

Strategic Plan - The Use of Technology

January 5, 1996

Table of Contents

The Foundation for Technology
Technology as an Agent for Transformation
The View of Information Technology at FGCU
Framework for Strategic Plan Goals
Strategic Plan Goals and Supporting Objectives - Overview
Information & Communication Technology - Goals
Supporting Objectives for Goals
Policies and Procedures

The Foundation for Technology

Florida Gulf Coast University is being created as a dynamic higher educational organization for Southwest Florida to prepare students to compete and excel in a world characterized by constant change, high levels of technology, and increased internationalization. The University will serve the needs of the region by developing and supporting the individual's ability to access, assimilate, apply, and create knowledge; to acquire and incorporate rational problem-solving strategies; to appreciate and value artistic expressions; to examine and evaluate beliefs, ideas, and actions; and to develop skills that contribute to continuous personal, economic, and social well-being; and encourage a commitment to enhancing the welfare of the community that FGCU serves.

Guiding the institution toward the realization of its mission is an underlying set of principles upon which programs and services are designed and evaluated. Thus, the use of communications and information technologies will incorporate these principles:

- Student success will be at the center of all University endeavors and its realization will be pursued as a collaborative effort among all areas of the University - central administration, academic programs, student services, and administrative support services.
- The University will create a tolerant academic community that supports a pluralistic, diverse, gender-equitable, inter-generational, and accessible learning environment while establishing and maintaining high academic standards.
- The University will establish a culture which, in addition to intellectual development, promotes the physical, emotional, and social growth of its students as they pursue their academic goals.
- Quality teaching will be emphasized, recognized, rewarded, and supported.
- The University will seek outstanding faculty who are committed to embodying the University's mission and continuously shaping and enhancing its programs, instruction, and services.
- An interdisciplinary philosophy of learning geared toward student success will be evident in all academic pursuits of the University.
- The University will constantly embrace information technology in creative, experimental, and practical ways to enhance and maximize the creation and delivery of instructional resources and to develop and strengthen its administrative support systems.

- The University will provide an environment that supports flexible access to educational programs, knowledge resources, and administrative systems.
- The University will seek to build strong community partnerships and will emphasize the value of its faculty, students, and staff providing service to the community.
- The University will continuously assess the value, effectiveness, and currency of its programs, instruction, and services with a view toward continual renewal and improvement.

Technology as an Agent for Transformation

The rapid evolution of computer, video and integrated communication technologies has revolutionized the means available for human communications and the ways in which information resources are created, stored, shared, and accessed.

Consequently, a revolution is also occurring in regard to how academic programs are structured and delivered, how information resources get managed and accessed, how scholarly work occurs, and how information is provided in support of the administrative and student support functions of universities.

There was a time when it was sufficient for a university's design to include buildings, books, electricity, phone lines, faculty, and limited support staff. It was also acceptable practice to require all students to 'come to the temple' according to a time schedule determined primarily for the convenience of the institution. This simply is no longer the case.

Higher education is being transformed into an age of information geared to the individual learner, and information technology is a primary instrument of the transformation. Current and emerging computer and communication technologies allow us to:

- offer expanded educational opportunities;
- provide local and global access to information resources;
- form electronic communication and information links with other public agencies and community groups; and
- support the administrative functions of the university in ways that are far more flexible in terms of time, place, and pace.

Thus, to create a new public university today is a rare circumstance that carries with it the responsibility to build a new and much more powerful infrastructure from its inception. FGCU therefore acknowledges that it is imperative that a technological, human, and financial support plan be designed that can help ensure that Florida Gulf Coast University will fulfill its mission into the 21st century. It is toward this end that this strategic plan for using information and communication technologies will be directed and continually evaluated.

The View of Information Technology at FGCU

When FGCU has successfully built an environment that incorporates and supports the effective use of current and emerging communication and information technologies, its students and visitors will find:

- A Telecommunications Utility - a network that consists of interconnected desktop computers, mobile laptop computers, campus servers, Internet servers, interactive and broadcast television linked together by cabling and switching schemes; that is ubiquitous in nature, technically heterogeneous,

