Information Technology Services Division Annual Report FY 2010

Executive Summary

During the last academic year, the Information Technology Services Division (ITSD) has implemented major initiatives to improve the technology infrastructure at UMass Boston, to enhance support for learning, teaching and research, and to improve the business processes and outreach efforts of the University as well as ITSD's own internal processes.

In the infrastructure area, ITSD has replaced all wireless access points with enhanced devices and is in the process of mapping gaps in wireless coverage so as to install additional access points appropriate to provide wireless coverage throughout all campus buildings and public spaces.   The ITSD's program for rewiring campus buildings has continued with wiring upgrades in the Quinn Administration Building, the Healey Library and the campus datacenter. ITSD has increased storage quotas for faculty and staff email to 500 MB and has added additional file storage capacity of 20 Terabytes for research and business needs of faculty and staff. In anticipation of major infrastructure changes due to the campus master plan, ITSD has initiated the process of hiring a consultant to develop an enterprise information technology architecture plan for the university to insure that the technology infrastructure will support the University's strategic goals well into the future. The enterprise architecture project, set to commence in the summer of 2010 and take 8 to 12 months to complete, will coordinate closely with facilities planning and other master planning initiatives.

In support of learning and teaching, ITSD has continued to upgrade and enhance the University's technology classrooms and labs to improve the teaching environment. ITSD converted M-2-404, M-2-423, H-4-031 and the Conference Room in the State Archives into TEC 2 Classrooms. In addition to upgrading computers in the blue and white labs, ITSD has installed projectors in general use labs to make them more available for instructional purposes. In collaboration with UMass Dartmouth, ITSD has worked on the development of a prototype Virtual Computing Lab which will enhance student and faculty access to the University's computing resources from campus and off-campus locations 24 hours a day. ITSD has also introduced a number of tools to support learning, including wikis, classroom capture, and enhanced content in the University's iTunesU and Open Course Ware sites. In the last year, faculty have created more than 400 wikis to support instruction; over 750 course sections were taught using the Blackboard learning management system; more than 30 faculty piloted classroom capture technology; the UMass Boston iTunesU site averaged almost 4,000 hits a month; and the number of courses in the OCW site has doubled to 48, with support from a grant from the Boston Foundation. ITSD successfully launched the new Digital Learning Studio in Healey Library, re-located the instruction design staff there, and has provided a broad range of faculty-oriented programs and training. ITSD's Instructional Technology Center offered more than 100 MS Office 2007, Xythos, Statistical, and Security workshops with over 700 faculty, staff, students attending - most registered via the training registration system which now includes over 1100 accounts; and supported 1877 academic and non-academic events in presentation rooms. ITSD's Educational Technology group successfully hosted its 4[th]Educational Technology Conference in May, attended by more than 100 faculty members and guests from other regional institutions.

In support of research, ITSD continued to work with the Boston Bio-Med consortium and is pursuing certification with the InCommon Federation in order to provide UMass Boston researchers with access to consortium resources. ITSD installed an expanded storage array (20TB) to support data storage needs and has ordered an additional 70 TB of storage for installation this summer. As part of the Enterprise Architecture planning, ITSD will be conducting interviews with key stakeholders in the research community to help in planning for future research needs.

In support of the business processes and outreach efforts of the University, ITSD has supported the addition of new self-service functionality to PeopleSoft HCM and as well as upgrades to PeopleSoft Student Administration. ITSD is assisting in the management of the campus implementation of Image Now document imaging system. ITSD has worked closely with UITS to improve the stability of the R25 application as well as working with campus stakeholders to move to the next generation of the scheduling and space management application. ITSD has been a lead player in the University's web re-architecture project, which has completed the strategy phase and is currently working on usability testing and page design. ITSD also developed the University's first mobile web site, which has been very well received since its release in May. Working with the Title III grant team, ITSD has developed a new portal site for transfer students which will go live this summer. ITSD's Media Services group provided multimedia and audio support for 472 special events on campus, enhancing the University's community outreach. Finally, in the area of security, ITSD has collaborated with the other UMass campuses in the development of an enterprise information security plan.

With respect to its internal processes, ITSD completed a new strategic plan in FY 10, focusing on six major areas: Infrastructure, Research, Security, Business Services, Teaching and Learning, and IT Operations. The Strategic Plan is included as Appendix 1 to this report. ITSD also conducted a customer satisfaction survey this year, to which 160 faculty and staff responded. Fifty five percent of the respondents indicated that they were satisfied or very satisfied with the overall computing environment. Fifty eight percent indicated satisfaction with the services provided by ITSD. Telecom, email, wired network, desktop support, and web services received the highest satisfactory ratings. Wireless access received the highest dissatisfaction ratings. ITSD plans to use the survey as a benchmark for future ratings. Additionally, many individual departments initiated feedback mechanisms to get more regular input from their clients about their level of satisfaction with the service. ITSD upgraded the HEAT ticketing system and has implemented a self-service mode to allow customers to create and track their own service tickets.

Goals for FY 11

ITSD's Strategic Plan, shown in Appendix 1, outlines the major goals for next year. As the University lays out its new strategic plan this year, ITSD will be reviewing its goals to align them with the direction of the University.

Some highlighted projects in the next year:

Looking forward to the next year, the development of the Enterprise Architecture plan is the key initiative for ITSD. This plan will set the stage for almost everything else ITSD will undertake in the future.

The hiring of a new coordinator for research support (assuming this position is funded) as well as the addition of a new storage array will begin the development of a more robust support structure for University researchers.

ITSD will also be working with Facilities to explore the development of a 24-hour operations center to support mission-critical functions.

The pilot of the Virtual Computing Lab during FY11 has the potential to significantly enhance student and faculty access to computing resources while saving money on the upgrade of lab computers.

ITSD expects to work closely with the University's planners and building architects during FY 11 to insure that technology for the new campus buildings is appropriately integrated into the designs.

The development and implementation of a new University web site and a new content management system will be a high priority for the next year, as we approach the go-live date in the spring of 2011.

ITSD will work closely with UMass Online in the selection and implementation of a new learning management system.

With the successful completion of several "pilots" – ITSD Educational Technology will make available the following services to faculty – Classroom Capture, i>Clickers & Anti Plagiarism Software.

ITSD Strategic Goals and Accomplishments AY 09-10

For AY 09-10, ITSD established the strategic goals shown below in support of the University's goals. Following each goal is a brief report on the accomplishment of the initiatives related to each.

University Goals:
1. Increase student access, engagement and success
2. Attract, develop and sustain highly effective faculty
3. Create a physical environment that supports teaching, learning, and research
4. Enhance campus-community engagement

1. Communicate better and build partnerships, within IT and with customers and university community. *(Supporting UG 1,2,4)*
Take the lead in the development and implementation of the redesigned University web presence.
- ITSD's Director of Application Services, Linda Modiste, has taken on the role of project manager for the web re-architecture project. CIO Anne Agee is part of the executive steering committee for the project. Despite the setback of the collapse of the University's chosen vendor, the team was able to move the project to a new vendor, who has completed the strategic phase and is moving into the design phase as of June, 2010.

