DRAFT

IT Strategic Plan

Technology Council

Indiana University Northwest
5/24/2006
TABLE OF CONTENTS

Background for Information Technology Strategic Planning ...............3
Directives from Strategic Planning Team ........................................3
Technology Council and Development of Strategic Plan for Information Technology .................................................................5
Scope of Information Technology Plan ..........................................5
Objective of Information Technology Strategic Plan .......................6
Mission Statement for Information Technology Department ..........6
Context ....................................................................................7
Strategic Goals and Objectives ..................................................8

Appendices
Appendix A: Strategic Planning and Implementation .......................13
Appendix B: IU Northwest Shared Vision .......................................14
Appendix C: IU Northwest Mission Statement ..............................15
Appendix D: IUN Student Centered Principles ..............................16
Appendix E: Members of Technology Council ..............................18
Appendix F: Overview of Information Technology .........................19
Appendix G: IT Governance and Constituent Consultation Chart ......25
Appendix H: Current IT Organization Chart ..................................26
Appendix I: Template for Annual IT Requests ..............................27
Background Information for IT Strategic Planning

Directives from Strategic Planning Team

In May, 2005 the Strategic Planning Team approved the Strategic Planning Process for Information Technology (Appendix A). In addition the Strategic Planning Team adopted the following Preamble and Principles to be used by the Technology Council in the development of Strategic and Implementation Plans for IT.

Preamble

The Technology Council is charged with developing a process and plan that:

- Ensures information technology that is consistent with the Shared Vision (Appendix B) and Mission (Appendix C) of IUN.
- Supports the strategic direction of the campus.
- Allows achievement of annual operating needs.
- Includes the capacity to respond to unexpected opportunities for improvement.

Principles

The Technology Council ensures that:

1. Recommendations promote the unique identity of IU Northwest as
   - A campus of IU, and
   - An institution known for excellence in cultural discovery and learning and sustainable regional vitality.
2. Recommendations promote using Information Technology to support excellence in learning, scholarship, and student services.
3. Information Technology recommendations address the learning needs of IU Northwest’s diverse constituents.
4. Information Technology recommendations are consistent with the campus’s Student Centered Principles (Appendix D).
5. Recommendations are in full compliance with existing federal and state laws.
6. Recommendations promote technological access to public information for the community we serve.
7. Recommendations support a sustainable Information technology infrastructure.
8. Recommendations support the security and protection of all university data.

On August 24, 2005 the Strategic Planning Team identified in general the Information Technology that would be required to achieve the 2010 Vision.

The Strategic Planning Team also supplied the Technology Council with Action Items that they determined were required to achieve the 2010 Strategic Outcomes. They categorized these Action items as HighPriority and Medium priority.

**High Priority Action Items**

- The University provides students, faculty and staff with reliable access to computing, data storage, information, and network services, on campus and off, in ways that respect our value for caring and competent interaction.
- IU Northwest provides online access to its campus and community partners utilizing wireless or other optimal technology.
- The University’s inventory of computers and software is systematically modernized to support academic excellence in the pursuit of our unique identity,
- Websites are up-to-date, are interactive, project our Vision, and allow us to manage content easily.
- IU Northwest develops plans to leverage university and campus resources, e.g. CETL (Center for Excellence in Teaching and Learning), to support instructional technology. These plans offer faculty a comprehensive set of options to easily create, edit, revise, and maintain online course material.
- The IU Northwest Technology Plan identifies a process to implement environmentally responsible IT practices.

**Medium Priority Action Items**

- The University develops a multicultural, disciplinary, and cross disciplinary program of digital library research, digitized slide libraries, and special collections.
- IU Northwest has a plan to address the student population that does not have access to a computer off campus.
Technology Council and Development of IT Strategic Plan

The Chancellor appointed members to serve on the Technology Council (Appendix E) in 2005 and work was begun on the development of an IT Strategic Plan. The charge included the submission of the IT Strategic Plan to the Strategic Planning Team to review for alignment with 2010 Strategic Outcomes at their May 2006 retreat.