- and as intuitive in its use as voice communications or electrical service; and that is the key ingredient making feasible a networked learning, distance-free, knowledge navigation-based environment for the learner.
- Open Classrooms - Computer conferencing, electronic mail, and voice mail applications that allow students to communicate with faculty and each other around the clock, allowing a new freedom of discussion, questioning, and clarification even in large enrollment courses.
 - Distance- and Time-Free Learning - A combination of personal computers, television and videotapes, print materials, electronic library resources, multimedia courseware servers, and networked delivery systems, that allow the University to loosen the rigidity of class schedules, relieve space pressures, and accommodate schedules of the nontraditional student.
 - Customized Personal Learning - Interactive multimedia instructional software that allows students to control learning segments and explore new segments at a depth and pace appropriate to their own learning needs.
 - Community Partnerships - Electronic links that extend the campus to community partners such as public schools, health centers, business and industry, government and non-profit agencies, cultural facilities and library resources.
 - Open Information Access - University information databases that are available for students and faculty to access and update, as authorized, allowing for more convenient and efficient services such as off-site registration, financial aid and admissions processing, and grade reporting; and that are tailored for enrolled and prospective students and faculty to access through personal computers, touch-tone phones, and the Internet.

Transformed Organizational Structure - An organization that models and capitalizes on the benefits that technology offers for transforming traditional organizational structures. In particular, networked technologies and software tools will affect the way decisions are made by expediting the availability and distribution of data throughout the University. Cross-institutional work groups and an appropriate balance between distributed and centralized technical support will make possible collaborative planning and resource management.

Strategic Plan Framework

With the University in a formative stage of development, the strategic plan serves to define a role and scope for the use of information and communication technologies at FGCU. The construction of this initial plan is guided by several key precepts that provide the framework for defining specific technology goals. They are:

- A technology infrastructure that permits video, data, and voice communications among faculty, students, and staff independent of geography.
- Expanded access for constituents to educational programs, knowledge resources, and administrative systems.
- Organizational structure and processes for the planning, administration, training, and service support of information technology that reflect departmental interests and needs while maintaining University-wide priorities.
- Funding strategies for technology that support the institutional mission and priorities.
- Utilization of information systems to improve productivity and organizational effectiveness.

- Ongoing evaluation of the technology enterprise with a view toward continuous improvement.

Strategic Plan Goals and Supporting Objectives

This strategic plan identifies the role and scope of the use of technology at Florida Gulf Coast University through the statement of ten major goals, which are listed beginning on page eight. These goals reflect the institutional mission and guiding principles, and underscore the emergence of information and communication technologies as a crucial agent for transformation to a learner-centered environment. The final section of this report expands each goal into more discrete, tactical supporting objectives for which concrete results can be demonstrated and assessed. Each of the objectives is geared toward achievement as the University becomes operational during 1997-1998 year.

Information & Communication Technologies

Goals

Goal One . . .

The University will establish and support a high-speed, reliable, and ubiquitous telecommunications network that facilitates electronic information sharing and retrieval for students, faculty, and staff from both on and off-campus locations, and defines the University as a member in the global electronic community.

Goal Two . . .

Members of the Florida Gulf Coast University community will have access to computing platforms, software, and network resources that enhance learning effectiveness and individual productivity.

Goal Three . . .

The University will focus its information technology resources and network infrastructure on creating student-centered support services that enable direct user access to personal records and institutional information to allow electronic student service transactions.

Goal Four . . .

The University library will serve as a central resource to campus and regional constituents by promoting and providing electronic access to local and global library resources. The University library will serve as a central resource to campus and regional constituents by promoting and providing electronic access to local and global library resources.

Goal Five . . .

FGCU will emphasize distance- and time-free teaching and learning strategies in order to maximize access to educational programs and to facilitate convenient, off-campus student and faculty participation in instructional offerings.

Goal Six . . .

FGCU course offerings will incorporate and exploit the learning advantages of video and multimedia presentation tools.

Goal Seven . . .

In the development of administrative support information systems, the University will continuously take advantage of the efficiencies afforded through networked computing and the productivity gains of enterprise-wide information technology solutions.

Goal Eight . . .

The University will adopt an organizational model for information technology that reflects the transition to a network-centered computing environment and reflects a

balance between and integration of departmental and university-wide needs and priorities.

Goal Nine . . .

The University budgeting and funding strategies for information technology resources will ensure a continuous and stable funding base commensurate with the central role of technology in University priorities.

Goal Ten . . .

Resources and services will be continually evaluated to ensure that information technology supports the advancement of the University mission, and that resources are allocated in accordance with the University's priorities.

Supporting Objectives for Goals

GOAL 1 The University will establish and support a high-speed, reliable, and ubiquitous telecommunications network that facilitates electronic information sharing and retrieval for students, faculty, and staff from both on and off-campus locations, and defines the University as a member in the global electronic community.