Roll out new ITSD web site in FY10.
- The new ITSD website (http://www.umb.edu/it/) was fully implemented during FY 10.
- Each department within ITSD updated content on its site.

Continue development of ITSD electronic newsletter.
- ITSD published three newsletters for faculty and two general newsletters during FY 10. See them online at https://www.umb.edu/it/about/news.

Explore the use of Facebook as a communication tool.

- The ITSD Educational Technology group made extensive use of Facebook and Twitter to share information on activities of interest to faculty. As of June 2010, the EdTech Facebook page has 129 fans.

Market IT services to university community
- ITSD has used its electronic newsletter and IT news as well as Facebook and Twitter and its revised web site to better market services to the University community.

In addition, ITSD conducted an overall customer satisfaction survey as well as instituting a number of departmental feedback mechanisms to improve ITSD's understanding of customer needs and expectations.

- 160 faculty and staff responded to the overall survey. Fifty five percent of the respondents indicated that they were satisfied or very satisfied with the overall computing environment. Fifty eight percent indicated satisfaction with the services provided by ITSD. Telecom, email, wired network, desktop support, and web services received the highest satisfactory ratings. Wireless access received the highest dissatisfaction ratings. ITSD plans to use the survey as a benchmark for future ratings.
- ITC implemented a presentation room booking and usage survey to collect feedback from clients. The survey was first used in Fall 2009 in an effort to improve service where necessary. About 88% of clients who responded to FA09/SP10 surveys were "very positive" about the service they received from ITC with either booking or using the presentation rooms.
- ITSD Service Desk sent out bi-weekly survey to collect clients' feedback. The survey results showed 28.8% of the clients called the service desk for software related issues, followed by emails issues (25.4%) and hardware related issues (22.9%). Roughly 60 % of the clients who responded to the survey were "very satisfied" with the services ITSD provided.
- The Classroom Technology group conducted a survey of faculty teaching in TEC 2 classrooms to solicit feedback concerning equipment usage and support.

ITSD also supported the University's community outreach efforts by working with several high school interns during the year and by hiring a student in the Year Up program for an extended internship.

ITSD participated regularly in University events such as Open House, Welcome Day and orientation programs for new students and faculty.

ITSD provided support for more than 470 special events on campus this year as well as providing extensive AV support for events such as Convocation, Welcome Day, the University Gala, the Chancellor's University Address, Community Breakfast, and Commencement. Additionally, ITSD provided AV support for external clients of the University, including the US Senate Debate, the Boston City Council Debate, the American Cancer Society, and the Massachusetts Department of Health and Finance.

ITSD Installed HD Videoconferencing System for in Support of President's Office Initiative and purchased New Digital Signage Hardware and Software System.

ITSD supported over 36 Broadcasts from our TV Studio to NECN and expanded use of Verizon Fiber Optic Connection to support studio broadcasts to Voice of America, CNBC and BBC.

2. Continue to improve the campus infrastructure. (Supporting UG 1,2,3)
Work with a consultant to develop Enterprise infrastructure plan, including plan for moving data center to new location.
- As of June, 2010, after issuing an RFP, rating the responses and interviewing the finalists, ITSD is in the final stage of selecting a vendor to carry out the Enterprise Architecture planning. The process will take 8 to 12 months to complete.

Implement plan for providing wireless coverage throughout the campus.
- The ITSD Communications and Infrastructure team has replaced all existed wireless access points with updated models providing better coverage. The team is in the process of mapping gaps in wireless coverage in order to determine where to place additional access points. Wireless coverage will extend throughout all buildings on campus by the end of summer, 2010.

Finish cabling remaining campus buildings.
- As of June, 2010 ITSD Communications and Infrastructure has completed rewiring the Quinn Administration Building, the Healey Library (with the exception of the 10th floor) and the campus data center. McCormack Building rewiring starts in mid-July. Wheatley Building rewiring will begin early calendar year 2011.

Pilot the McAfee data protection suite to improve information/data security.
- ITSD has installed and rolled out the McAfee EPO suite, which includes virus protection, data loss prevention, and end point security. This endeavor replaces the end of life machine and older software with new hardware and the latest updated software with the new features. Part one of the rollout has occurred and the data loss prevention and the end point security should be rolled out by the first quarter of FY11.

Expand network access controls for the wireless and wired network to improve network security, as well as prioritizing business traffic on the network and insuring access to appropriate bandwidth.
- In May, 2010, ITSD Communication and Infrastructure put a new bandwidth shaping device into production. This device will ensure business-related bandwidth is prioritized and guaranteed. Network Access Controls will start to be implemented late summer, 2010.

Fully develop plan for addressing storage needs of the University, including business file storage, research storage, email archiving, and document management, file sharing, and collaboration tools.
- A plan for addressing storage needs has been developed and is currently being executed as follows:
    - Business File Storage, File Sharing – New storage array (July 2010) combined with existing storage offerings
    - Research Storage – New storage array (July 2010)
    - Email Archiving – Currently investigating archiving options (implementation to completed early calendar year 2011)
    - Document Management – Xythos

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      o   Collaboration Tools – Xythos, Intercampus tunneling

Document and advertise options available to departments for server hosting in the campus data center.
- SLA's and hosting options have been developed and documented.

Upgrade Exchange email servers.
- Currently exploring Exchange email options (Recommendation by July 2010, implementation early calendar year 2011)

Continue to build disaster recovery and business continuity infrastructure.
- Buildout of Telecomm Switch Room as backup datacenter (ongoing)
- Exploring Worcester datacenter as disaster recovery option

Complete transition to new voice mail system.
- Late calendar year 2010

Complete transition to Paetec telecommunications services.
- Completed in November 2009

Explore using internet trunking for telecommunications (cost savings)
- Exploring different options. Recommendation late calendar year 2010.

Develop strategy for fax servers on campus, desktop faxing capability, and elimination of fax machines for cost savings and greater data security.
- Implementation early calendar year 2011.

3. Improve planning. (Supporting UG 1,2,3)
Undertake strategic planning exercise in FY10, including a customer satisfaction survey which has not been done in several years. The enterprise infrastructure plan to support the Master Plan will also be part of this strategic plan.
- ITSD completed a five-year Road Map for IT this year, which is attached as an appendix to this report. The Road Map focuses on six areas: Infrastructure, Research, Security, Business Services, Teaching and Learning, and ITSD Operations. The Road Map was developed collaboratively across the ITSD units. It will serve as a talking point for ITSD to further develop its plans through consultation with the University's business and academic units during the upcoming year.
- ITSD conducted a customer satisfaction survey this year, which is attached as an appendix to this report. Additionally, individual departments within ITSD added or expanded their customer feedback tools this year in order to improve their understanding of customer needs and expectations. Aggregated results from these tools are also included as an appendix to this report.
- As of July, 2010, after issuing an RFP, rating the responses and interviewing the finalists, ITSD has selected a vendor to carry out the Enterprise Architecture planning. The process will take 8 to 12 months to complete.

