

# **Technology Task Force Recommendation**

**March 30, 2004**

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## **Executive Report**

### **Introduction**

Recognizing that a technology plan is essential in order to make more efficient use of technology as well as to implement technology effectively, President Barden, in the fall of 2002, appointed a 16-member Technology Task Force. The Task Force was to review technology usage on the MSUM campus and to make recommendations to President Barden. This group was asked to involve the campus community, to gather information, and to submit to President Barden recommendations for technology policy changes, near term technology usage, and to provide suggestions on technology replacement plans. A Technology Master Plan was submitted to Dr. Barden in May 2003, reviewed by the administration and others on campus, and submitted to the Chancellor's office in June 2003. This executive report will highlight the major Technology Task Force recommendations.

### **Action Plans**

Action plans for the Academic and Administrative areas were submitted as attachments to the Technology Master Plan in May 2003. These Action Plans included action items with rationale, persons or groups responsible, timeline, approximate budget, and measurable outcomes or assessment measures for each item. The Action Plans and a proposed four-level classroom environment description are also attached to this Executive Report. Over the summer of 2003, the Task Force submissions were reviewed on campus and at the Chancellor's Office. In August 2003, Dr. Barden asked the Task Force to reconvene to further refine and delineate the action plans. Following the Faculty Professional Development Day (Topic--Technology in the Classroom) in October, the Task Force again involved the campus community by holding open forums and soliciting responses to on-line surveys. After further study, the Task Force members felt the eight major recommendations included in this executive report were the short-term actions, which would have the greatest impact.

A sub-group of the Technology Task Force will continue to meet and to develop an Infrastructure Action Plan. The Infrastructure Action Plan will become an integral part of the Master Campus Plan.

### **Recommended Technology Initiatives**

#### **1) Laptop computers for faculty**

In order to “jump start” a broad based technology infusion on campus, the MSU Moorhead Technology Task Force recommends that the University put in place a three-year lease to purchase plan for laptop (portable) computers for full-time faculty members (286) and head coaches (11) during Fall 2004. (The number, 297, comes from Fall Semester 2003 employee listings.) The Task Force membership felt that the Laptop Proposal would:

- a) Allow all faculty computers to be replaced every three years, as the dollars would be an ongoing expenditure “taken off the top” of the equipment dollars.
- b) Incorporate a computer replacement process, as this proposal would assume that the cost would be an ongoing cost—MSUM would use this, or a similar model, to replace the laptop computers in the fourth year. The Technology Committee could address modifications to the replacement process as the end of the three-year cycle nears.
- c) Provide allowance for faculty who might need a computer replacement before three years and/or upgrades from the base unit. Upgrades would be paid for from the requesting faculty’s department equipment dollars. These additional costs would be reviewed by faculty member’s individual department and approved by the appropriate Dean but would not incur additional costs to the Laptop Proposal.
- d) Allow for the majority of faculty computers to have common specifications with common software, which should simplify support issues.
- e) Remove the bulk of the faculty computer expenses from department equipment budgets. Doing so would allow the departments to focus their time and expertise on expenditures for classroom and laboratory equipment. Funding faculty computers has historically been the major equipment expenditure for many academic departments.
- f) Increase technology usage in teaching delivery, as each faculty member could physically take his, or her, laptop computer into the classroom and connect to the permanently ceiling mounted computer projector in their classrooms.

A sub-committee of the University Technology Committee would determine the faculty general computer needs. This sub-committee would be comprised of one representative from Information Technology, one member with Windows expertise, one member with Macintosh expertise, and one member from Purchasing. This sub-committee would be responsible for:

- i) Defining minimum configurations for a Windows based and a Macintosh laptop computer.
- ii) Defining options available for upgrades.
- iii) Defining minimum support from the vendor.
- iv) Developing a request for bid document.

In an effort to gain ownership and commitment, each faculty member would request a laptop computer replacement (both MAC and PC base models available) for Fall Semester 2004. Faculty requests would occur ideally during Spring Semester 2004, with the computers available for distribution early Fall Semester 2004. The office of Academic Affairs and Dean's Council would develop a process for faculty to request a laptop. Criteria discussed by the Task Force members included:

- a) Demonstrated curriculum development that uses laptop technology in the classroom.
- b) Proposed curriculum development to use laptop technology in the classroom.
- c) Completion of structured training on the use of laptop technology in the classroom.

Information Technology and Instructional Technology would develop training sessions on the basic use of laptop computers and the use of laptop computers as an instructional tool.

- a) Faculty members would receive their laptop computers after attending a four-hour training session covering:
  - i) Maintenance and operation of laptop units.
  - ii) Instructional techniques and applications for laptops in the classroom.
- b) Other training would be available to the faculty and staff, which would utilize computer and/or laptop technology to increase effectiveness, efficiency, and quality of instruction.
- c) Provide trained staff or students to assist faculty in migrating their instructional materials to web or other technology delivery systems.