The planning process for the development of the IT Strategic Plan is intended to be one of continuous improvement. The Technology Council conducted an environmental analysis of the internal and external IT resources. The Technology Council reviewed the existing IT resources and structure and individual members sought input from their own constituencies on their information technology needs. In addition the information technology strategic and tactical plans of IU South Bend, IU East, UITS, as well as, the strategic plans of other colleges and universities were reviewed. Technology-related higher education resources, such as EDUCAUSE, were also reviewed to identify trends and issues in information technology in higher education.

From the information gathered in the environmental analysis, the Technology Council developed three strategic goals with associated objectives. The objectives identify what the campus needs to accomplish during the next three years in order in to be on track to achieve the 2010 Vision.

The next step in the strategic planning process will result in the development of tactical implementation plans, timelines and measures of achievement for each objective. The plans will then be implemented, evaluated, and adjusted as needed.

In the Fall solicitations for requests for annual IT improvements (Appendix I) will be sought from each Vice Chancellor.

Scope of the IT Strategic Plan

The scope of the IU Northwest IT Strategic Plan includes all aspects of information technology resource management and user support to include the following:

**Technical Resources** to include computers, networks (wired and wireless), digital storage devices, digital media devices,
telecommunications devices, instructional media, telecommunications devices, related infrastructure and software.

**People** who provide support for the technical resources and the users of the technical resources.

**Services** related to the effective use of technical resources, including user support, instructional technical support, classroom technology support, course management services, research computing and service activity support, administrative processes support, web support, an application and programming support.

**Expectations** regarding the technical resources, service level agreements, contractual arrangements, environmentally responsible policies, procedures, best practices and IT performance measures.

**Fiscal Resources** assuring the effectiveness and sustainability of the provision of technical resources and services.

**Objective of the IT Strategic Plan**

The IT Strategic Plan is designed to lay the foundation for the subsequent development of more detailed objectives, tactical implementation plans with timelines, and measures to ensure the achievement and effectiveness of the plan. Prioritization of the objectives will be determined based upon the urgency of the need, criticality to the 2010 Strategic Outcomes of the campus, the University-wide mandates, resource requirements, sequencing, and dependencies.

**Mission Statement for Information Technology**

The Office of Information Technology provides innovative, contemporary, and accessible technology in micro computing, instructional media, networking, and telephone services enabling the students, faculty, and staff at IU Northwest to effectively meet the goals of a student-centered learning community. To accomplish this mission, Information Technology Services works collaboratively with the campus community to provide technology leadership and support which emphasizes empowerment of the individual.
Context

IU Northwest is committed to establishing and maintaining appropriate information technologies, including instructional technology, in order to serve student, staff, and community needs. This commitment has several implications. As a regional campus, IU Northwest is clearly an integral part of the Indiana University system but with its own catchments area as well as its own linkages to the wider system.
**IT Strategic Goals and Objectives**

**2006 - 2009**

**Goal 1**

*Use IT to enhance teaching, learning, research, and service activities; to support the experiences of internal and external community members in interacting with the campus; and to empower the students, faculty and staff to work effectively and efficiently.*

**Objective 1:**
Provide access to contemporary technology to enable students, faculty, and staff to meet their educational, research, service, and administrative needs.

**Action:** Develop and implement a plan to provide wireless network access to all classrooms and the Library/Conference Center. (2006-2009)

**Action:** Develop a plan and timeline to upgrade network infrastructure to increase internal speed, reliability, and redundancy. (2006-07)

**Action:** Adopt a learning driven design for technology classrooms that takes into account the diverse needs of our students, and develop processes and guidelines for the maintenance of and identification of the need for additional technology classrooms. (2006-07)

**Action:** Install whiteboards in all technology classrooms. (2006-07)

**Action:** Develop a process to ensure that our websites are up-to-date, are interactive, accessible, project our Vision, and allow us to manage content easily.

**Action:** Develop a plan that provides services and support to assist faculty and staff in the adoption and use of Oncourse CL, the IU course management tool. (2006-09)
Objective 2:
Promote customer-centered Information Technology Services and Support.

Action: Develop a plan to provide help desk assistance, consulting, documentation, and other services to enable students, faculty, and staff to optimize their use of technology and continue to explore ways to ensure the operation and support of IT related systems after 4:00 pm (5:00 pm EST).