Implement the disaster recovery tools and business continuity tools in CPO tracker software.

- ITSD has worked with the University's Coordinator of Safety Planning to implement these tools and to upload disaster recovery and business continuity plans into CPO Tracker.
- ITSD has completed a draft IT Services Catalog which forms the basis of recovery and continuity planning.

4. Improve organizational development. (Supporting UG 1,2,3)
Introduce additional staff recognition events.

- ITSD instituted a Customer Service Award in 2009, in addition to the CIO Award for Excellence that was instituted in 2008. More than 100 nominations were received from the University community for the first award, which was given to Andy Arcadipane during Customer Service week in October 2009.

Begin to implement a change management procedure to improve communication among departments and lessen service interruptions due to changes in technology.

- A work group was set up to begin development of definitions, procedures and standards for change management. This work will continue in the next year.

5. Support teaching and learning. (Supporting UG1, 2)
Implement additional modules of Xythos to provide enhanced capabilities and improve integration of Xythos with MS Office applications.

- The plug-in module that integrates Xythos with MS Office was installed in December 2009. The service has been running in "test" mode on several computers within IT. ITSD has noted some performance issues and is working with the vendor to resolve these before making this module available to all users.

Introduce support for clicker technology with the purchase of 3 sets of clickers and transmitters, one each for McCormick, Science and Wheatley buildings.

- ITSD has trained and supported over a dozen faculty during its pilot of i>Clickers. Professor Marietta Schwartz, has written about the impact clickers have had on teaching and learning in her blog, at http://blogs.umb.edu/mariettaschwartz/2009/01/26/clickers/.
The i>Clickers units are currently lent out through Classroom Technology Support, but, as usage grows, ITSD plans to provide a base unit in all TEC II classrooms.

Work with faculty and University Communications to add content to the University's OpenCourseWare and iTunesU sites.

- ITSD staff member Eileen McMahon obtained a grant from the Boston Foundation to add material to the Open Course Ware site focusing on the needs of Boston Public School teachers. Twenty four new courses were added this year, bringing the total to 48.
- ITSD expanded iTunes U with the development of a private space for course materials and private authentication. (See user survey results in Appendix 2).
- The iTunes U website was enhanced and course creation forms and terms of use policies were developed (www.itunesu.umb.edu). Content was enhanced by
  - Importing Open Course Ware content to iTunes U

- o Adding course introductions and public lectures and events to the University's iTunesU sites
- o Coordinating iTunes U postings with YouTube and Blackboard
- o Creating Camtasia Relay profile to upload screen captures directly to iTunes U courses.
- o Developing content for Hispanic Studies and other languages in iTunes U.
- o Developing graphic elements and templates for iTunes U

Build out and advertise the new Faculty Development Center in Healey Library.
- ITSD converted the former Media Center (Healey 3rd floor) to the new Faculty Development Center (Digital Learning Studio/DLS) last summer, adding new furniture and upgraded media production computers. Instructional designers from the lower-level of the library were relocated there and now work as a team with the media staff. This has allowed ITSD to offer a true one-stop place where faculty can get support. An open house was held on October 15th, 2009 and was well attended. The DLS hosts events such as faculty showcases, training workshops, conference sessions and one-on-one consultations with faculty on instructional design and media production.
- The DLS has provided support for the introduction of new tools such as wikis and SCOLA. Wikis have grown in use by over 300% in the past year, to 485 Wikis and 3294 users campus-wide, with programmatic adoption in the Writing Program and in the CSM Freshmen Support Communities.

Upgrade computers in Blue and White labs
- ITSD purchased 65 Dell Optiplex 380 Dual Core computers for replacement of the current 4-5 year old computers in the Blue lab (36), White lab (22) and Staff offices (7). Installation will be completed by the end of summer 2010.
- A Dell PowerEdge R710 Server was also purchased to allow for replacement of the current "NETAPPS" server which houses all of the applications running in the general use labs (GUL).
- Purchased a new laptop cart for Mobile classroom use, this will allow for shorter charge time and convenience in transporting the laptops from one location to the next.

Purchase new equipment for Adaptive Computing Lab
- The software and hardware in the Adaptive Computer Lab (ACL) is four years old or more. The current assistive technology in the ACL was designed to operate with Windows XP and some do not function with Office 2007. As the software becomes compatible, ITSD will upgrade/replace.
- Purchased a new scanner for use in the Adaptive lab.
- Purchased a number of floor lamps to increase lighting in the Adaptive lab and 3 transportable lamps available for use as needed.
- A number of other items requested by ACL users were purchased: Jelly Bean Switch, Buddy Buttons, IntelliSwitch (transmitter/USB Receiver), Big Red Switch and Discover Pro.
- ITSD continued its ongoing collaboration with the Ross Center for Disability Services to support students through the deployment of adaptive technologies, including the acquisition and deployment of IP speakerphones to serve access needs of students with

disabilities requiring captioning by remote caption writers for on-campus and remote synchronous course meetings.

Work with UMOL to replace/upgrade synchronous communication tool (currently Wimba)
- ITSD worked closely with UMOL on the evaluation of synchronous communication tools. . After a thorough review (RFP, Vendor Presentations, Evaluations, etc.) the committee recommended continued use of WIMBA for this purpose.