Departments, Deans, and Information Technology, would handle adjunct faculty computer requests. Sufficient computer technology should be available to better equip the adjunct faculty members' offices as a result of the increase of laptops from this initiative.

## **2) Desktop or Laptop Computers for Staff**

Realizing that a desktop unit may be the appropriate computer for the majority of staff, the Task Force felt that an option for securing laptop computers should be available for staff and administrators. The MSUM Technology Task Force recommends that the office of Academic Affairs, Administrative Affairs, and Student Affairs develop a process for administrators and staff to request funding for computers. Replacement or upgrade criteria discussed by this committee included:

- a) Demonstrated need for upgraded computer technology.
- b) Support of faculty members and administrators using laptops as a presentation tool.
- c) Completion of training on the use of computer technology.
- d) Review and approval process of proposals by the appropriate supervisor and a peer review committee as defined by the Administrative Affairs Vice President.

## **3) Classroom Technology Upgrades**

A major increase in the number of classrooms with data projectors was the goal of the Task Force. Equipping a classroom to proposed level two with a ceiling mounted data projector, Internet access port, control box, DVD/VCR and audio would cost approximately \$3,365 per small to medium classroom. With the faculty having the ability to physically take their laptop computers into the classroom, each technology equipped classroom room would not need a dedicated computer. By eliminating the cost of a dedicated computer, MSUM could take those dollars and equip more classrooms with data projectors and needed connections.

The Task Force members suggested a teaching classroom environmental structure with five levels as shown in Appendix A of the Academic Plan. Level One would be a standard classroom with Internet access only, and Level Four would be a classroom with data projector, DVD player, document camera, interactive response receivers, wireless capability, and a Smart Board, which would cost approximately \$10,000 per classroom. Level Two would likely be adequate for the majority of technology enhanced classrooms and that cost would be approximately \$3500 per classroom. The Task Force recommended that all classrooms have, as a minimum, Internet access or Level One.

A plan for identifying classrooms for technology improvements should be undertaken by the Academic Affairs and Administrative Affairs leadership in consultation with the academic departments and Information Technology. Increasing the number of technologically equipped classrooms across the campus available to interested faculty is a high priority of the Technology Task Force. Creating a new classroom scheduling policy to maximize assignment of classrooms based on technology needs of instructors should be developed and quickly implemented as more technology-equipped classrooms become available.

#### **4) Wireless Access**

Providing wireless access for students was an initial priority of The Task Force. Informational Technology has placed wireless access points in the Center for Business, Library, Dragon Den and Connecting Link and has been monitoring these access points for usage and security concerns. The Task Force recommends expanding wireless access to all academic and residential buildings for MSUM students. Providing wireless access in select classrooms should also be done, as demand develops, and the classroom priority plan develops. Identifying programs, such as Construction Management, that might utilize wireless technology and focusing on supporting those programs is recommended.

Developing a wireless access plan for the campus and submitting that plan to the Technology Fee Committee for funding would be strongly suggested. Utilizing this committee would provide student input and, with student funding will allow student needs to be met in a timelier manner. Administrative Affairs is developing an infrastructure wireless plan for the campus for inclusion in the Campus Master Plan.

#### **5) Technology Fee**

A review of the scope and areas funded by the student computer fee may be appropriate, with an eye to broadening technology funded by this technology fee. This committee was formed when establishing computer labs was a priority. With technology advancements perhaps a broader perspective may be appropriate.

#### **6) Technology Training and Education**

Extensive and broad based education for faculty and staff will be necessary as technology evolves. Instructional Media, Information Technology and Instructional Technology should provide leadership in developing training sessions. These Technology Service Departments will need to develop new budgets reflecting changes in service and support expectations.

### **7) Technology Committee (The University Committee)**

The Task Force recommends that the University Technology Committee be restructured with a broadened membership from both instructional and administrative areas. Technology Committee membership should reflect both the member's university responsibilities as well as collective bargaining representation. This committee should be charged with the review and forwarding recommendations for future campus technology usage but only after involving staff and administrative persons in the committee membership.

An example of the University Technology Committee's expanded charges might be the responsibility for evaluating the success of the proposed laptop initiative and developing guidelines for the next round of computer replacements in three to four years or at the end of the lease purchase agreement. Identifying ongoing needed support for the laptop initiative would be another appropriate committee effort.

### **8) Cost Benefit Analysis of a Multiple Platform Campus**

Being an educational institution and having computers on campus with several different operating systems for general computing, has long been a tradition, but without review. The Task Force has been asked, and proposes to investigate, the costs and benefits of continuing to have multiple platforms as a general practice for faculty and staff computers. The luxury of just doing business as we have always done in the past is over and operations must be justifiable. It is the Task Force's intention to involve the MSUM campus community in a discussion of the costs and the benefits of continuing the past practice with multiple platforms, or perhaps migrating to having one operating system for general computing. This review would begin Spring Semester 2004.

