

# Supporting Excellence: Technology at Union University

## Technology Master Plan 2003-2006

Report of the Technology Master Plan Team  
ARIS Council  
Union University  
2003

## Historical Overview of Planning Process

Fall 1995

Fully developed *Computing Services Long-Range Plan* presented

Spring 1997

*Computing Services Long-Range Plan* revised for input into Campus Master Plan  
Representatives of ARIS met with consultant from Paulien & Associates

Fall 1997

University received technology report from Paulien & Associates

Spring 1998

ARIS formed Technology Master Plan Team to develop a new plan  
Early discussions led to request for guidance from Academic Master Plan Team

Fall 1998

Academic Master Plan Team's vision for technology received  
Team broke into two work groups representing academic & administrative areas

Spring 1999

Department chairs interviewed by team members and faculty surveyed  
Team addressed pressing issues related to building projects  
Developed document outlining classroom technology configurations/options

Fall 1999

Additional faculty representation added to team  
Team reorganized into three work groups on policies, training, & services

Spring 2000

Draft reports from the policies and training work groups reviewed

Fall 2000 and Spring 2001

Changes in University organizational structure interrupt work  
Team members take administrators on campus wide technology tour  
Technology planning placed on agenda of reconstituted ARIS Council

Fall 2001 and Spring 2002

Drafting and revising of Technology Master Plan

Fall 2002

Draft of Technology Master Plan reviewed by Library staff, Computing Services Staff, Council of Chairs, Library/Technology Committee, Academic Council, and Greater Faculty

Spring 2003

Faculty surveyed and draft of Technology Master Plan revised  
Technology Master Plan endorsed by Greater Faculty

## Introduction

Union University's movement toward excellence has been dramatic in the years since Dr. Dockery cast his fresh vision for the future. This is evident all around us. A thriving new campus in Germantown, new buildings on the Jackson campus, a higher quality student body, a more highly qualified faculty, national recognitions, establishment of University Centers, and increased financial support all testify to the great strides the University has taken. It is no accident that the institution's newly adopted mission statement speaks directly to this movement.

Union University provides Christ-centered education that promotes excellence and character development in service to Church and society.

As the University continues this march it is increasingly critical that all areas of the institution be intentional about every aspect of this mission. This means that for Union excellence is a commitment of the highest order.

In the area of technology the commitment to excellence does not mean that we will invest in every technological possibility. Nor does it mean that we can ever expect to attain a state of technological perfection. What it does mean is that all that we undertake must be done with a commitment to do the very best we can with the resources God has placed at our disposal. Wherever and however Union's educational programs are delivered, technology is viewed only as a tool to further the achievement of the institution's distinctive mission. To put it simply; for Union, technology is never an end, but rather a means of supporting excellence in the classroom, the residence complex, the lab, the office, and beyond.

## The Framework

The framework of the Technology Master Plan is comprehensive in scope. Its goals, strategies, and actions address not only technology resources but also the human, fiscal, and policy issues that make those resources work effectively for the mission of the institution. At the same time, it should not be viewed as exhaustive or prescriptive. It does establish certain technology goals for the University, outlines strategies to achieve those goals, and recommends some specific actions. At the same time, the plan recognizes that some strategies and actions may need to be adapted or altered in the course of implementation. Others may also be added due to new developments. Therefore, the plan is a dynamic document intended to serve as a working blueprint that guides the University in its technology planning process.

The vision for technology reflected in the Academic Master Plan informs the framework in significant ways.

**Strategy:** The University will seek to provide its faculty the resources needed to ensure appropriate use of technology in the classroom.

**Action Plan:** Faculty will offer input into the development of a Technology Master Plan for the purpose of:

- maintaining and enhancing instructional technology to support a high quality technological environment, especially in those disciplines where technology defines their instructional methods;
- developing an on-going and substantial faculty development plan to provide support (instructions to faculty, release time for development of technology based courses with Pew type program to provide support);
- use as a primary tool for the day-to-day operation of our growing campus as a whole with support for the growing trend toward laptops in the classroom and on-line connections in the dorm rooms; and
- ensuring an attractive method for the delivery of quality instruction to non-traditional students.

Several of the strategies and actions outlined in this plan are an attempt to operationalize this aspect of the Academic Master Plan's goal of ensuring a stellar faculty for the future of the University.

An equally significant influence on the direction of this plan is the vision of campus technology being cast by the Computing Services Department. This vision includes three simple but profound concepts; the three R's of campus technology.

