

Technology Plan: Preliminary Outline

This document constitutes a preliminary outline of what the Merritt College Technology Committee would like to develop into a College Technology Plan. The Committee developed this plan by a) identifying and discussing College technology needs during committee meetings during the 2005-2006 school year, b) reviewing a dozen or so technology plans from community and state colleges nationwide, c) soliciting ideas regarding technology needs from Merritt College staff, faculty and administrators, and d) critically evaluating and rewriting the outline on a regular basis from its inception in December, 2005, to the present date.

On behalf of the Technology Committee, I ask the members of the College Council to review this outline, to give the Technology Committee your feedback and suggestions, and to endorse this document as a work in progress.

Respectfully,

Chris Grampp
Chair, Technology Committee, 2005-2006 school year
April 19, 2006

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1. INSTITUTIONAL SUCCESS

Merritt College recognizes the interdependence of institutional success, student success, and information technology. In order to succeed on these three fronts, our institution must stay current with advances in information technology and make them available to our faculty and our students. As an institution we commit ourselves to providing campus administrators, faculty, staff and students with the broad array of technological innovations in education, and to monitoring technology in the workplace, so that we can continue to provide our College community with the tools to become successful.

A. The College should recognize and utilize information technology as a significant change agent in redefining the goals and objectives of the campus.

B. The College should develop information technology resources and opportunities that will help draw students to Merritt College, and promote their success once they enroll. Such resources and opportunities include:

- Smart classrooms
- Access to hardware, software, and training resources
- Student email addresses
- On-line courses

C. The College, through the Technology Committee, should provide ongoing information to all employees about the current availability of information technology, both that which lies within the College, and that which comes from external sources.

D. The College should facilitate information technology communication and sharing among faculty, staff, and administrators through professional day classes, on-going training sessions, vendor demonstrations, web and email postings, and Technology Committee resources.

E. The College should develop and use information technology systems that support the business operations of the College, such as online registration, paper-free communication (where appropriate), and networked communications.

F. The College should establish a campus-wide network to which all campus-related computers can connect.

G. The College should provide effective web-based services for students, faculty, administrators, and staff, to speed up College operations, and permit remote accessing.

H. The College should distribute campus-wide wireless Internet access to as many locations as the current infrastructure permits.

I. The College should provide sufficient bandwidth to provide for the orderly expansion of online resources and technology.

J. The College should provide smart classrooms (information technology equipped) for departments that make use of such technologies.

K. The College should provide an internet-connected computer classroom for library instructional purposes.

L. The College should comply with all ADA guidelines relating to information technology equipment and use.

M. The Technology Committee should respond to technology-related concerns and wishes of the entire College. Where appropriate, the Technology Committee should recommend fund allocation for equipment, supplies or other technology-related material.

N. The College should consider information technology needs related to all other areas of campus development, such as building renovation and expansion, interior remodels, and long-range physical plans.

2. TECHNOLOGY SPENDING AND FUNDING

It is critical to the effective use of information technology that the College obtain funding sources for hardware and software, repairs and maintenance, consultants, training, web resources, and networks. These sources must be identified, sorted and categorized according to purchase and funding deadlines, prioritized according to cost, convenience, and evaluated according to total costs of ownership. The College must also be committed to establishing connections to and relationships with vendors, consultants, public and private agencies, and other information technology funding opportunities.

A. At least once a year the College should compile a prioritized funding list for new information technology purchases, upgrades, and repairs, based on institutional programmatic goals and departmental needs described in the College Education Plan. This list should be made available to staff, faculty, and administrators upon written request.

B. The College should develop information technology funding goals minimally based on a percentage of overall College discretionary funding over a five year period.

C. The College should periodically determine the total costs of information technology based on the following costs:

- Research
- Hardware (equipment and upgrades)
- Software (applications and upgrades)
- Licensing fees
- Training
- Maintenance
- Repairs
- Disposal or recycling
- Consultants fees and salaries

D. The College should periodically evaluate information technology funding sources, such as:

- College
- District
- State
- DSPS
- Federal [VTEA and grants]

E. The College should periodically determine unmet information technology funding needs, and devise strategies for generating them.