Supporting Objectives

1. A *physical communications infrastructure* will be defined and incorporated into the institutional building program that facilitates high bandwidth communications of data, digital video, voice and broadband television throughout campus.
2. An operational plan will be developed to integrate and *extend University telecommunications resources* into the Southwest Florida community in order to deliver and to improve access to educational programs and public service offerings.
3. A campus *networking strategy* will be documented that will specify network protocols, routing, and switching electronics, hubs, and systems management software.
4. A process will be defined and adopted for setting standards and selecting *common network-based software* applications such as electronic mail, gateways, group conferencing, and database management systems.
5. A policy regarding *faculty and student access to the Internet* will be defined and implemented, along with a strategy to develop the corresponding support infrastructure.
6. A strategy regarding *user access to University networked information resources* will be defined, and a plan to provide the corresponding support infrastructure will be implemented.
7. *University standards and policy* for creating and maintaining FGCU affiliated Internet servers, application development programs, and browsers will be formulated.

GOAL 2 The University will provide its students, faculty, and staff access to personal computers, software, and network resources necessary for achieving learning effectiveness and individual productivity.

Supporting Objectives

1. *Institutional standards* for desktop and mobile computing platforms, software, communications, networking, and support will be defined, published, and implemented.
2. The University will develop a strategy to outfit general-purpose student computing areas and to provide *on-campus network ports* to support mobile student computing and to provide open access to networked resources.
3. Special purpose science laboratories and *some classrooms* will be built and equipped *with either network ports or computer stations* at each student seat.
4. An institutional policy, practice, and support strategy regarding *student personal and laptop computers* will be defined and adopted.
5. An institutional policy, practice, and support strategy regarding *desktop and mobile computing resources for faculty and staff* will be defined and adopted.

GOAL 3 The University's information technology resources and network infrastructure will be focused on creating student-centered support services that enable direct user access to personal records and institutional information to allow electronic student service transactions.

Supporting Objectives

1. The University will implement a *student records system* that fully integrates admission, registration, financial aid, and advising functions, and has student access to information resources and the establishment of electronic student service transactions as it's central design objective.
2. The University shall design and acquire support systems that enable *access to information resources* through multiple networked and dial-in personal computers and touch-tone telephones.
3. The University will provide electronic support mechanisms that facilitate *faculty-student-administration interaction* - such as student electronic mail, voice mail, and computer conferencing.
4. The University will provide *training and assistance programs and software* that enable students to effectively use all of the services offered in support of their educational experience.
5. The University will initiate a project to determine the applicability, potential benefits, and various uses of a '*smart*' *student identification card*.

GOAL 4 The University library will serve as a central resource to campus and regional constituents by promoting and providing electronic access to local and global library resources.

Supporting Objectives

1. The *library 'collection'* will be built to meet the curricular needs of the University and will include print and analog and digitized media formats. A plan for storing, indexing, searching, and retrieving the digitized resources will be developed.
2. The library infrastructure will be designed to support *on-line user*
3. *access to full-text, multimedia, and bibliographic databases globally,*
4. *on-demand document delivery; and electronic reference inquiries.*

5. *Cooperative arrangements* with other libraries for collection building and sharing will be established and policies adopted for providing user access to local and remote resources.
6. The library facility will feature *state-of-the-art workstations* to support open access to networked resources, the completion of academic assignments and scholarly research, as well as distributed terminals to allow quick access to electronic catalogues of holdings.

GOAL 5 FGCU will emphasize distance- and time-free teaching and learning strategies in order to maximize access to educational programs and to facilitate convenient, off-campus student and faculty participation in instructional offerings.
Supporting Objectives

1. A regional plan will be written with community partners for building a *video telecommunications network* that supports the delivery of live video courses to key receive sites.
2. *Joint-use facilities* will be *identified in the five-county region* and agreements reached for using them as meeting sites for courses to be offered via live video transmissions from the Fort Myers campus.
3. All FGCU academic programs will be analyzed according to targeted students and course objectives for the purpose of determining appropriate *technology-based delivery strategies* for each.
4. For each course that utilizes technology-based delivery strategies, *development teams will be formed* with support staff assigned to assist faculty in creating and implementing necessary computer, video, audio, or integrated media instructional applications.
5. An *on-campus faculty development center* will be designed to include the hardware, software, and networking necessary for creating computer, video, audio, and integrated media instructional applications.
6. Campus classrooms will be designed to allow for the *origination and off-campus distribution* of live video classroom instruction.
7. A *public radio and television broadcasting station* will be located on the Ft. Myers campus, integrated into the institution's organizational structure, and utilized as a resource for producing and distributing courses and information in support of the public's interests.
8. *Research* will be undertaken to *evaluate* the effectiveness of various forms of *telecommunications for distance teaching and learning* purposes. Examples of such forms of telecommunications include desktop and group video conferencing; broadcast TV, ITFS, and cable distribution systems; videotaped courses; audio conferencing; and Internet applications.