Action: Develop an ongoing process to learn about the training needs of faculty and staff and develop a sustainable plan in partnership with the Center for Excellence in Teaching and Learning (CETL) and the Office of Human Resources, as appropriate, to meet those needs. (2006-09)
Lead Technology Council Volunteer: Marshall Anderson

Action: Consider the use of an adaptive support technician in the development of a plan to ensure the accessibility of all resources on campus technology and information (2006-07)

Action: Improve communications both formal and informal with users about the available services and support provided by the IT department.
Lead Technology Council Volunteer: Manoj Pardasani

Action: Develop a proposal for the relocation of the Help Desk to foster easy accessibility for students, faculty, and staff. (2007-08)

Action: Develop a plan including Facilities approved locations for additional accessible computer kiosks. (2008-09)
Goal 2

Provide a secure and reliable IT environment while maintaining the kind of access required of a public university.

Objective 1:
Provide a contemporary and reliable data infrastructure to meet the instructional, research, service, and business needs of the campus.

Action: Ensure that the IU Northwest campus is a participant in the ILight project. (2006-07)

Action: Upgrade and appropriately size network bandwidth from inside buildings.
Lead Technology Council Volunteer: Ranjan Kini

Objective 2:
Supply a highly reliable, effective modern communications infrastructure

Action: Investigate advantages and disadvantages of using Vo IP including a cost/benefit analysis. (2006-07)

Objective 3:
Provide a secure data and communications environment

Action: Develop and implement campus security and responsibility strategies and guidelines using best practices to secure the campus network and protect critical campus information technology resources, assets, and processes. (2006-07)

Action: Create continuity plan that includes disaster preparedness, emergency response and business continuity. (2006-08)
Lead Technology Council Volunteer: Peter Kesheimer
Goal 3

Ensure sustainability and continuous innovation in the IT environment.

Objective 1:
Provide IT Governance structure to optimally serve the needs of users for teaching and learning, research, service and discovery, student services, and administration.

Action: Determine appropriate leadership model and reporting lines (September 2006) and establish collaborative, advisory and consultative relationships with other IT faculty and administrative committees (June 2007). Lead Responsibility: Technology Council

Objective 2:
Provide financial support to optimally serve the needs of users for teaching and learning, research, service and discovery, student services, and administration.

Action: Create an IT funding model and mechanisms to 1) establish sustainable funding to support the continuous maintenance and periodic upgrades of computers for faculty and staff; existing and future student technology labs and existing and future technology enhanced classrooms and 2) provide for the financial capacity to respond to emergency IT situations. (2006-07)
Lead Technology Council Volunteers: Bill Dorin, Terry Lukas, Bert Scott

Action: Review IT staffing, development, and compensation issues (2006-07); develop and implement strategies to address issues identified (2007-09)
Lead Technology Council Volunteers: Carolyn Hartley and Tim Sutherland
Objective 3: Provide an IT environment that encourages use of new and emerging technologies.

Action: Develop plans and structures to develop a campus environment that systematically reviews, evaluates and shares information on current and emerging technologies. (2007-09)
Appendix A

Information Technology Strategic Planning and Implementation Process
Appendix B

The Shared Vision

We, the students, faculty, staff, and alumni of IUN, take pride in our unique identity as Indiana University serving the seven-county region of northwest Indiana.

As a student-centered campus, we commit ourselves to academic excellence characterized by a love of ideas and achievement in learning, discovery, creativity, and engagement.

Because we value the complete richness of the human family, we embrace diversity in all its facets and aspire to the full nobility of our shared humanity.

We interact in caring and competent ways to support individual and community aspirations and growth.

We honor and value the contributions of all our members.

We promote well-being through an attractive and convenient environment conducive to learning. Our graduates are prepared for life-long learning, ethical practices, successful careers, and effective citizenship.

