adoption of the recommendation that Faculty Council request Central Administration to begin planning for the allocation of funds to continue the IT innovation grants initiated by Chancellor Hooker and the faculty IT development workshops funded by CCI (this funding ends with the 2002-2003 academic year). FITAC and the IT Strategic Planning Council should work collaboratively with Central Administration on this action.