F. The College and the District should work to secure partnerships with state and industry to acquire and support information technology.

G. The College and the District should develop service agreements with vendors to assist in maintenance and upgrading of information technology equipment.

H. The College should adopt a flexible purchasing system that balances individual and departmental need, quality of equipment, and competitive pricing.

I. The College should advocate for District Purchasing to enter into cost-effective hardware and software contracts.

J. The College should develop information technology funding needs according to short (up to 18 months), medium (18 months-4 years), and long (4-8 years) projections.

K. The College should establish line item funding for information technology (TTIP/TCO).

3. INFORMATION TECHNOLOGY AND COLLEGE INFRASTRUCTURE

The College acknowledges that information technology success begins at the most basic level, that of the physical organization of the campus. To this end, the College should support the campus-wide installation, in both existing and future buildings, of state-of-the-art cabling, transmission devices, switches and relays, and any other equipment necessary to support IT use.

A. The College should retrofit, to the extent possible, all existing buildings with cables, conduits, wire closets, wireless transmitters, and ethernet switches that reasonably accommodate information technology needs for the next ten years.

B. The College should include technology planning as an integral and essential part of new facilities development. This planning should include basic groundwork such as cabling, conduits, wire-closets, and transmitters, along with office, conference room, study area, library, and classroom design that accommodates future IT needs.

C. The Facilities Committee should meet with the Technology Committee during the program development, preliminary planning, design development, construction document, and construction phases of all projects to insure that information technology is sufficiently integrated into the design process.

4. INVENTORY OF EXISTING EQUIPMENT

In order to keep its information technology systems and equipment up-to-date and functioning at the highest possible levels, the College should keep an inventory of all hardware and software. This inventory will allow the College to assess the extent and state of its equipment, help facilitate repairs, help determine obsolescence, help establish funding requirements for new purchases, help assure that each department has adequate hardware and software, and help assure that information technology is distributed evenly and fairly across campus

A. The College information technology staff should compile and maintain an inventory method to account for all existing equipment. The inventory includes the following information:

- Location
- PCCD#

- User(s)
- Department
- Make
- Model
- PO#
- Description
- Operating system
- Year of purchase
- REQ#
- Warranty and Date

B. The inventory list should be kept by the Information Technology Department. Copies should be kept in Division Offices.

C. Faculty, staff, and administrators should notify the inventory keeper of all new information technology related purchases, changes in equipment location or users, and disposal of obsolete equipment. The Information Technology Department should distribute inventory forms to all departments, with a checklist verifying the status of existing equipment, and accounting for new purchases, and for equipment that has been relocated, abandoned, or no longer in use.

D. The Information Technology Department should update the list each July (at the end of the purchasing cycle).

E. The Information Technology Department should make the inventory list available in electronic format upon written request, or accessible from a secure server or website.

5. HARDWARE AND SOFTWARE PURCHASING AND DISTRIBUTION

In order to facilitate the purchase and distribution of information technology equipment and services, the College should develop a process for monitoring new hardware and software releases, for replacing obsolete equipment and outdated applications, for buying new equipment and programs, for making information technology systems and equipment available to classrooms, offices, and labs, and assuring that students, staff, faculty, and administrators have knowledge of and access to campus information technology resources.

A. The College should provide all staff, faculty, and administrators with an orientation to campus information technology systems, including an overview of existing hardware and software, educational and administrative application opportunities, purchasing, and maintenance procedures.

B. The College should provide faculty, staff, and administrators with state of the art hardware and software such as:

- CPUs
- Laptops
- Monitors
- Printers
- Scanners
- Wireless apparatus

- Peripherals (cables, hubs, small externals)
- Software
- Plug-ins
- Video on demand
- Centrally distributed media center
- Mobile equipment where suitable

C. The College should monitor industry trends on an ongoing basis to identify new information technologies and their potential applications.