Initially a Task Force sub-group will survey select MSUM graduate employers regarding the employers' expectations of graduate computer expertise. The survey will assess current computer

platforms and expertise and also ask for a the employers perception of the three to five year trend in computer platforms standards and expected new employee computer knowledge.

A second subgroup will focus on determining the financial costs of having multiple computer platforms on the MSUM campus. Costs including purchase, support, training, etc will be collected and presented.

### **9) Technology Services**

With the increasing importance of technology services in the daily life of the campus the Task Force felt that the campus communities needed to have a better understanding of what technology services were offered, where these services were available, and how to procure them. The Internet and the MSUM homepage were selected as the informational media. After meeting with representatives of Informational Technology, Instructional Technology, and Instructional Media departments, it was agreed to have a direct hotlink from the MSUM homepage (Technology Services) to a second level page, delineating the services available from the three distinct departments. Links from the second level page will take the user to either the home page of the desired technology services department, or to another page within a selected technology department addressing the specific inquiry of the user. Representatives from the departments met late Fall Semester 2003. The Technology Services link on the MSUM home page plus the second level page listing the technology services available at MSUM went active January 2004. Link for technology services page is: <http://www.mnstate.edu/home/services.htm>

## Academic Technology Action Plan

<i>Action item</i>	<i>Rationale</i>	<i>Responsibility</i>	<i>Timeline</i>	<i>Budget</i>	<i>Measurable Outcomes</i>
<b>1a. Upgrade Computing and Audio/Visual Technology in Teaching Environments (Classrooms, labs, studios)</b>					
Conduct campus-wide assessment of technology availability in classrooms / studios / labs	There is no comprehensive inventory of technology-equipped classrooms on campus. This study would be the first toward enhancing the technology that exists in our teaching environments.	Administrative Affairs  Information Technology  AAC	June 2003 Spreadsheet/database due to Vice President for Administrative Affairs by July 1, 2003	None	Report
Assess and prioritize future needs and budget availability to decide on a schedule of upgrading campus teaching environments according to a level configuration (See Appendix A)	Technology use is no longer ancillary to teaching. Instructors use a variety of Web-based applications, PowerPoint, and other technology to effectively teach students. The pyramid structure as described in Appendix A makes the best use of available resources and teaching needs.	Administrative Affairs  Information Technology  Instructional Media  AAC	June, 2004	None	Prioritized list of classrooms/facilities to be equipped
Determine support needs for teaching environment technology upgrades	We must be sure that support is included in budgeting for technology classrooms.	Instructional Media  Information Technology	June 2004	To be determined	Recommendation of support needs and budget request

Equip first set of classrooms for <ul style="list-style-type: none"> <li>▪ Fall 2004</li> <li>▪ Fall 2005</li> <li>▪ Fall 2006</li> </ul>	The plan will have a three-year phase-in period, beginning in the Fall 2004.	Administrative Affairs  Information Technology  AAC  Instructional Media	August 2004  August 2005	To be determined Level 1: \$5000  Level 2: \$5300  Level 3: \$7000  Level 4: \$840/access point – may require 2 for some large rooms	Report of number equipped classrooms Fall 2004
Create scheduling policy to maximize assignment of classrooms based on technology needs of instructors and proximity of classroom to department offices	This policy will make sure that instructors who need technology in their teaching will have access to equipped classrooms, while taking into account their office proximity to available classrooms.	Registrar  AAC  Administrative Affairs	December 04  September 05	No cost	Written Policy
<b>1b. Upgrade Equipment in Scientific, Artistic, and Musical Environments</b>					
Create a priority list of items needing replacement or purchase in labs, studios, and other teaching environments	Current equipment needs in these areas cannot be funded through normal department equipment budgets.	Academic Departments  AAC	April 2004  September 2004  September 2005	To be determined	List of categories

<b>1c. Expand Existing Wireless Networks on Campus</b>					
Study wireless	Preliminary research	Technology	Spring 2003	None	Report of visit

feasibility <ul style="list-style-type: none"> <li>• Visit Mankato</li> <li>• Visit NTC, MHD</li> </ul>	has been conducted into creating wireless networks.	Task Force			
Implement wireless networks in Library <ul style="list-style-type: none"> <li>• Purchase access points for Library</li> <li>• Determine policies</li> </ul>	This has been implemented and is being studied.	Lead Faculty Group  Information Technology	April 2003	No new budget	Report to LFG
Create priority list of next wireless network locations in public locations	Student, staff, and faculty use of wireless networks can be enhanced by equipping public locations	Technology Committee Informational Technology Instructional Technology Student Senate Union Staff Student Computer Committee	May 2004	To be determined	Priority list
Create priority list of next wireless network locations in academic buildings/classrooms	A variety of disciplines can use wireless networks and a priority list will balance needs with budget resources.	Technology Committee Informational Technology Instructional Technology Student Senate Union Staff Student Computer Committee	Spring 2004	\$840 per access point	Priority list