Indiana University Northwest collaborates and cooperates with other educational institutions, external partners, and the surrounding communities to enhance our overall quality of life.
Appendix C

IU Northwest Mission Statement

The mission of Indiana University Northwest, a regional campus of Indiana University, is to provide a high-quality and relevant education to the citizens of Northwest Indiana, the most diverse and industrialized area of the state. The institution strives to create a community dedicated to the pursuit of knowledge and intellectual development, leading to undergraduate and selected graduate degrees in the liberal arts, sciences and professional disciplines. The campus is strongly dedicated to the value of education, lifelong learning, diversity, celebration of cultures and opportunity for all, as well as to participating in the sustainable economic development of the region and of the state. Indiana University Northwest is committed to the health and well-being of the communities it serves.
Appendix D

Student Centered Principles

Preamble
As members of the IUN community, we recognize how our actions affect the outcomes and success of our students and their approaches to and attitudes toward college life. The IUN campus will actively pursue broad-based consultation and participation with the many constituencies directly served and impacted by the decisions made within the campus. We believe the eight student-centered principles below, to be used as guidelines in setting and revising campus policies and practices, will help generate and support an interconnected environment.

- Students are informed how often, and when within the ensuing two years, classes are likely to be offered.

- IUN coordinates advising and scheduling so that all students can complete their baccalaureate programs in a timely manner. Fulltime (15 credit hours a semester) students without deficiencies shall be able to complete their baccalaureate programs within four years.

- IUN offers lower division courses at times convenient for both day and evening/full time and part time students. Upper division courses shall also be offered at a time convenient for both day and evening/full time and part time students whenever practical.

- Students, faculty and administrators are guided by and exhibit ethical behavior, and treat each other with respect, promoting a sense of pride, enjoyment and dignity.

- To the extent possible, constituencies of the IUN community are informed in a timely manner when decisions are made that significantly affect them.
• Faculty, advisors, counselors and front-line staff are knowledgeable, available, competent, and show personal concern for students.
• IUN is committed to student safety, privacy, easy accessibility, well-being, maximum student achievement and student access through both academic and administrative support services.
• A wide variety of opportunities for involvement in campus life and enrichment activities is valued, available, widely communicated and easily accessible for all students.
Appendix E

Technology Council Membership

Linda Anderson, Director of Student Activities
Marshall Anderson, School of Medicine
William Dorin, College of Arts and Sciences
Jason Griffith, Student Services
Carolyn Hartley, Director of Human Resources
Rick Hug, School of Public and Environmental Affairs
Peter Kesheimer, Registrar
Ranjan Kini, School of Business and Economics
Violet Lanis, School of Education
Terry Lukas, Director of Instructional Media
Manoj Pardasani, Division of Social Work
Josy Petr, School of Nursing and Health Professions
Jodie Reminder, Center for Excellence in Teaching and Learning
Cuthbert Scott, School of Business
Tim Sutherland, Interim Director of the Library
Atilla Tuncay, Interim Director of Continuing Studies
Mark Uncapher, Director of Information Technology Microcomputer Support Services
Marilyn Vasquez, Interim Chair of Technology Council
Carol Wood, Director of Information Technology Technical Services
Appendix F

Overview of Current Information Technology Activities and Resources

On the one hand, the current use of computers in instruction at IUN is diverse and extensive. For a number of years there have been classes taught using multi-media in the classroom. Several distributed-learning courses are taught using digital video. A number of classes now use web-enhanced teaching methods such as Oncourse, the IU course management system. Library instruction is taught with hands-on computer time using electronic resources. Electronic discussion-groups and e-mail inside Oncourse are integral to many courses.

Student Technology Centers

There are two Student Technology Centers (STC's) at IUN. Marram Hall 103 is the main STC with the manager's office located there. This STC has adjacent bathrooms, a secure entry, and special equipment for our visually impaired students, graphics PCs with scanners and color laser printer, and is open extended hours. The other STC is located in the Savannah Center room 227. The Marram Hall STC supports Macintosh and IBM compatible Personal Computers and both STC's have multiple high capacity HP laser printers. Funding for the STC's come entirely from Student Technology Fees.

Computer Classrooms

IUN's microcomputer classrooms are located in Marram Hall, Raintree Hall, Hawthorn Hall, the Library, and at the off-campus Portage Commons site. Each computer classroom has an overhead large display video/data LCD projector, which displays the video signal from the teacher's station on a pull-down screen at the front of the room, and one or more networked HP Laser printers. Funding for all computer classrooms comes entirely from Student Technology Fees.
Multimedia Classroom Technologies

There are a total of 50 classrooms on campus and 3 in Portage currently used for general instruction. Of these, 22 have been converted to use similar fixed multimedia equipment consisting of an instructor's console with a networked computer (Mac or PC), video copy stand and VCR/DVD player. This console is connected to an LCD data/video projector(s) and powered stereo speakers. Each room is secured with a keypad entry locking system. Three classrooms in Marram Hall have a small switcher and both Apple iMacs and Dell SX 270 PC's.