- **Reliable Systems:** Union's technical staff is responsible for acquiring, installing, and maintaining equipment and software to create and support data/delivery systems that are reliable.
- **Responsive Staff:** When systems become unreliable, the technical staff will respond by taking responsibility, taking action, working in timely manner, and providing positive communication.
- **Responsible Use:** All students, faculty, and staff are expected to use systems responsibly by adhering to University practices and policies that guide the effective, ethical, and equitable use of technology.

The strategies and actions found in the plan reflect much of the emphasis in these fresh visions for technology as well as specific needs revealed through research conducted by the Technology Master Plan Team and ARIS Council. The plan will continue to be reviewed and updated through the regular assessment activities of the University departments responsible for supporting technology with the focus remaining the support of excellence in these vital areas of the University.

## Summary of Goals and Strategies

### **Goal #1: Develop More Effective Use of Technology in the Classroom and Office**

*Strategy 1.1:* Ensure that all University employees have a working knowledge of the basic information services and resources supported by the institution (Barham)

*Strategy 1.2:* Provide support for significant development activities for faculty to enhance student learning through the use of technology (Sanderson)

*Strategy 1.3:* Ensure that all faculty and staff have regular on-going opportunities for specialized technology training (Barham & Baker)

### **Goal #2: Use Technology to Integrate Students into Union's Community of Learners**

*Strategy 2.1:* Ensure that all students have access to a basic level of information services and resources (Barham)

*Strategy 2.2:* Provide all incoming students, regardless of educational program, with an orientation to basic skills and policies related to University technology resources (i.e. e-mail and calendaring, academic records access, etc.) (Barham)

*Strategy 2.3:* Improve the level of support provided for student access to the campus network (Barham)

*Strategy 2.4:* Ensure that all students acquire the information fluency skills essential for effective life-long learning (Baker)

### **Goal #3: Create a Technological Environment to Support Excellence**

*Strategy 3.1:* Ensure that all University technology resources are well maintained and kept current (Carter, Barham, & Tracy)

*Strategy 3.2:* Ensure faculty has equitable access to specialized instructional technology (Sanderson & Baker)

*Strategy 3.3:* Provide support for the effective delivery of instruction that is distinctively Union to non-traditional students and the enhancement of the traditional classroom (Barham & Baker)

*Strategy 3.4:* Ensure that the University technology infrastructure is developed to meet future demands (Barham & Baker)

*Strategy 3.5:* Provide for secure remote access to appropriate network resources for all current users (Barham)

*Strategy 3.6:* Ensure that the University's administrative computing systems are well maintained and developed (McWherter)

*Strategy 3.7:* Provide support for the expansion and renovation of Academic Resources and Information Services facilities (Barham & Baker)

*Strategy 3.8:* Provide support for increasing the usage and development of internet-based technologies (Tracy)

### **Goal #4: Invest Wisely in the Human Capital of Technology Support**

*Strategy 4.1:* Ensure that technology personnel have appropriate training and are compensated at equitable levels (Sanderson, Barham, & Baker)

*Strategy 4.2:* Provide support for technology personnel to develop new skills, enhance existing skills, and keep current in the field (Barham & Baker)

*Strategy 4.3:* Ensure that technology staffing is sufficient to support the mission of the University (Sanderson, Barham, & Baker)

*Strategy 4.4:* Develop structures and processes that will ensure all users of University technology resources are provided with responsive and effective technical support (Barham & Baker)

#### **Goal #5: Develop the Fiscal Resources Necessary to Support Excellence**

*Strategy 5.1:* Ensure funding to support the replacement cycle for technology resources (Carter)

*Strategy 5.2:* Provide support for ARIS technology operating budgets sufficient to achieve goals of the plan (Barham & Baker)

*Strategy 5.3:* Provide support for departmental capital technology requests in accordance with University priorities (see *Faculty Handbook*, p. F-21) (Sanderson, Barham, & Baker)

*Strategy 5.4:* Provide additional support for specialized labs and media resources by establishing allocations for each University academic department within the operating budgets of Computing Services and Instructional Technology (Sanderson, Barham & Baker)

*Strategy 5.5:* Explore other alternatives for funding of technology needs (Carter)

#### **Goal #6: Coordinate Technology Master Plan with Institutional Effectiveness Cycle**

*Strategy 6.1:* Monitor progress on the plan through the University outcomes assessment process (ARIS Council)

*Strategy 6.2:* Plan for regular revision of plan at appropriate intervals (ARIS Council)

## Action Plans

### **Goal #1: Develop More Effective Use of Technology in the Classroom and Office**

*Strategy 1.1:* Ensure that all University employees have a working knowledge of the basic information services and resources supported by the institution

Action 1.1.1: All current faculty and office employees using University technology resources are expected to demonstrate mastery of the basic skills and policies related to those resources (i.e. e-mail, data access, etc.).