D. The College should develop and monitor criteria for prioritizing new purchases and upgrades. Purchasing priorities should be based on criteria such as:

- the age of the equipment or software
- the extent of hardware and software within a department
- the effectiveness and suitability of a department's equipment
- the short, medium, and long-range needs of departments, as described in Department Action Plans.

E. The College should develop and monitor criteria for phasing out older hardware and software.

F. The College recommends that new hardware and software purchases, whenever possible, should meet the following criteria:

- Common brands. The College should periodically develop and distribute a list to all campus departments of suggested hardware and software brands.
- Common vendors. The College should periodically develop and distribute a list to all campus departments of suggested hardware and software vendors.
- Shared licenses
- Be expandable for 2-4 years (ward off obsolescence)
- Be no more than one generation behind the latest version, or more than eighteen months behind a current release.

G. The College Technology Committee should serve as a campus-wide source for information and recommendations regarding information technology purchases and use.

H. The College should develop smart classrooms containing equipment such as:

- Wireless Internet
- LCD projection capability and resources
- Digital blackboards
- Digital video and camera equipment
- Printers and scanners
- Laptop power cord plug access
- Digital whiteboards
- CD burners
- TV monitors
- DVD players
- Nomad capability
- Electrical connections and network access for laptops. Laptop power cord plug access

I. The College should develop and implement a web-based equipment site that shows all

equipment available for each room on campus, and allows faculty and staff to request delivery of equipment for each room on campus through a reliable, time-sensitive reservation and confirmation process.

J. The College should evaluate existing computer labs each semester, and make recommendations for repairs, upgrades, and new purchases.

K. The College should insure that all computer labs are ergonomically friendly, with comfortable chairs, new mouse pads, adequately bright monitors, and good lighting and ventilation.

L. The College should make all computer labs ADA compliant.

M. The College should research questions regarding software legality and licensing, and distribute an updated "bullet point" memo to all departments each semester regarding these issues.

6. SECURITY, UPDATES, AND FILTERS

The College recognizes that administrators, staff, faculty, and students need to transmit information safely, receive up-to-the-minute protection from viruses and spam, and be unencumbered in their pursuit of College goals by unauthorized users, unauthorized programs, or unnecessary draws against the campus bandwidth.

A. The College should install, upgrade, update, and maintain campus-wide security systems offering protection from viruses, spam, and unauthorized breaches.

B. The College should provide faculty, staff, and administrators with ongoing access to software and hardware updates.

C. The College should provide secure off-campus access to campus information technology resources.

D. The College should install and operate filtering software that blocks programs and operations in computer labs that interfere with normal student, staff, faculty, and administrative use. Such programs and operations include (but are not limited to) non-academic web surfing, instant messaging, chat rooms, and similar activities that use up College bandwidth, are extraneous to campus purposes, and cause distractions in lab settings.

7. WEB PAGES

Web sites and web development are essential features of a successful College learning environment. Merritt College commits itself to developing and maintaining a state-of-the-art web site and server for use by the administration, staff, faculty and students. The College should develop and maintain a web site that is attractive and utilitarian, promotes classes and campus services, and provides server space for departments and faculty to develop original web sites within general unifying guidelines.

A. The College should hire a web master to develop and maintain its web site and support the development of administrator, faculty and staff web sites.

B. The College should develop and maintain a two-tiered server that will maintain campus security while encouraging a collaborative atmosphere for web development.

- The first tier should be a password protected area, accessible by the web master and designated personnel, and containing the main sections of the campus web site.
- The second tier should provide virtual space for faculty and departments to develop original web sites within the framework of College guidelines. This tier should include server space, and should be open to upload by the administrators, faculty and departments responsible for the construction and maintenance of the individual sites.

C. The College should support departmental web development by:

- Providing periodic training and workshops on using standard web authoring tools that are compatible with the web servers on campus
- Designating people to guide the development of department web sites
- Providing reassigned time for web site development whenever possible.