Raintree 102 remains our most advanced technology classroom which has an AMX touch pad to control lights, curtains, sound, instructor access to a rack of equipment including Apple Macintosh computer, VCR, video disc, video copy stand and other equipment as needed.

Mobile Multimedia Presentation Systems

At present, IUN has 17 mobile multimedia presentation systems that are available for use in the 50 classrooms on campus. There are 14 PC carts and 3 Apple Macintosh carts. The carts are customized before delivery. Speakers can be added as well as VCR/DVD players and/or video copy stands. There are 13 LCD data/video projectors available to be combined with the above carts as needed. We expect the demand for these mobile systems to decrease as we move toward a fixed multimedia concept.

IUN's Academic Facilities Inventory

IU's Bureau of Facilities reports these instructional spaces, which include classrooms, teaching labs, and conference center rooms. To this list, facilities in Portage Commons and in the proposed Professional Building have been added. The original Shared Vision Steering Committee had as one of it's outcomes that ALL classrooms would be conducive to learning. This included appropriate technology, seating, lighting, and air conditioning. The Bureau of Facilities inventory reports the condition of this outcome.

Distributive Education by Video Teleconferencing

IUN has three rooms equipped for academic video teleconferencing. Hawthorn Hall 338 is the smallest holding a maximum of eight people and is equipped with IP Polycom equipment including a video copy
stand, VCR, fax machine, and scan converter for Mac or PC computers.

Hawthorn 318, with a seating capacity of 20, is our most sophisticated facility with three robotically controlled cameras and instructor controlled video copy stand, VCR and a networked Macintosh computer capable of running both Mac and PC operating systems (Virtual PC) and application programs. Advanced technologies including chromakey are available through video staff assistance in the adjacent control room. This DE room can connect via IP Polycom, fiber through Ameritech Advanced Video System (AAVS) as well as ISDN and other routes through IUPUI and IU Bloomington MCU's.

Hawthorn 105 has the largest capacity with 39 seats. It has two 54" monitors in the front of the room with instructor controlled networked computer, video copy stand and VCR. An adjacent control room allows our video staff to make connections via IP Polycom or AAVS and control cameras.

**Current Research Computing Activities**

AVIDD (Analysis and Visualization of Instrument-Driven Data) is a distributed computing facility with components at IU Bloomington, IUPUI, and IU Northwest *(schematic)* designed to process data generated by large scientific instruments. AVIDD opens new doors for research at Indiana University because of its novel design, addressing the full life cycle of data analysis including intake, storage, analysis, and visualization. The implementation of AVIDD is aimed at a great diversity of sciences, including the life sciences, geophysics, atmospheric sciences, physics, and chemistry. There are few, if any, similar efforts in existence today.

There are three aspects of the AVIDD facility that are particularly forward-looking in meeting the coming needs of scientists:

- Real-time data analysis. AVIDD provides facilities for analysis of nonscheduled, real-time data streams while also maintaining high overall usage levels of the computational systems.
- Managing very large data sets. With a total of 10 TB (terabyte) of spinning disk, and close integration with IU's massive data storage system, scientists will easily be able to manage and analyze multi-TB data sets using the AVIDD facility.
- Low-cost, distributed visualization environments. IU has developed three relatively low-cost 3D visualization
environments, permitting the installation of immersive 3D visualization devices in several labs, shared research areas, and advanced classrooms.

Current Administrative Computing Activities

IUN uses computers as an integral element of all administrative activities, including in the Office of Academic Affairs, The Office of Administration and Finance, and the Office of Information Technology. In Academic Affairs, computers are essential to the scheduling of instructional facilities and A/V equipment, to maintain student records including admissions information, grades, student fees and tuition, and placement data. In Administration and Finance, computers facilitate maintaining financial records, human resources records, physical plant records and work schedules. In Information Technology, computers are used to keep track of Help Desk service requests, maintain web pages, maintain an inventory of personal computers and printers, and provide microcomputer applications training.