In addition, ITSD
- Hosted its 4th annual Educational Technology Conference bringing over 100 faculty and area guests to learn and share ideas on teaching with technology.
- Continued to upgrade and expand the array of software applications available to faculty, staff and students. Applications such as SPSS, MatLab, Mathematica, NVIVO, Adobe Acrobat and MS Office Suite are available. In the DLS, faculty have access to Camtasia and Captivate (lecture capture and recording software), Jing, Adobe Creative Suite CS 5 (Photoshop, Illustrator, InDesign, etc.)
- Facilitated the migration of two WIMBA Classroom production staff to design work with the Instructional Support team.
- Expanded the use of classroom capture technology outfitting additional learning spaces with appropriate technology and piloting several different methods of classroom capture. The Digital Learning Studio staff managed a pilot of Camtasia including training, and individual consultations with faculty during the Fall '09 and Spring '10 semesters with over 30 faculty. (See faculty survey results in Appendix 2). Because of the popularity of this service, ITSD upgraded the Camtasia Relay system so it can process up to 3 simultaneous recordings. ITSD also installed Accordent Classroom Capture System in Media Auditorium, H-LL=3507, installed wireless microphones in TEC 2 Rooms to support Camtasia Classroom Capture recording, contracted withscreencast.com to host streaming video screen capture recordings of faculty lectures and implemented a Camtasia Relay Server. (See user survey in Appendix 2.)
- Piloted Wikispaces for faculty courses. Faculty developed one to four wikis to post course syllabi for students, and provide a course forum where students could   communicate with them and other students outside the classroom in the exchange of ideas and the production of academic work. (See Faculty survey results in Appendix 2).
- Developed online support tools for wikispaces https://www.umb.edu/elearning/tools
- Set up additional printers around campus to enhance student access to print services.
- Continued training for MS Office 2007; began training development for Windows 7 and Office 2010.
- Converted H-4-031, M-2-404 and M-2-423 into TEC 2 Classrooms
- Converted a Conference Room at the State Archives Building into a TEC 2 Classroom
- Upgraded AV Equipment in H-LL-3505
- Upgraded Lighting System in TV Studio
- Replaced some Digital Signage CRT Monitors with larger LCD Flat Panels

- Provided Project Management for Athletics AV Installations in Student Lab and Conference Room, Computer Science Classroom AV Installation, Enrollment Services AV Installation, Beacon Fitness Center AV Installation and Marine Science Webcam Installation.

6. Support research. (Supporting UG 2)
Continue to support the University's participation in the Boston High Performance Computing Consortium.

- Representatives from ITSD as well as a faculty member and the Vice-Provost for Research attended the January meeting of the Boston High Performance Computing Consortium. In order to participate in consortium activities, UMass Boston needs to join the InCommon Federation. ITSD has initiated this process.

Expand the use of the University's fiber link in order to provide showcase opportunities for University researchers/content experts on NECN and other media outlets.

- Expanded use of Verizon Fiber Optic Connection to support Studio Broadcasts to Voice of America, CNBC and BBC
- Installed HD Videoconferencing System for in Support of President's Office Initiative
- Supported Webinars and Video and Skype Conferences in support of faculty and students

In addition, ITSD

- Sent several staff members to training on grant writing
- Worked with ORSP to improve the creation of monthly reports
- Facilitated data access to language and writing center faculty researching student perceptions and grant writing to improve student outcomes related to online tutoring program mediated via online synchronous conferencing systems.
- Began research work in collaboration with faculty regarding models of online learning in three areas, role play in synchronous conferencing, accessibility tools for adaptive learning, and international marketing studies involving university students from multiple nations and industries local to each participating university.

7. Improve and streamline business processes for IT and the University. (Supporting UG 1,2)
Enhance the HEAT service management system with additional modules and functionality.

- Upgraded HEAT hardware platform and installed a new enterprise SQL server
- Upgraded HEAT software from v 8.4 to v 9.0.2 and purchased Survey, Knowledge Management and Asset Discovery modules
- Implemented HEAT self-service
- Implemented SMART reporting server
- Added functionality for tracking faculty consultations in Ed Tech group

Develop and begin to implement a formal security program for the University including policy development, awareness and training, workstation security, server security, network security, incident handling, compliance and disaster recovery.

- UMass Boston's Security Officer has worked with other UMass Security Officers to draft a formal Information Security Program document for use by all campuses.
- ITSD has worked with the Information Security Council to develop guidelines for server security, desktop security, laptop security, and paper document security.

- ITSD has developed a brochure and posters on information security as well as adding training classes for staff and providing training sessions for individual departments in the University.

Expand the X25 Space Analysis system to support the Campus Center, Special Events and Revenue Generation (invoicing, etc)
- ITSD worked closely with Facilities to populate R25 with complete data for University spaces
- Implemented the X25 Space Analysis System (SaaS); available to unlimited users, this product sits on top of R25 data snapshots.
- Worked with UITS on the physical move of R25 to new UITS data center
- Created R25 data snapshots for all users of X25
- Planned and implemented onsite training for all business users of X25: Registrar, Customer Service, Facilities, Provost, IT, Campus Center, Special Events, Institutional Research

Continue close association and campus Project Management for all UITS initiatives:
- IdM Identity Management
- BI Business Intelligence (Summit Reporting)
- Peoplesoft HCM additional milestones and module integration
- Peoplesoft SA upgrade and module expansion
- Peoplesoft FIN (Finance) module expansions

• Continue to expand and support additional campus applications and departments.
- New Web Projects as requested across UMass Boston campus departments.
- Web-Rearchitecture UMass Boston wide Project with vendor assistance
- Xythos Document Management Scanning and Workflow capabilities
- Began document and records management project with ImageNOW.
- Installed new Scantron system.
- Worked with Provost's Office to find a replacement for AFR system for faculty reports.

Strengths and Weaknesses

ITSD is blessed with a diversity of talent and many staff who are able and willing to experiment to with new technologies in order to refine and enhance the services offered by their units, as witnessed by the many new services we were able to pilot or implement this year—wikis, lecture capture, ERP upgrades, mobile web site, for example. Unfortunately, the numbers of staff in some areas, or rather the lack of numbers of staff, still hinders ITSD's ability to provide the level of service that the University community needs and wants. The areas of web support and research support are two examples in addition to student support, where we also have many gaps in what we can offer to students. Other projects, such as wireless enhancement and wiring upgrades, move slowly because there are few people to do the work. Since technology is an area that changes rapidly, ITSD has made great efforts to support professional development whenever possible and has leveraged online training and local training opportunities extensively, as indicated in Appendix 3 of this report.

Working with Other Campus Units

As this report indicates, ITSD has made great efforts to work with and support UMass Boston's academic and business units. One way or another, ITSD has worked with almost every unit on campus in the last year. This work would be enhanced by having access to other unit's annual goals and reports, which up to now have not been readily available. ITSD has posted its most recent annual report on its web site and intends to post the current report and the strategic plan there as well.

Aspirational Peer

ITSD has identified George Mason University's IT Unit as an aspirational peer. (http://itu.gmu.edu)

GMU is regularly cited as a leader in almost every area of IT organization. Of particular interest is George Mason's expertise in strategic planning. The IT units regularly prepare plans and assess planning efforts, as this link indicates (http://doit.gmu.edu/documents/Division%20of%20Instructional%20Technology%20Annual%20Report%20FY%202009.pdf)

ITSD has recently completed its first effort at strategic planning and hopes to build on and improve that effort by following examples like this.

Additionally, GMU has done an excellent job of documenting policies and procedures and communicating them to the University community. This is also an effort that ITSD hopes to emulate.