D. The College should establish common standards for College, department, and individual web pages, including recommended formatting, color, fonts, and general organization for and presentation of Merritt and Peralta logos, intercampus links, phone and email contact information, and home pages.

E. The College should encourage diversity among individual and department web pages within the unifying framework described in D above. Original content should include (but is not limited to) photos, departmental mission and objective statements, faculty and staff biographies, events, new course descriptions, outside links, and other matters unique to each discipline, department, and individual.

E. The College should design a website that is organized, navigable, searchable, and easy to use for students, faculty, staff, and outside visitors.

F. The College website and all College-associated web pages should be ADA compliant.

G. The Technology Committee should review the College website each semester to insure that all content is up-to-date. This content should include course offerings, events, notices, and any other date-sensitive material.

8. STAFFING AND TRAINING

Information technology training for faculty, staff, and administrators is essential to the College mission. Technology training should be broad in scope, including software and hardware instruction, information on obtaining suitable programs, instruction in the use of the College and District network, and teaching staff about the proper channels for making IT related purchases.

A. The College should determine current training needs of campus community, and prioritize them according to immediate, medium, and long-term needs. This determination should be based on the results of a survey sent to and completed by each department.

B. The College should implement information technology training based on funding availability, short, medium and long term technology needs as determined in A above, and the academic calendar.

C. The College should develop a benchmark for evaluating training execution and quality, and measuring results. The benchmark should be based on the feedback from written evaluation forms given to training participants immediately after each session, and one month after each session.

D. The College should hire a part-time or full-time Information Technology expert to assist staff, faculty, and administrators in software and hardware training. This individual should monitor all training needs and recommendations outlined in the Technology Plan, and should conduct a series on regular classes and provide individual consultations.

E. The College should provide information technology training in the following campus locations:

- Classes—traditional and smart classrooms
- Library—traditional format, hybrid, and digital library
- Laboratories—open lab(s)
- Faculty areas, offices (on campus and virtual), and remote authentication
- Staff areas—offices, software, and hardware and software “storerooms”
- Tutoring/Learning Resources—F2F/virtual tutoring, co sourcing tutoring, software licensing
- Technology Resource and Education Center or Academic Technology Center (ATC) or equivalent, including:
 - Faculty learning lab
 - Pedagogy library (print/digital)
 - Template library/database (e.g. Multi Media Educational Resource for Online Learning - MERLOT)
 - @ONE
 - Teacher Learning Technology (TLT) Roundtables
- Distributed media/distance learning, including video on demand, and satellite distribution (upstream/downstream)

F. The College should develop resources to train faculty, staff, and administrators in:

- Choosing appropriate vendors, equipment, and supplies
- Teaching-related software
- On-line courses
- Academic grade and record-keeping software
- Office software facilitating day-to-day College operations, and reducing paperwork
- Individual faculty, staff, and administrator web page development
- Using the College and District networks
- Basic information technology equipment maintenance techniques
- Backup applications

G. The College should support in-house training in the form of:

- Staff Development workshops
- individual staff development training
- in-house information technology trainer
- Web training via district (such as M/S Office training)

- Peoplesoft training via district
- Collective Bargaining Agreement (CBA) funds

H. The College should support off-campus training opportunities such as

- Information Technology workshops
- Conferences
- Training from vendors
- Self-training
- Mentors
- Print and digital resources.
- On-line training resources

I. The College should support sabbaticals and release time for faculty, staff, and administrator information technology training.

J. The College should hire a part-time or full-time Information Technology expert to assist staff, faculty, and administrators in software and hardware training. The College should recommend that the District allocate a minimum of \$25,000 annually to the Merritt College Staff Development Committee to support this position.

K. The College should promote Tony Hampton from Computer Network Technician to Department Network Coordinator or equivalent position.

L. The College should hire an additional information technology staff person to improve IT service to the college, and to perform office and administrative tasks.

M. The College should hire additional students to assist students and faculty in computer labs.

N. The College should create an internship program for students that helps them gain job experience, improves information technology services for faculty and students.