Action 1.1.2: All new employees using University technology resources will be required to successfully complete workshops certifying mastery of basic skills and policies relating to those resources (i.e. e-mail and calendaring, academic records access, etc.).

Action 1.1.3: For all current employees supervisors and chairs are expected to identify persons with deficiencies in basic skills and recommend appropriate development goals.

Action 1.1.4: The components of these basic skills and policies relating to University technology resources (i.e. e-mail and calendaring, academic records access, etc.) will be developed in consultation with a broad spectrum of faculty and staff.

Action 1.1.5: All workshops will be coordinated through the Center for Faculty Development and the office of the Staff Development Initiative.

*Strategy 1.2:* Provide support for significant development activities for faculty to enhance student learning through the use of technology

Action 1.2.1: Encourage faculty to take advantage of Teagle grants to improve their classroom technology integration or research the impact of technology on learning.

Action 1.2.2: Encourage selected faculty in each department to become discipline models for best practice in the integration of instructional technology through release time.

*Strategy 1.3:* Ensure that all faculty and staff have regular on-going opportunities for specialized technology training

Action 1.3.1: Schedule and promote regular workshops at convenient times in a broad range of specialized technologies and resources (i.e. web design, presentation design, etc.).

Action 1.3.2: Workshops will be coordinated through the Center for Faculty Development and the office of the Staff Development Initiative.

Action 1.3.3: Develop and distribute broadly a set of training materials and helps.

Action 1.3.4: Assign to appropriate staff the responsibility for one-on-one and group training.

Action 1.3.5: Develop appropriate systems of incentives, recognitions, and awards for faculty and staff to promote new and broader uses of technology.

## **Goal #2: Use Technology to Integrate Students into Union's Community of Learners**

*Strategy 2.1:* Ensure that all students have access to a basic level of information services and resources

Action 2.1.1: Monitor system resources and license agreements to ensure that all students have equitable access to a basic level of information resources.

Action 2.1.2: Provide support for acquiring the most commonly needed adaptive technologies.

Action 2.1.3: Establish 24/7 computer access in some easily accessible and securable locations on the Jackson and Germantown campuses.

Action 2.1.4: Monitor the need for requiring all students to own some standard level of computer technology (i.e. laptop, PDA, etc.).

Action 2.1.5: Investigate the impact of extending selected software contracts to allow for student copies (i.e. Microsoft Office, virus protection, etc.).

*Strategy 2.2:* Provide all incoming students, regardless of educational program, with an orientation to basic skills and policies related to University technology resources (i.e. e-mail and calendaring, academic records access, etc.)

Action 2.2.1: Design learning experiences that will ensure all incoming students are familiar with basic skills and policies related to University technology resources (i.e. e-mail and calendaring, academic records access, etc.).

Action 2.2.2: Provide online tutorials that are web accessible as an alternative method of student technology orientation, especially for those in adult studies.

Action 2.2.3: Coordinate this activity with the Center for New Students CLU program and Student Life orientation programs.

Action 2.2.4: Ensure that all students acknowledge and abide by the policies regulating the effective, ethical, and equitable use of all University technology.

*Strategy 2.3:* Improve the level of support provided for student access to the campus network

Action 2.3.1: Provide initial set-up instructions and assistance for all resident students.

Action 2.3.2: Study the impact of providing full technical support for student computers that access to the network.

Action 2.3.3: Study the impact of providing students with remote access to the campus network.

*Strategy 2.4:* Ensure that all students acquire the information fluency skills essential for effective life-long learning

Action 2.4.1: Initiate the exploration of establishing an information fluency component as part of the redesigned undergraduate core by sending a white paper to the Core Review Team.

Action 2.4.2: In coordination with the Core Review process consider establishing a set of information fluency competencies that all students will be expected to master.

Action 2.4.3: Encourage each department to ensure disciplinary information competency for all graduates in each major.

Action 2.4.4: Encourage each graduate program to ensure all students acquire the research competencies appropriate to advanced study.

Action 2.4.5: Assign the primary leadership role for the development and implementation of this strategy to the library faculty.

### **Goal #3: Create a Technological Environment to Support Excellence**

*Strategy 3.1:* Ensure that all University technology resources are well maintained and kept current

Action 3.1.1: Fund the replacement of all University technology resources on a scheduled cycle (i.e. hardware, software, networking, media, etc.).

Action 3.1.2: Establish and broadly disseminate such policies and procedures as are necessary for the proper maintenance and servicing of all University technology resources.

Action 3.1.3: Invest in a system that will effectively track service requests and create a knowledge base for technical reference and user helps.