The IU system is converting older mainframe-based administrative systems to a series of modules from PeopleSoft. This conversion is being implemented in stages and will take a number of years to complete.

Academic Affairs Support of Scholarship Through Technology

The Center for Excellence in Teaching and Learning was established at IUN to encourage and support teacher scholarship through collaboration among the Office of Academic Affairs, the Faculty Organization's Faculty Development Committee and FACET members. The Center for Excellence in Teaching and Learning, CETL, began formal operations in the Spring of 2002. The Center is under Academic Affairs and is housed in the Library Conference Center. The Director of the Center reports to the Associate Vice Chancellor of Academic Affairs. CETL has established a Board of Advisors and a Steering Committee to provide faculty input on setting program priorities.

At present, IUN has the highest percentage of Apple Macintosh computers of any IU system campus. Each full-time faculty and staff member has their choice of a networked Apple Macintosh or PC desktop computer with laser printing services, e-mail, and access to the Internet via Netscape Navigator and Internet Explorer. As already noted, there are networked computer classrooms in Marram Hall,
Raintree Hall, Hawthorn Hall, the Library, and Portage Commons off-campus site. There are Student Technology Centers in Marram Hall and Savannah Center. The Library has a computer reference area on the first floor and an 8 station Cyber cafe. E-mail kiosks are placed in Hawthorn Hall on the first floor, Moraine Student Center, and are planned for the Savannah Student Center first and second floor. IUN creates and maintains web pages and list services for both administrative and instructional use. Through list serve software and e-mail, faculty and staff have the ability to communicate with each other, between departments, within the university, and beyond the university.

**Desktops**

Faculty and staff members have the ability to use word processing, e-mail, and the Internet through their Apple Macintosh or IBM compatible desktop computers. Some departments have purchased additional computers that are not on life-cycle funding. There are a total of 1,446 computers on campus, 571 are allocated to faculty and staff through life-cycle funding, 580 are for student use. The remaining 295 computers are either departmentally owned or in inventory for replacement or disposal.

**Printers**

IUN provides access to networked laser printers for all faculty and staff. There are 70 of these HP LaserJet printers, plus 16 HP Laser printers for students in both STC's and computer classrooms. The faculty and some staff have about 140 individual inkjet printers for confidential printing. Life-cycle funding provides for most faculty and staff laser printing needs. Some departments have purchased additional monochrome or color printers that are not on life-cycle funding.

**File Servers**

IUN has a small number of applications and file servers located in the machine room. These servers, the associated automated tape librarian backup system, uninterruptible power supplies, and operating software are under life-cycle funding. IUN servers currently provide networking services, Cold Fusion, file storage, and other applications. Some departments have chosen to purchase and support department-specific file servers. IUN houses the AVIDD training computer cluster.
E-mail and Web Services

IUN has both IMAP-based and Microsoft Exchange E-mail provided by centrally housed and maintained UITS servers. IUN pays a per user fee for these services. Students use the IMAP service, staff use Exchange, faculty can choose either but generally use Exchange. Likewise, IUN offers official and personal Web services to our departments, faculty, and students from UITS servers. IUN pays a small fee per user account for e-mail and web hosting.

Networking

IUN is fortunate to have a T-3 (45MBps) primary connection to the Internet and a T-1(1.54MBps) secondary or backup link. These connections allow our campus to enjoy high-speed Internet access and relatively fast access to centrally provided instructional and administrative services. IUN has a small modem pool for local access by students, faculty, or staff.

The wiring supplied to many faculty and staff desktops is Category-3 twisted pair cable capable of 10 MBps speed. There are approximate 1,200 network connections encompassing all networked devices, because the general health of the twisted pair cable plant is poor to fair a wiring replacement project is underway. An estimate to replace the current wiring with an all Category-5E system is about $500,000 as a turn-key project.
Appendix I

Year ______

Annual IT Requests From IUN Departments

Deadline for Submission of this Request_____________________

Title of Project

Description of project:

Impact of project:

Metrics to be used to measure impact:

Estimated Cost of Project:

One- time Costs:

Recurring Costs:

Other Sources of Funds:

Requestor’s Name

Approval of Director/ Dean

Approval of Vice Chancellor