Appendix 1:
ITSD Road Map/Strategic Plan FY 2010-FY 2014

Key:
Priority: U = Urgent; I = Important; D = Desirable
Current Status: C = Completed; O = Ongoing; P = Pending

Area One: Infrastructure

As the University moves forward with its 25-year Master Plan, which involves the removal of key pieces of the existing campus infrastructure, ITSD must plan for a new infrastructure design to support the instructional and research goals of the University.

Priority	Initiative	Status	Notes
U	**1. Enterprise Architecture Plan** **By 2014, ITSD will have developed and begun to implement an enterprise architecture plan for infrastructure to support the University's 25-year master plan.**		
	• Develop RFQ for enterprise architecture consultant. Complete RFP process by spring 2010.	C	FY10
	• Start consulting project early summer.	P	FY11
	• Complete plan by spring 2011.Work with Facilities to plan implementation of EA plan		
	• Explore alternative data center locations, Worcester, etc. Contract w/ vendor for implementation of Phase I.		
	• New Academic Building completed.		FY12
	• Plan redeployment of resources from existing data center to new data center location.		
	• New Science Building completed; Complete migration of current data center to new data center.		FY13
	• Contract vendor for implementation of Phase II of EA plan		FY14
U	**2. Wireless Network Enhancement** **By 2014, ITSD will have completed the build-out and enhancement of the University's wireless network**		
	• Design, plan and procure equipment for wireless overhaul.		FY10

Priority	Initiative	Status	Notes
	• Replace existing wireless footprint and augmenting coverage lapse areas.		
	• Complete wireless overhaul of by adding 75 new access point throughout campus (inside and outside spaces)		FY 11
	• Complete N-channel migration and ENAC (network access control) implementation		
	• Outfit new academic building with wireless N technology (all classrooms, labs, common areas)		FY 12
	• Outfit new academic building with wireless N technology (all classrooms, labs, common areas		FY 13
	• Ensure secure wireless access is available from all areas of campus		FY 14
U	**3. Storage Provisioning** **By 2014, ITSD will provide storage for the University's academic, research, and business needs using an appropriate mix of local, hosted and cloud services.**	P	
	• FY 10: Design, plan and implement a multi-terabyte scalable storage offering for faculty and staff (including front-end processing).		FY 10
	• Explore cloud-based storage for extreme storage needs. Make storage resources and annual budget item.		FY 11
	• Collaborate with institutions for shared storage.		
	• Add storage modules as needed to support University's mission and goals.		FY 12
	• Ensure Internet and LAN-based bandwidth resources are available for the transfer of large datasets.		
I	**4. Telecommunications** **By 2014, ITSD will provide unified messaging services to all areas of the University as well as support for mobile computing and Voice over IP.**	P	
	• Design and plan for the introduction of VoIP, centralized fax services, Voicemail feature set activation and Unified Messaging (Exchange 10)		FY 10
	• Implement VoIP in select locations, rollout centralized fax services, activate voicemail feature set and integrate Exchange 10 with voicemail system.		FY 11

Priority	Initiative	Status	Notes
	• Build out mobile computing infrastructure and support		
	• Install PBX in new datacenter, outfit new academic building with Voice over IP.		FY 12
	• Outfit new science building with Voice over IP		FY 13
I	**5. Email** **By 2014, ITSD will offer modern e-mail services for students, faculty and staff.**	P	
	• Design, plan and implement a cloud-based solution for student email and Exchange 10 for faculty and staff.		FY 10
	• Integrate Unified Messaging with campus telecommunications systems		FY 11
	• Plan for the addition of new faculty and staff resulting from new academic building		FY 12
	• Plan for the addition of new faculty and staff resulting from new science building		FY 13
I	**6. Active Directory Consolidation** **By 2014, ITSD will manage one central domain using Active Directory.**	P	
	• Design, plan and implement Active Directory 2008.		FY 10
	• Plan and implement migration of orphan domains to central IT AD 2008 domain.		FY 11
	• Design and implement a secure methodology for inter-campus and inter-institutional federation.		
	• Design and implement group policies (security) for newly integrated domain member.		FY 12
	• Outfit new buildings with one domain structure.		
D	**7. Virtualization** **By 2014, UMass Boston will have 90% of campus-based applications virtualized and will maximize the use of virtualization for disaster recovery.**	O	
	• Virtualize new and existing environments where possible.		FY 10
	• Plan for purchase of VM hardware and software as environment grows.		
	• Virtualize all new applications where possible.		FY 11

Priority	Initiative	Status	Notes
	• Establish cadre of VM talent on staff.		
	• 50% virtualization by end of 2011 (goal)		
	• 75%-90% virtualized for all applications.		FY 12
U	**8. Network Security** **By 2014, ITSD will have a robust network security infrastructure in place.**	O	
	• Implement IPS/IDS for select network environments. Rollout EPO and associated modules.		FY 10
	• Implement ENAC (network access control) on wireless environment		FY 11
	• Conduct network security audit		
	• Enhance physical security for all IT areas		
	• Outfit new building with ENAC for LAN and wireless-based communications		FY 12
D	**9. Network Consolidation** **By 2014, UMass Boston will have a consolidated network system.**	O	
	• ITEA will identify target networks for consolidation (i.e. Energy Management, Parking) and produce a plan for consolidation		FY 10
	• Develop a transitional plan with various network owners. Identify opportunities for new technology integration		FY 11
	• Outfit new buildings with consolidated network topology. Construct and staff a 24/7/365 Network Operations Center to monitor consolidated network activity.		FY 12

Area Two: Research Support

As the University continues to grow its research profile, ITSD needs to have a more coherent and comprehensive approach to providing support for research.

Priority	Initiative	Status	Notes
	1. Research Support Plan		

Priority	Initiative	Status	Notes
	By 2014, ITSD will have a well-developed plan for research support, laying out budget needs and priorities.		
	• Study research support structure at peer universities		FY 10
	• Request Research Coordinator position for FY 11		
	• Hire a Research Coordinator to assess campus research requirements and implement strategies for research support		FY 11
	• Work with Healey Library to interview faculty research to better understand support needs.		
	• Develop plan for Faculty Research Liaison program in conjunction w/ Healey Library		
	• Implement Faculty Research Liaison program		FY 12
	• Foster research relationships with intercampus and external research entities		
	• Develop research support staffing model (programming, database, project management and web support personnel)		
	• Request additional research support position for FY 13		
	• Hire additional research support position		FY 13
U	**2. Research Infrastructure** **By 2014, ITSD will provide appropriate infrastructure to meet University research needs.**	O	
	• Purchase and install multi-terabyte storage infrastructure for research needs		FY 10
	• Expand storage infrastructure to further accommodate research needs		FY 11
	• Work with departments on research grant fulfillment needs (HPC, storage, staffing) Establish dedicated research wireless network		
	• Explore options for research storage support in the cloud and/or in Worcester Data Center		
	• Augment on-campus research infrastructure with research computing footprint in the new Holyoke Supercomputing Facility and consortium-based shared resources		FY12
U	**3. Integrated Science Complex** **By 2014, ITSD will establish the Integrated Science Complex (ISC) as a core research facility.**	P	
	• Work with ITEA consultants and UMass faculty to develop ISC infrastructure architecture plan		FY 10-FY 11
	• Determine operational requirements (staffing, service levels) to support research in the ISC		FY 11

Priority	Initiative	Status	Notes
	• Purchase research support equipment for ISC (HPC, storage, bandwidth)		FY 12
	• Apply research support staffing model.		