Action 3.1.4: In conjunction with University Relations, strive toward creating and maintaining information delivery systems that effectively communicate Union's story to internal and external audiences.

*Strategy 3.2:* Ensure faculty has equitable access to specialized instructional technology

Action 3.2.1: Study faculty use of technology by discipline and class size to identify classrooms that need additional technology enhancement.

Action 3.2.2: Ensure that the equipping of additional multipurpose classrooms and lecture halls is given a high priority for technology capital fund allocations.

Action 3.2.3: Establish policies and procedures to regulate access to specialized instructional technology and campus media.

Action 3.2.4: Ensure more equitable access to specialized instructional technology by developing more comprehensive equipment inventory and classroom scheduling systems.

Action 3.2.5: Investigate the acquisition of an integrated software system for the scheduling of all instructional technology and classrooms.

*Strategy 3.3:* Provide support for the effective delivery of instruction that is distinctively Union to non-traditional students and the enhancement of the traditional classroom

Action 3.3.1: Fully utilize existing software and expertise to design innovative tools for the digital enhancement of instruction.

Action 3.3.2: Implement selected technologies (i.e. chat, ftp, etc.) to facilitate some limited web-based classroom enhancement.

Action 3.3.3: Study developments in high speed Internet and interactive cable for possible cost effective options for distance learning.

Action 3.3.4: Provide support for a course management system to enhance the delivery of instruction and class communications that is compatible with the University's new administrative information system.

*Strategy 3.4:* Ensure that the University technology infrastructure is developed to meet future demands

Action 3.4.1: Consult with appropriate representatives from Computing Services and the Instructional Technology Center early in the planning of any new building or classroom.

Action 3.4.2: Upgrade the campus network to meet current and future needs.

Action 3.4.3: Monitor Internet traffic and add additional bandwidth when necessary.

Action 3.4.4: Add additional servers to minimize overloading and make possible some limited redundancy.

Action 3.4.5: Investigate the possibilities for extending the campus network to the Fesmire Field Pressbox, Welcome House, and Facilities Management.

Action 3.4.6: Monitor developments in the provision of wireless technology with a view toward future implementation.

Action 3.4.7: Monitor developments in providing telephone services via cellular or the campus network-based technologies (i.e. voice over IP) with a view toward future implementation.

Action 3.4.8: Support the assignment of a mission-critical disaster recovery designation to selected systems (i.e. web/DNS/e-mail servers, designated network components, administrative information system, Internet service, designated telephone services, etc.).

*Strategy 3.5:* Provide for secure remote access to appropriate network resources for all current users

Action 3.5.1: Investigate options for the provision of remote access to network resources.

Action 3.5.2: Select a small group of employees to test remote access for efficiency and security.

Action 3.5.3: After adequate testing implement remote access for all current users.

*Strategy 3.6:* Ensure that the University's administrative computing systems are well maintained and developed

Action 3.6.1: Upgrade the administrative hardware on a five-year cycle with software being upgraded as part of existing annual support contracts.

Action 3.6.2: Provide support for implementing online registration and degree auditing.

Action 3.6.3: Develop a three-year plan detailing the training and resources needed to effectively transition from the current HP 3000 mainframe to a new model with an entirely different operating system and administrative information system by June 2005.

*Strategy 3.7:* Provide support for the expansion and renovation of Academic Resources and Information Services facilities

Action 3.7.1: Complete the renovation of current library facilities.

Action 3.7.2: Plan for expansion and/or renovation of Computing Services facilities.

*Strategy 3.8:* Provide support for increasing the usage and development of internet-based technologies

Action 3.8.1: Provide each member of the University community the resources for basic internet publishing.

Action 3.8.2: Provide opportunities for the development of websites for University entities such as departments, offices, centers, events, & conferences.

Action 3.8.3: Provide opportunities for web application development to improve the collection of audience information, the efficiency of specific business services, and the delivery of University information.

Action 3.8.4: Identify areas of internet usage potential and seek ways to incorporate them into the life of the University.

#### **Goal #4: Invest Wisely in the Human Capital of Technology Support**

*Strategy 4.1:* Ensure that technology personnel have appropriate training and are compensated at equitable levels

Action 4.1.1: Require all new technology employees to have appropriate degrees and/or specialized certifications in the areas of responsibility.

Action 4.1.2: Study salaries of technology personnel at benchmark institutions.

Action 4.1.3: Target salaries for technology personnel to exceed the median of benchmark institutions by making incremental step adjustments from 2003-2006.