Identify departments that would pilot laptop and wireless initiative	Increasingly, a student-owned laptop is being seen as an important learning tool. MSUM departments should determine feasibility for their programs.	AAC	Ongoing  Construction Mgmt Laptop Proposal Spring 2004	To be determined	List of Department(s)
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<b>2. Enhance Student Computer Labs / Instructional Software</b>					
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Examine/revise student technology fee policies	The policies of the student computer fee should be updated to determine a reasonable fee level and appropriate uses of the fee funds. A new name, in line with MnSCU terminology, will broaden the possibilities of expanded use for the fee.	Vice President Student Affairs  Student Technology Committee  Technology Committee	Fall 2004	None	Revised committee policies
<ul style="list-style-type: none"> <li>• Increase fee</li> <li>• Rename the fee to Student Technology Fee</li> <li>• Explore other uses of the fee money</li> </ul>					

Assess the current lab environment	There may be too many general-purpose labs on campus and continued funding of labs at past levels may be an inefficient use of fee resources. Studying how to better serve MSUM's students will make the most use of this resource.	Technology Committee  Academic Departments  Information Technology  Student Computer Committee	November 2004	None	Report to Administrative, Academic, and Student Affairs
<ul style="list-style-type: none"> <li>• Report on student-computer ratio</li> <li>• Determine reasonable ratio of students to general computers in labs</li> <li>• Instructional Software and process for determining the software for the general lab</li> <li>• Explore ways to increase support</li> </ul>					

for specialty labs					
Investigate course/major fees to pay for technology for student use	Departments could make use of a course or major fee, but it is unclear how such fees fit with MnSCU policy.	Technology Committee  AAC	Preliminary Draft Spring 2004	None	If appropriate, implementation of the fees
Create policy that allows faculty input on computer configurations and models AND software	Faculty and Deans should be consulted before purchases are made for labs in which they teach and use.	Technology Committee  AAC	2003-2004: create & approve policy	None	Policy created
Investigate creating a proctored computerized testing area on campus, perhaps using an under-used existing computer lab.	Creates a proctored online testing environment – no such facility exists at this time, and larger classes cannot be accommodated in the teaching computer labs that only contain 30 stations. Would facilitate savings in duplication costs, allow for COLOR and graphics in tests, etc.	Technology Committee  AAC  Information Technology  Instructional Technology	Spring 2004 Investigate, research costs and funding sources  Fall 2004 present plan to administrators	Hire Proctor: 20 hrs/week * \$7/hr * 30 weeks = \$4200/year	Plan for implementing a prototype.

<b>3. Faculty Computer Replacement and Software Upgrade</b>					
Upgrade or replace faculty computers on a regular schedule with laptops.	Faculty currently are using obsolete computers that cannot perform tasks inherently linked to teaching, such as viewing streaming media. The current method of replacing computers is not equitable across colleges or within departments. Laptops provide accessibility from multiple locations, such as home or conferences, while providing opportunities to use in the classroom.	AAC  Information Tech  Administrative Affairs	2003-2004  Purchase laptop computers Fall 2004	Full Time Faculty receive laptop (293) Cost @ \$1500/ laptop = \$150,000 / year -- A three year lease to purchase.  This would assume an ongoing expenditure of \$150,000 per year.	Report
Create policy that allows faculty input on computer configurations and models	Faculty should be able to decide, to some degree, the specifications and models of computers available to them.	Technology Committee  AAC	2003-2004	none	Policy

<b>4. Instructional Management System</b>					
Continue funding instructional management system (IMS) software and the hardware that supports the software.	An IMS is an important teaching tool that provides for effective teaching. It can also maximize university resources. Desire 2 Learn is the MnSCU IMS	AAC  Student Computer Committee  Instructional Technology	Ongoing	\$26,000/year  MnSCU's future funding commitment uncertain	Continued funding for IMS

<b>5. Training for Students, Faculty and Staff</b>					
Coordinate training opportunities between instructional technology and information technology.	There is currently overlap between training sessions and topics.	Instructional Technology Information Technology	Spring 2004	None	Schedule of offerings
Create listing of available workshops that faculty can schedule for their classes.	Students need opportunities to become familiar with listservs, web page development, E-Folio, PowerPoint, and the WebCT instructional management system.	Instructional Technology Information Technology Library Staff	Dec. 2004	None	Schedule of offerings
Investigate the design of a 1-credit course "Basic Information Technology Skills" that would be required for MSUM graduates	No other requirements for ensuring a broad range of computer literacy skills exist for MSUM graduates.	AAC Instructional Technology	2004-2005	To be determined	Course Proposal
Provide support and encouragement for faculty to incorporate technology into their teaching.	Faculty do not have the time to develop significant technical resources. Incentives could include reassigned time or summer stipends.	Lead Faculty Group AAC Instructional Technology	Ongoing	\$28,000/year (Lead Faculty Budget)	Report from LFG at end of each year submitted to VP Academic Affairs
Provide faculty with guidance for incorporating technology training in their PDEPs.	Evaluation criterion 3 ("continuing preparation") requires that faculty "be aware of the changing nature of their disciplines and techniques of instruction." Changing technology may very well change techniques of instruction, so faculty should be encouraged to	MSUM IFO AAC Faculty Development Committee	Dec. 2004	None	List of workshops / brownbag opportunities