Area Three: Student learning and effective teaching

IT provides support for student learning and teaching effectiveness. As the university opens new academic buildings, ITSD has additional opportunities to enhance teaching and learning at the University.

Priority	Initiative	Status	Notes
I	**1. LMS** **By 2013, working with UMass Online, UMass Boston will select and implement (training, data migration, documentation, etc) a new learning management system that will enhance teaching and learning.**		
	• RFQ evaluation committee members identified	O	FY 10
	• RFI (February – April) **-- Survey the users to identify the needs; the results will be used to build the RFI**	P	FY 10
	• RPC (request for public comment) – May - July	P	FY 10 -- Via UMOL's Wiki
	• RFB (?) – July - September	P	FY 11
	• Product Demos - October	P	FY 11
	• Selection of LMS – November – December	P	FY 11
	• Design/Installation/Testing	P	FY 11
	• Pilot	P	FY 12
	• Training / Documentation	P	FY 12
	• Go Live	P	FY 12
I	**2. Virtual Computing Lab** **By 2014, ITSD will offer faculty, staff and students the ability to access lab resources (software applications) from any computer that has access to the web – both ON and Off campus.**	O	
	• Learn from George Mason and North Caroline State University how the app works—conference calls; testing the system	O	FY 10
	• Site visit to George Mason University to see and learn firsthand how the system works; issues faced, etc.	C	FY 10
	• Define skill sets that are needed to build and support the application	P	FY 10 – Technical and imaging
	• Allocate staff resources in building the system and have them work with staff from UMD and other campuses	P	

	• Build prototype with assistance from John Savage	P	
	• Determine pilot group (faculty class maybe an option) and build images with assistance from lab staff	P	FY 11
	• Participate in the pilot	P	
	• Evaluate "pilot"	P	Build an evaluation document
	• Determine best hosting location	P	Worcester/UMD?
	• Have UMB IT staff (Systems and Lab) assist in building and creating the images for wider roll-out	P	FY 12
	• Provide training and documentation	P	FY 12
	• Market the services	P	FY 12
I	**3. New Academic Buildings** **By 2014, the University will have two new buildings – an integrated science complex and a general academic building. I.T. will assist in the planning of the technology, including real-time support, to enhance teaching & learning.**		
	• Science –Design of classroom, labs, social spaces	P	FY 2011
	• Meetings with Architect, faculty, students	P	FY 2011
	• Science - Technology in classrooms	P	FY 2011
	• Review the technology needed for each space	P	FY 2011
	• Order equipment	P	FY 2011
	• Install and test equipment	P	FY 2011-12
	• Science - Staffing requirements	P	FY 2011
	• Determine staffing numbers and costs	P	FY 2011
	• Hire staff	P	FY 2012
	• Train staff on new technology and spaces	P	FY 2012
	• Renovation Wheatley & McCormack - Classroom design	P	FY 2011
	• Renovation Wheatley & McCormack - Technology in classrooms	P	FY 2011
	• Gen Academic –Design of classroom, labs, social spaces	P	FY 2012
	• Meetings with Architect, faculty, students	P	FY 2012
	• Gen Academic - Technology in classrooms	P	FY 2012
	• Review the technology needed for each space	P	FY 2012
	• Order equipment	P	FY 2012
	• Install and test equipment	P	FY 2012-13
	• Gen Academic - Staffing requirements	P	FY 2012
	• Determine staffing numbers and costs	P	FY 2012
	• Hire staff	P	FY 2013
	• Train staff on new technology and spaces	P	FY 2013
I	**4. Digital Learning Studio** **By 2014 the Digital Learning Studio (faculty support center) staffed by instructional designers, media specialists and educational technologists will provide**		

	faculty the support needed to use technology to enhance teaching -- both face-t-face and online. The DLS will offer a core set of programs for faculty each semester.		
	• DLS Design : Research new cubicles to add to DLS and provide more office space for consultants, purchase new software	O	FY 10
	• Evaluate all DLS software and hardware , and	O	
	• Prepare plan/budget for upgrading software and new acquisitions	P	
	• New purchases and upgrade digital Learning Studio Software and furniture, and installation through cooperation of LMS manager	P	FY11
	• Establish staff and client Policies and procedures based on new services, upgrade website, and communications to reflect changes. Hire full-time media specialist to work with faculty. • Based on need analysis and feedback from Faculty Liaison, Instructional Designers and other members design and develop workshops and other events that promote the use of technology	O	FY10, 11, 12, 13, 14
	• Publicize new list of services, and offer presentations and workshops to faculty	O	FY 10, 11, 12, 13, 14
	• Provide faculty support in video editing software in the form of workshops and on-line tutorials • Enable MACX streaming video server		FY 14
	• Provide faculty working on A/V materials back up their work or access the files from their offices.		FY 15
I	**5. Emerging Technologies** **By annually reviewing technologies that can enhance teaching and learning, we will be offering the best resources to our faculty and students. By 2014, we will offer new media technologies such as iTunesU, Camtasia/Classroom capture, i>Clickers, etc.**	O	
	• **iTunesU:** Develop iTunes U so that faculty can host content in a secure manner • work with web services to set up workflow for private authentication	P	FY10
	• Pilot Private authentication—set up 5 courses in iTunes U to test private authentication • Feedback from pilot • Improve workflow so that it is less manual	P	FY10-11
	• Increase content of iTunes U • Develop best practices for rolling out private side of iTunes U to all faculty • Roll out iTunes to all faculty	P	FY11
	• Provide workshops and online tutorials for iTunes U • Evaluate and improve services	O	FY12
	• Continue to market and support services • focus on IT newsletter, ITC workshops, on-line tutorials	O	F13
	• Reevaluate workflow model and best practices; final report and improvements	O	FY14

	• **Camtasia:** Pilot classroom capture system – Camtasia Relay / Camtasia Studio—Fall/spring pilots; evaluation of software, technical support, and potential of integration with iTunes	C	FY 10
	• Decision to continue with Camtasia relay or pilot new class capture system; renew license or look at Echo 360; File evaluation , recommendations report	C	FY11
	• Develop and distribute training materials, offer workshops	P	FY12
	• Market software to increase users, focusing on IT Newsletter, ITC workshops, on-line tutorials	O	FY13
	• Reevaluate workflow model and best practices; final report and recommendations	O	FY 14

	• **I>clicker**: Pilot i>clicker
	   o Install i>clicker base stations in Tec II and Tec III classrooms.
	   o Pilot i>clickers with x# faculty.
	   o Research integration of i>clickers with blackboard
			FY 10

	• Expand user base of i>clicker • Roll out i>clickers as service integrated with blackboard		FY11
	• Expand audience of faculty for services • Provide workshops to faculty on service		FY 12
	• Feedback from faculty in pilot; surveys and evaluation		FY 13
	• Improve services and support; improve workshop and support info		FY 14

Area Four: Business Services/Campus and Enterprise Application Support

UMass Boston depends heavily on local campus applications as well as enterprise applications in order to conduct its business effectively and efficiently. ITSD will continue to upgrade and enhance locally supported applications and work with UITS to handle upgrades and enhancements of enterprise applications smoothly.