*Strategy 4.2:* Provide support for current technology personnel to develop new skills, enhance existing skills, and keep current in the field

Action 4.2.1: Encourage technology staff to develop additional skills by providing funds to attend national conferences and other workshops to keep abreast of advances in technology.

Action 4.2.2: Identify current key technical personnel who need specialized certifications and support the achievement of such.

Action 4.2.3: Develop campus technology leadership through administrator participation in leadership development activities.

*Strategy 4.3:* Ensure that technology staffing is sufficient to support the mission of the University

Action 4.3.1: Study the technology staffing of benchmark institutions.

Action 4.3.2: Target the levels of technology staffing to exceed the median of benchmark institutions by 2006.

Action 4.3.3: Create a new faculty level leadership position for instructional technology and campus media.

*Strategy 4.4:* Develop structures and processes that will ensure all users of University technology resources are provided with responsive and effective technical support.

Action 4.4.1: Evaluate technology organizational structures for effectiveness and modify as needed.

Action 4.4.2: Provide for regular faculty and staff evaluations of all technology services.

Action 4.4.3: Regularly review and revise processes that regulate technical support to ensure effectiveness and responsiveness.

Action 4.4.4: Invest in technologies that will increase the effectiveness of communication with and between technicians.

## **Goal #5: Develop the Fiscal Resources Necessary to Support Excellence**

*Strategy 5.1:* Ensure funding to support the replacement cycle for technology resources

Action 5.1.1: Maintain the capital technology fund to replace select technology hardware on a 3-year cycle and all remaining technology hardware (i.e. printers, etc.) on a 4-year cycle.

Action 5.1.2: Establish a separate funding mechanism to underwrite the cost of upgrading the University's administrative computing system on a five-year cycle beginning in 2003-04.

Action 5.1.3: Study the growth of technology resources carefully and project future funding needs to absorb growth in technology (i.e. new faculty, staff, and student workers, student growth, software licensing increases, etc.).

Action 5.1.4: Develop methods by which funding and purchasing decisions can be made during the spring term so that fall curricular planning and support can occur in a timely manner.

*Strategy 5.2:* Provide support for ARIS technology operating budgets sufficient to achieve goals of the plan

Action 5.2.1: Build the operating budgets for all ARIS departments to implement the initiatives of the plan.

Action 5.2.2: During 2003 prioritize the plan in terms of cost and timing in accordance with expected funding over the next five years.

Action 5.2.3: Adjust operating budgets over the course of the plan according to results from outcomes assessment.

*Strategy 5.3:* Provide support for departmental capital technology requests in accordance with University priorities (see *Faculty Handbook*, p. F-21)

Action 5.3.1: Increase allocations each year for the technology capital fund, separate from the replacement cycle fund, to support special departmental technology requests that exceed \$500.

Action 5.3.2: Ensure that expenditures from these capital technology funds are appropriately monitored for compliance with University systems compatibility and specifications.

Action 5.3.3: These requests will be prioritized and approved during the spring semester in a joint meeting of representatives from the ARIS Council with input from the Deans.

*Strategy 5.4:* Provide additional support for specialized labs and media resources by establishing allocations for each University academic department within the operating budgets of Computing Services and Instructional Technology

Action 5.4.1: These technology operating budget departmental allocations will be limited to purchases of less than \$500.

Action 5.4.2: Ensure that expenditures from these technology operating budget departmental allocations are appropriately monitored for compliance with University systems compatibility and specifications.

Action 5.4.3: Identify those disciplines where learning outcomes, subject matter, and accrediting standards are to a significant degree defined by immersion in technology.

Action 5.4.4: When allocating these academic departmental funds the formula used shall be weighted to prioritize those disciplines defined by immersion in technology.

*Strategy 5.5:* Explore other alternatives for increased funding of technology needs

Action 5.5.1: Develop a mechanism that will ensure the inclusion of technology components in all appropriate grant proposals.

Action 5.5.2: Consider the possibility of establishing a technology endowment through the Office of Institutional Advancement.

Action 5.5.3: Study the technology funding levels and sources of the institution's benchmark schools.

**Goal #6: Coordinate Technology Master Plan with Institutional Effectiveness Cycle**

*Strategy 6.1:* Monitor progress on the plan through the University outcomes assessment process

Action 6.1.1: Assign plan actions to appropriate departments for inclusion in outcomes.

Action 6.1.2: At conclusion of each assessment cycle compile these plan outcomes into a Technology Master Plan assessment report.

Action 6.1.3: Ensure that all ARIS departments conduct regular assessment activities that measure user satisfaction.

*Strategy 6.2:* Plan for regular revision of plan at appropriate intervals

Action 6.2.1: Review and revise the Technology Master Plan at the conclusion of each assessment cycle.