	develop and upgrade technical skills. On the other hand, the administration cannot impose closure; i.e. deans cannot demand that faculty engage in technology training, but they can encourage it.				
Create regular schedule of faculty workshop offerings	<p>Faculty should have access to instruction in the following areas.</p> <ul style="list-style-type: none"> <li>• Understanding of how to make online materials accessible and compliant with section 508 of the Federal ADA law.</li> <li>• Understanding of instructional management systems for in-class, blended, and online teaching.</li> <li>• Creating web-based PDF materials</li> <li>• Using electronic portfolios for assessment</li> <li>• Managing online discussions</li> <li>• Learning to use blended or online delivery techniques</li> <li>• Basics of web page creation, Office products, email, listservs, and calendar software</li> </ul>	Instructional Technology	ongoing	none	Schedule

Establish a newsletter, listserv or roundtable discussions so that technology issues can be discussed by the MSUM community	While there are many faculty who use technology, the opportunities for them to discuss what they are doing is minimal.	Technology Committee Instructional Technology Lead Faculty Group	2003-2004	none	Electronic Newsletter or Listserv
Plan duty day devoted to technology issues.	One way to make time to learn about technology and teaching is to devote an in-service day to the topic.	President's Office	October, 2003	Done	Website/promotional materials about the day
Create regular schedule of staff workshop offerings.	<ul style="list-style-type: none"> <li>• PDF forms (Adobe Acrobat)</li> <li>• Accessible web site creation</li> <li>• MSUM-specific software for ISRS, DocuTech, etc.</li> </ul>	Information Technology Instructional Technology	Spring 2004	None	Schedule of offerings
Develop and purchase CD-ROM and online training modules for faculty and staff.	Using these modules would be a more efficient use of MSUM faculty and staff time, since the products are already created.	Instructional Technology Information Technology	June-July 2004	\$30/module for Office Step-by-Step Training CD's * 5 modules = \$150	List of CD's purchased
Ensure that faculty become aware of and informed about MnSCU's intellectual property policy.	Faculty is not aware of current policy regarding intellectual property. MnSCU has created online training for this.	MSUM IFO Director Instructional Resources Instructional Technology	Fall 2004	None	List of promotional materials for MnSCU's online training.

Develop workshop & online supporting materials for fair use policies & guidelines.	Current laws & guidelines are not immediately accessible to MSUM faculty. Providing clear and concise guidance would be helpful.	Library Staff	2004-2005	None	List of materials developed for training.
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**6. Enhance Support for Technology**

Assess campus-wide technology support needs for classrooms and labs	Troubleshooting technical problems (for example, determining problems with network access or replacing projector bulbs) is an ongoing problem in teaching environments that faculty cannot always address.	Information Technology Instructional Media	2004-2005	To be determined	Report of additional student help needed and # of hours recommended along with a list of proposed checklists/duties)
Assess campus-wide technology support needs for Web development	Although many faculty would use the Web to distribute materials and for other uses, they are not Aware of resources available to help them do this.	Instructional Technology Information Technology	Fall 2004	To be determined	Report of additional student help / staff needed and # of hours or alternative plan to address the web development issues.
Assess campus-wide technology support needs for online forms <ul style="list-style-type: none"> <li>• PDF documents</li> <li>• Online data collection, such as student evaluation of teaching</li> <li>• Student forms</li> <li>• Faculty forms</li> </ul>	Using online forms and creating PDF documents could make the university more efficient and productive, but many faculty and staff do not have the software or training to create such documents.	Instructional Technology Information Technology		To be determined	Plan to address training needed, list of responsible people for departments / divisions.

Assess campus-wide technology support needs for student services (Right Now)	RightNow is a versatile software system that can address many questions and store responses in a central database. This can reduce time spent answering the same questions while provide immediate information to students.	Instructional Technology  Information Technology	2004-2005 Info Tech, Instr Tech develop databank of frequently asked technical questions 2005-2006 more areas (Faculty Development, Academic Depts, Student Services) involved	None	Databank of questions in the RightNow repository
Review position descriptions for staff and new faculty to reflect technology expectations. See that whenever MSUM seeks new faculty, appropriate technological competence is among the criteria used for selection.	New faculty with technological skills (a) will not need to be trained and (b) may provide a catalyst within their departments for technological innovation.	Human Resources  AAC  Department Chairs	Ongoing	None	Position descriptions reflecting technology expectations
<b>7. E-Learning/Blended Delivery</b>					
Determine departments/programs/courses that would be suitable and marketable for electronic or blended delivery	Collaboration between departments, programs, and Deans can ensure that MSUM has a clear, strong, and strategic presence in distance education.	AAC	2003-2004	None	List of departments, programs and courses