Priority	Initiative	Status	Notes
I	**1. Series25 (R25, Schedule25, X25, 25Live)** **By 2013 ITSD will provide an expanded suite of space planning, calendaring, and special event handling applications, fully web enabled, moved to a SaaS (Software as a Service-Cloud Computing) architecture at CollegeNET moving our current R25 (Resource25) to Live25. X25 will be a key tool in the Master Plan for forecasting and planning for all space.**		
I	Space Inventory. Complete the inventory of all space on campus, including all attributes needed for space assignment and utilization analysis for X25 analytics.	O	FY 10 – X25 Implemented, Training Conducted, Product in use across 8 UMass Boston

Priority	Initiative	Status	Notes
			Departments
I	Class Scheduling. Complete the analysis of the classroom/lab/other scheduling paradigm to expand automated optimum space assignment through Schedule25 to near 100%.	O	FY 11 – Continue to tighten the data validity and completeness with assistance of Facilities
U	25Live implementation. Plan and execute the conversion from the R25 to the 25Live product, which will be entering its end of life. R25 enhancements will come to an end and we will move to a fully Web 2.0 environment. This will allow additional functionality, customized calendar publishing, a robust support model, in the SaaS architecture at CollegeNETs hosted Data Center, integration with social networking sites, etc.	P	FY11 – Convert to 25Live
I	X25 expansions. Continue usage and establish business procedures and regularly schedule system usage. Establish business outputs and system cycles to achieve them. Establish special requirements in support of the campus master plan.	O	FY12 - Align X25 with the needs of the Master Plan
I	25Live event registration automation. Plan and execute the implementation of this function in 25Live. Establish policies, standards, business procedures, and guidelines for revenue and non-revenue event registration via the web.	P	FY12 - Automate registration, invoicing, additional enhancements
D	Digital Signage. Plan and execute the implementation of specialized digital signage driven by the Series25 event management system. Provide data to LCD/LED panels at key meeting rooms with event information, similarly signage at building entrances with event directional information	P	FY12 – Event Digital Signage
U	**2. Web Re-architecture Project** **By 2014, UMass Boston will have completely re-architected, designed, and deployed a new external facing web presence to grow with the aspirations of the university as well as deploying a fully functional, robust, and feature rich enterprise wide Content Management System (CMS) for the entry of all content (visual, audio, and written) into our website.**		
U	• Commence engagement with vendor • Internal Project Roadmap (12 – 24 months) • Content Inventory & Ownership • Internal UMass Boston resource allocation • Engage team & assignments of work breakdown • Selection of CMS • Commence phased moratorium on existing work load • Develop stakeholder inventory/communications plan • Design distribution of Project information • Implement mobile web site	O	FY 10 – Commence Phase I Strategy Phase for Web Redesign Project
U	• Continuation of vendor work • Continuation of internal Project plan & activities • Implement moratorium on existing workload • Alignment of internal IT & Marketing resources	O	FY 11 – Design, Development, initial deployment activities

Priority	Initiative	Status	Notes
	• Acquire cross organizational resources for content review • Design & acquire new hardware infrastructure • Installation of CMS • Commence training program design • Expand the mobile web site • Commence integration with 25Live and/or R25 • Initial go live • End of initial vendor engagement		
U	• Continuation of internal Project plan & activities • CMS administrator role • Continued training • Content conversion phases • Commence intranet study • Continue to address Web Services team work orders (normal work load re-introduction and governance) • Training • Integration of 25Live • Intranet planning, development, and design • Continued mobile considerations and presence	O	FY 12 – Continuation of implementation, expansion of mobile site, expansion to meet growing needs of the University and its mission
I	Work will be determined dependent upon internal resources and requirements as the Web Rearchitecture project winds down, and we return to a business as usual support model and the development of a fully functional intranet for all internal business departments. Continue to integrate with new technologies to meet the needs of faculty, students, and staff and learning technologies. Commence ongoing support model for umb.edu and the CMS, providing upgrades, service provisioning, and operation support for all departments of UMass Boston	P	FY 13 – Continuation of intranet implementation, continued support of web technologies to meet continued needs of the University and its mission
I	We return to normal web support activities for umb.edu and a UMass Boston intranet and activities to support the CMS.	C	FY 14 – Redesign Project Ends
I	**3. Title III Grant: Transfer Student Portal** **By 2012 ITSD will have deployed the Title III granted Transfer Student Portal. It will be integrated at the appropriate time into the Web Redesign project architecture to best align the benefits with the mission of UMass Boston in attracting potential students from feeder schools such as Community Colleges and High Schools and other institutes of learning.**		
I	• Acquisition of project resources for development of the portal and its content. • Completed the acquisition of all resources, commenced development of the portal and content, and commenced the design phase.	O	FY 10 – Grant Years 1/2

Priority	Initiative	Status	Notes
I	• Development of portal and initial content. • Preparations for go live.	O	FY 10/11 - Grant Years 2/3
I	• Implementation of baseline portal along with considerations of activities related to the Web Redesign project and its status • Integration into Web Rearchitecture project • Integration with USelect (Course Evaluation System) • Development of access control methodologies for true "portal" user experience (user profiles). • Additional integrations with Admissions processing.	O	FY 11/12 – Grant Years 3/4
I	• Complete project and integrate with UMass Boston web presence with consideration of both mobile and traditional web architectures • Grant funding ends • Realign resources to ongoing work (content and development)	C	FY 12/13 – Grant Years 4/5
	4. Enterprise Applications (UITS Initiatives) **By 2014 and beyond, ITSD will continue to manage the projects and implement the large number of UITS BDL initiatives on the part of the UMass Boston campus in support of enterprise-wide applications, including PeopleSoft, document and records management, business intelligence, and Identity Management.**		
U	Continue to align UMass Boston ITSD resources with UITS on the planning and delivery of all ERP (PeopleSoft) applications and additional enterprise wide applications and services provided to UMass Boston by UITS. **Human Capital Management (HCM):** • Employee Self Service – expansion of functionality including voluntarily waiving the print of pay advice • Manager Self Service – expand time and labor functionality to include student employees • eLearning – begin research on PeopleSoft eLearning application and deployment issues **Finance/Grants:** • Expense Self Service – deployment of the finance 8.9 functionality to enable university travelers to submit their expense report on-line **Identity Management (IdM):** • The security umbrella will provide the highest level of security and single sign-on (SSO) capabilities across major ERP applications. Targeted are HCM, ECRT, Summit Reporting, Student Administration, and Advancement. **Advancement:** • The University Advancement Office will migrate from a single server/dedicated applications to a multi-campus ERP application **Document Management** • Graduate Admissions and Registrar Document Management	O	FY 10