GOAL 6 FGCU course offerings will incorporate and exploit the learning advantages of video and multimedia presentation tools.
Supporting Objectives

1. *Classrooms* will be designed *with electronic podiums* that allow teacher control and projection of both digital and analog instructional media.

2. Course-related, *digitized media* will be identified, or developed, and installed on storage devices, such as CD ROMs or network servers, to allow for *electronic access and classroom display*.
3. *Video and data projection systems* will be located in every classroom and networked to electronic teaching podiums.
4. Media and presentation development software tools will be identified, and faculty will be provided the *necessary training or staff* support to use the tools to develop *instructional applications*.

GOAL 7 In the development of administrative support information systems, the University will continuously take advantage of the efficiencies afforded through networked computing and the productivity gains of enterprise-wide information technology solutions.

Supporting Objectives

1. The University will develop a strategy to select and use network-based relational database management systems, decision-support systems, and software development tools and methodologies that best serve the needs for *institution-wide information systems development*.
2. The University will seek enterprise-wide solutions that maximize the productivity gains of *document imaging* and *departmental workflow* analysis in the design of information systems.
3. Information systems will be designed with the objectives of providing qualified user *database access and update capabilities* - independent of time and location.
4. Emphasis will be placed on adopting only *fully-integrated software products* that are designed with an open-systems architecture, independent of database and platform, interoperable, and scalable.

GOAL 8 The University will adopt an organizational model for information technology that reflects the transition to a network-centered computing environment, and reflects a balance between and integration of departmental and university-wide needs and priorities.

Supporting Objectives

1. The President will clearly designate *cross-institutional authority and responsibility* for information technology strategic planning, staffing, a budget allocation process, technology acquisition approval, and outcomes assessment.
2. The President will create a *representative committee of user constituencies* that will be vested with the responsibility of formulating, reviewing, and recommending information technology policies and practices.
3. The University will develop a *technical support structure* that is made accountable for providing reliable and compatible network communications while meeting the needs of diverse user groups.
4. In the interest of effectively implementing technology initiatives and projects, the University will form *cross-departmental task groups* .

5. The University will recognize the value of knowledgeable technology users through *an ongoing commitment of funding for faculty and staff training and professional development.*

GOAL 9 The University budgeting and funding strategies for information technology resources will ensure a continuous and stable funding base commensurate with the central role of technology in the University priorities.

Supporting Objectives

1. To ensure optimal use of financial resources, the University will adopt a process to *coordinate technology funding requests* that reflects institutional priorities and standards, and prevents duplication of expenditures.
2. In order to realize the educational and productivity gains of continuous rapid technology innovations, the University will actively seek strategies and programs to *maintain technology currency* in a cost-effective manner.
3. Given the continuing requirement for technology funding and the uncertainty of state funds, the University will *develop strategies for generating revenue* from sources that include user and student technology fees, business and industry grants, and support from other outside individuals and agencies.
4. The University will constantly *seek and evaluate opportunities for outsourcing* information technology programs as a means of cost containment and service enhancement.

GOAL 10 Resources, services, and this plan will be continually evaluated and updated to ensure that information technology supports the advancement of the University mission and that resources are allocated in accordance with University priorities.

Supporting Objectives

1. A formal means of *regular evaluation of information technology programs* and use will be developed and performed through the University's Office of Institutional Planning and Evaluation.
2. The University will appoint an *external information technology advisory board* to periodically review the strategic plan, and to provide outside perspective regarding technology innovation and its potential role within the University.
3. This plan will be reviewed and revised at least annually.

Submitted to:

President McTarnaghan

by:

Strategic Planning for Technology Committee

David B. Osterholt

Special Assistant to the President

Kathleen B. Davey

Dean of Instructional Technology

Duncan McBride

Computer Systems Specialist

Charles W. McKinney

Director of Academic Support Services

Carolyn M. Gray
Dean of Library Services
Wm. Gregory Sawyer
Dean of Student Services
Charles W. McKinney
Director of Academic Support Services
Richard Peggnetter
Dean of College of Business
Wm. Gregory Sawyer
Dean of Student Services