<p>Create policy statements and guidelines for electronic delivery of course materials</p>	<p>There should be some direction and oversight of online course delivery.</p>	<p>Technology Committee AAC Instruction Media Instruction Tech Disabilities Coord Information Tech MSUM IFO</p>	<p>2004-2005</p>	<p>None</p>	<p>Policy</p>
<p>Disseminate materials about intellectual property</p>	<p>Current laws are not clear or accessible to lay audiences. Providing clear and concise guidelines would help those creating intellectual property to feel secure in doing so.</p>	<p>Director of Library Services</p>	<p>Ongoing</p>	<p>None</p>	<p>List of materials</p>
<p>Investigate support services necessary for E-learning</p>	<p>A wide range of support services, including the bookstore, financial aid, and others are required by e-learners. Provision should be made to ensure that all MSUM learners have access to these services.</p>	<p>Instruction Tech Information Tech AAC Admin Affairs Lead Faculty</p>	<p>2004-2005</p>	<p>None</p>	<p>List of services established, planned</p>
<p>Investigate fee structures for e-learning initiatives</p>	<p>Design and implementation of online and blended courses requires a great deal of support from Instructional Technology personnel and trained web developers. Supporting online and blended courses as they are delivered also requires funding to pay for help desk support, marketing of the programs, and e-student services.</p>	<p>Lead Faculty  AAC</p>	<p>Spring 2004</p>	<p>None</p>	<p>Report</p>

Study library electronic reserves	Electronic reserves would be useful for E-learners; however there are significant logistical and legal issues that must be overcome to make this a reality.	Library Staff	2004-2005	None until implementation is recommended	Preliminary report
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**8. Personnel Issues**

Ergonomics	<ul style="list-style-type: none"> <li>Given that MSUM students, staff, and faculty spend a great deal of time working with computers, we should make every effort to ensure that tables, desks, chairs, and other equipment meets ergonomics standards.</li> <li>Educate MSUM personnel on ergonomic standards</li> </ul>	Director of Environmental Health and Safety	Ongoing	To be determined	List of resources, documents outlining ergonomic support on campus
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**9. Audio / Video Enhancements (ITV, Streaming audio/video, Video Conferencing)**

Promote the use of the Tegrity WebLearner	This is a turnkey system that automates the production of streaming media materials for the web.	Instruction Media Instruction Tech	Ongoing	None	List of Tegrity presentations
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## Classroom Teaching Environment Levels

Level	Description	Internet Access	Other Technology	Level Cost Per Classroom
Level 1*	Overhead Projector and Screen ( <b>Existing</b> )	Internet Access <b>(\$100/port)</b>		<b>\$100</b> for the few classrooms, which do not presently have Internet access.
Level 2*	Overhead Projector and Screen Data Projector Ceiling Mounted ( <b>\$2500</b> ) Laptop Connections ( <b>\$500</b> ) Audio Powered ( <b>\$200</b> )	Internet Access	DVD/VCR ( <b>\$165</b> )	Additional Cost: <b>\$3365</b>
Level 3*	Overhead Projector and Screen Data Projector Ceiling Mounted Laptop Connections	Internet Access	SmartBoard ( <b>\$2000</b> ) Document Camera ( <b>\$2000</b> ) Interactive Student Response System ( <b>\$1000</b> )	Additional Cost: <b>\$5500</b> All items in adjacent column not necessary for level 3.
Level 4*	Overhead Projector and Screen Data Projector Ceiling Mounted with Internal hard drive for remote access is an optional item ( <b>\$??</b> ) Laptop Connections, if available, would allow instructor to connect to standard ceiling mounted data projector	Wireless Internet Access <b>\$840/access point/ 20 students</b>  Additional switches may be needed as we expand wireless networks (\$1300 approximately.)		Additional Cost: <b>\$840/access point/ 20 students</b>  <b>Switches possible (1200 each)</b>

\*

**Each increasing level assumes technology from preceding levels is available, i.e. Level 3 has all the capabilities of Levels 1 and 2. All Technology items below show current costs installed in classroom and charged back to departments or other accounts.**

Item	Cost	Installed By:
Data Projector	\$2500	Instructional Media
DVD/VCR	\$ 165	Instructional Media
Audio Powered	\$ 200	Instructional Media
Document Camera	\$2000	Instructional Media
Internet Access Port	\$ 100	Information Technology
Laptop Computer Access Box	\$ 600	Information Technology & Instructional Media
Smart Board Technology	\$2000	Instructional Media?
Interactive Response System	\$1000	Instructional Media?
Wireless Access Point (G)	\$ 840	Information Technology
Switches	\$1200	Information Technology

## Administrative Technology Action Plans

<i>Action item</i>	<i>Rationale</i>	<i>Responsibility</i>	<i>Cost</i>	<i>Timeline</i>	<i>Assessment Method</i>	<i>Current Status</i>
<b>1 Install Wireless Access</b>						
Install wireless segment to the network on campus.	Provide faculty, staff and students with wireless access to the Internet from several locations on campus.	Information Technology	\$600/Access Point	August 2003	Schedule with completion dates.	Seven installed, proposal developed for expansion.
		Instructional Technology	\$1300/12 Access Points	Install access points in library and Student Union.	Evaluate usage.	
			\$12,000/VPN			
<b>2. Develop Rotation Plan for Office and Employee Computer Replacement</b>						
Review the current process for obtaining computers for offices and departments. Develop a rotation plan based on equipment needs.	Some of our office computers are over 5 years old and are unable to support current software.	Administrative Affairs	Annual cost with a four year rotation cycle for computers at the desktop for administrators and clerical desks.	August 2003 – Develop Plan	Schedule with completion dates.	
		Academic Affairs		Continuing – Obtain Resources	Evaluate usage	
		Student Affairs				
		Instructional Technology				
		Information Technology				
<b>3. Obtain and Install Internet Conferencing in two areas; from the desktop and a conference room.</b>						
A. Install at least one Internet Teleconferencing room on campus.	Holding MnSCU meetings via the Internet will save travel	Information Technology Facilities	Desktop camera and software - \$600.	Summer 2003.	Evaluate usage.	Completed.

B. Make available resources to conduct Internet conference calls from the desktop.	expenses to St. Paul. Having this resource available will allow our employees to collaborate with colleagues on other campuses.	Instructional Media	Video Conference Room			
<b>4. Install a better centralized personal scheduling system.</b>						
Install a personal scheduling system that would allow users to share their calendars with others and provide 'hot-sync' capabilities with PDAs.	The current calendaring system is six years old. If it crashes, we are not sure we could recover.	Information Technology	\$1,000	By the end of 2003.	Satisfaction survey to users.	Completed in July 2003.
<b>5. Provide Adequate Printing Services – Black &amp; White and Color..</b>						
Obtain high volume printers for campus use.	Many of the offices printers are old and unable to produce quality printed material.	Vice Presidents Information Technology		By the end of Academic Year 2003-4.	Ongoing review of changes in printing technology related to campus requirements.	Installation of new color printing options in Printing Services
<b>6. Provide Text Scanning Capabilities.</b>						
Provide hardware and software to scan text documents into a computer in an editable format.	Many older documents are not available in electronic form. We have to retype them. Scanning would be a faster option.	Instructional Technology Information Technology		By the end of Academic Year 2004-5	Ongoing review of campus needs and campus survey.	

<b>7. Improve Campus Communications – Internal and External.</b>						
Provide information in multiple formats to our on-campus and off-campus audiences.	New methods of communications should be used to publish our image.	Publications  Dragon Communications Committee		By the end of Academic Year 2003-4	Ongoing review of campus needs.	Establishment of DComm.
<b>8. Provide for Staff Professional Development and Training.</b>						
Provide support and encouragement for staff to incorporate technology into their position.	Staff training should be offered on topics conducive to personal improvement.	Information Technology  Human Resources		Continuous	Yearly review of staff needs and training provided.	First report submitted to Task Force.
<b>9. Develop a Plan for Improved Service for Students including file storage, calendar, and Instant Messaging.</b>						
Provide similar services to our students that we provide to our employees.	Our students should have access to the same options.	Information Technology  Student Computer Fee Committee	Replacement of existing e-mail server; total cost \$35,000. Additional service for calendar, storage, etc would require more storage, cost range \$35,000 +.	By the end of Academic Year 2004-5	Completion of project and survey of student satisfaction.	

## Infrastructure Action Plans

<b>1. Upgrade the campus network to 100Mb service to the desktop with 1Gb service to the building.</b>						
Upgrade campus network infrastructure	With the increased use of audio and media services, this is critical	Information Technology	Upgrade 62 switches, total cost \$82,000. Upgrade all fiber longer than 600 feet to single mode, total cost \$35,000.	Starting in FY 2005	Schedule with completion dates and evaluation usage and user needs.	New Science building will be wired to support faster speeds.
<b>2. Upgrade the campus core router/switch to 1Gb service.</b>						
Upgrade campus core switch/router. Router is six years old and cannot meet the network needs of the University. This is our single network connection to the rest of the world.	With the increased use of audio and media services, this is critical	Information Technology	\$65,000	Starting in FY 2005	Schedule with completion dates and evaluation usage and user needs.	New Science building will be wired to support faster speeds.
<b>3. Explore possibility of shared data storage and disaster recovery with City, Public Service and School District.</b>						
Using the existing fiber ring in Moorhead, develop a real-time backup system and disaster recovery system.	All entities must have disaster recovery, all should have real-time backup.	Information Technology	Unknown	Starting in FY 2005	Schedule with completion dates and evaluation usage and user needs.	Initial contact has been made with the City and Public Service.
<b>4. Explore possibility of shared wide-area wireless access with City, Public Service and School District.</b>						
Evaluate the opportunities of wide area wireless	All entities will benefit from wireless access.	Information Technology	Unknown	Starting in FY 2005	Schedule with completion dates and evaluation usage and	Initial contact has been made with the City and Public

opportunities with Moorhead Public Service.					user needs.	Service.
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# Budget

<b>Academic Action Plan</b>		<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>
<b>1A</b>	Upgrade Computing and Audio/Visual Technology in Teaching Environments (Classrooms, labs, studios)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
<b>1B</b>	Create a priority list of items needing replacement or purchase in labs, studios, and other teaching environments					
<b>1C</b>	Expand Existing Wireless Networks on Campus (see Administrative Plan)					
<b>2</b>	Enhance Student Computer Labs / Instructional Software (see Student Computer Fee Committee)					
<b>3</b>	Faculty Computer Replacement and Software Upgrade Personnel support for laptops (.50 FTE)	\$150,000 \$30,000	\$150,000 \$30,000	\$150,000 \$30,000	\$150,000 \$30,000	\$150,000 \$30,000
<b>4</b>	Instructional Management System, if funding does not come from MnSCU	\$26,000	\$26,000	\$26,000	\$26,000	\$26,000
<b>5</b>	Training for Students, Faculty and Staff (current budget except deliver as 1 credit course)					
<b>6</b>	Enhance Support for Technology (will depend on needs assessment)					
<b>7</b>	E-Learning/Blended Delivery					
<b>8</b>	Personnel Issues (current budgets)					
<b>10</b>	Audio / Video Enhancements (ITV, Streaming audio/video, Video Conferencing)					
	<b>Totals</b>	<b>\$306,000</b>	<b>\$306,000</b>	<b>\$306,000</b>	<b>\$306,000</b>	<b>\$306,000</b>

## Administration Action Plan

**FY 2005      FY 2006      FY 2007      FY 2008      FY 2009**

**TECHNOLOGY TASK FORCE RECOMENDATION**

<b>1</b>	Install wireless segment to the network on campus	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
<b>2</b>	Review the current process for obtaining computers for offices and departments. Develop a rotation plan based on equipment needs.	\$115,000	\$115,000	\$115,000	\$115,000	\$115,000
<b>3</b>	Install at least one Internet Teleconferencing room on campus. Make available resources to conduct Internet conference calls from the desktop.					
<b>4</b>	Install a personal scheduling system that would allow users to share their calendars with others and provide 'hot-sync' capabilities with PDAs.					
<b>5</b>	Obtain high volume printers for campus use.					
<b>6</b>	Provide hardware and software to scan text documents into a computer in an editable format.	\$2,500	\$2,500	\$2,000	\$2,000	\$2,000
<b>7</b>	Provide information in multiple formats to our on-campus and off-campus audiences. (Part of item 9)					
<b>8</b>	Provide support and encouragement for staff to incorporate technology into their position.					
<b>9</b>	Provide similar services to our students that we provide to our employees, including storage, e-mail, calendar, etc.	\$10,000	\$60,000			
<b>Infrastructure Action Plan</b>						
<b>1</b>	Upgrade campus network infrastructure	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000

- 2 Upgrade campus core switch/router. Router is six years old and cannot meet the network needs of the University. This is our single network connection to the rest of the world. \$62,700
- 3 Using the existing fiber ring in Moorhead, develop a real-time backup system and disaster recovery system.
- 4 Evaluate the opportunities of wide area wireless opportunities with Moorhead Public Service.

<b>Total</b>	<b>\$228,200</b>	<b>\$215,500</b>	<b>\$155,000</b>	<b>\$155,000</b>	<b>\$155,000</b>
<b>Grand Total</b>	<b>\$534,200</b>	<b>\$521,500</b>	<b>\$461,000</b>	<b>\$461,000</b>	<b>\$461,000</b>

**Possible Funding Sources**

University Equipment Budget					
All Computer Rotations	265,000	265,000	265,000	265,000	265,000
Campus Network Upgrades	20,000	20,000	20,000	20,000	20,000
Instructional Managements Systems	26,000	26,000	26,000	26,000	26,000
Hardware and software to scan documents	2,500	2,500	2,000	2,000	2,000
Sub Total	\$313,500	\$313,500	\$313,000	\$313,000	\$313,000
Support Personnel: Reassignment of .50 FTE	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Administrative Affairs designated carry forward for 2005 from campus core switch/router	\$62,700				
Student Computer Fee - Wireless costs and e-mail, calendar, storage server costs.	\$28,000	\$78,000	\$18,000	\$18,000	\$18,000
R&R - Upgrade computing and audio/visual technology in teaching	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
<b>Funding Source Total</b>	<b>\$534,200</b>	<b>\$521,500</b>	<b>\$461,000</b>	<b>\$461,000</b>	<b>\$461,000</b>