Priority	Initiative	Status	Notes
	project will provide for electronic scanning and workflow to eliminate the need for paper transactions • Faculty involved in Graduate Admission Application process will also access and manage application material on-line • Contract has a major conversion of 15 years of data that will include the Registrar office		
U	**Business Intelligence (Summit Reporting):** • Expand the Dashboard Suite to include PeopleSoft HCM, Finance, Student Administration and Advancement • Design and development of an Executive Dashboard will provide executive level trend data for long-term planning **Human Capital Management (HCM):** • Expand Employee Self Service – continue expansion of employee functionality • Expand Manager Self Service to include departmental offices • Implement Recruiting, ePerformance eLearning modules **Finance:** • University campuses will begin the Finance Upgrade project from V 8.9 to V9.1. Resource teams and design session to be scheduled over the summer of 2010. Implementation to commence Sept 2010 **Identity Management (IdM):** • With major ERP applications under the Idm umbrella, team will begin the enhancement of application functionality to include automated processes such as on-boarding and termination • Self Service module will be deployed, allowing employee password resets **Advancement:** • Upgrade Harris Connect application to provide enhanced web-based solicitation **Document & Records Management** • Pilot project live in Fall of 2010. Post stabilization additional departments will be identified for future implementation **Collaboration Tools** • SharePoint Portal "UCollaborate" network share drive will serve as a centralized site for access to all ERP application projects collaborative space **Forms Automation Pilot** • UMass Boston will serve as a pilot for the design, development and deployment of an electronic forms workflow application. Primary objective to develop an "electronic business process" for the Personal Action Form (PA) used by the Human Resources Office. **Data Archival** • The University is currently reviewing products that will provide data redundancy an archival abilities	O	FY 11

Priority	Initiative	Status	Notes
U	**Business Intelligence (Summit):** • Expand dashboard reporting ability to Office of Research and Sponsored Programs • Design and Develop the Oracle Upgrade to V10 • Research and design Electronic Personal Action Workflow **Advancement:** • Implement Multi-Source Interface **Document Management:** • Continued Expansion to Departments / Schools	O	FY 12
U	**Business Intelligence (Summit):** • Additional Dashboard deliverables • Program upgrades **Human Capital Management (HCM):** • Upgrade Time and Labor module to V10 **Finance/Grants** • Upgrade to V11 **Identity Management (IdM):** • Single Sign-on SSO Portal **Advancement:** • Expand E-Commerce **Document Management** • Continued Expansion to Departments / Schools	O	FY 13
U	**Business Intelligence (Summit):** • Additional Dashboard deliverables **Human Capital Management (HCM):** • Implement Talent Acquisition **Finance/Grants:** • Implement Forms Workflow **Identity Management (IdM):** • Upgrade Planned **Advancement** • Upgrade Planned **Document Management** • Continued Expansion to Departments / Schools	O	FY 14

Area Five: Enterprise Security

As the security and regulatory landscape keeps evolving, ITSD will keep developing its security and policy initiatives to insure that UMass Boston has an effective information security program in place.

Priority	Initiative	Status	Notes
I	**1. Training** **By 2014, UMass Boston will have a fully developed security awareness training program for students, faculty and staff.**	O	
	• Develop a freshman orientation initiative to socialize the incoming freshman on the hazards or being unprotected on the internet.		**FY 10**
	• Work with Information Security Council to develop and publicize security guidelines for servers, laptops, desktops, and paper-based information		
	• Work with all organizations to improve their security awareness especially in the areas of PII. o Posters, digital signage o Online training modules		**FY 11-FY 14**
	• Work with Information Security Council on Cybersecurity Awareness Month activities		
	• Keep informed of new techniques and technologies to improve our security posture.		
	• Update Information Security Web site		
	• Continue to provide training opportunities for staff, especially members of the Information Security Council.		
	• Work with department faculty heads to maintain security and privacy thought the campus.		
U	**2: Policy and Documentation** **By 2014, UMass Boston will have a well-developed and easily accessible set of policies and documentation related to information security.**	O	
	• Work with the other UMASS Information Security Officers to develop a system-wide Information Security Program.		FY 10
	• Continually review and revise existing University policies related to information security to ensure that they are current and easy for University users to understand and conform to best practices and appropriate standards.		FY 11-FY 14
	• Create procedures/guidelines to go with policies to adapt these policies into the work environment.		

Priority	Initiative	Status	Notes
	• Continue to work with department heads to ensure that security practices are documented at the department level.		
	• Implement and maintain a web site for policies and documentation related to Information Security		
I	**3. Desktop and Server Initiative** **By 2014, UMass Boston will have a complete inventory of desktops and servers as well as appropriate tools to monitor security of information stored on them.**	P	
	• Implement an inventory of servers and desktops and the information stored on them in order to understand where sensitive information is located in the University.		FY 10
	• Implement processes to automate as much as possible the identification and encryption of sensitive data.		FY 11-14
	• Set standards for desktop and server security and educate the University community about the standards for purchasing, configuring and maintaining security on servers and desktops.		
	4. Server Architecture **By 2014, ITSD will implement a secure server architecture for all University servers.**		
	• Work with Information Security Council to develop guidelines for setting up servers so that proper security adjustments are made to keep information secure.		FY 10
	• Examine the architecture to break the networks into separate DMZ areas to protect the various server from cross infection in case of a virus outbreak and to segment the infrastructure to prevent data leakage		FY 11
	• Set up a Certificate server to ensure the viability and encryption of all of the email data used both in and out of the campus.		FY 12
	5. Auditing and Reporting **By 2014, ITSD will utilize several auditing and reporting methods to continually review and improve information security.**		
	• Raise security awareness through various programs to help students, faculty, and staff. Utilize system scanners to produce reports for the user to advise them on how to be more secure. • (Keep up on the latest regulations so we can comply with them in a timely manner.)		FY 10
	• Work with the auditors to set the expectations of the user community and prepare them for what the auditors will be looking for in future audits		FY 11
	• Hire external penetration testers and auditors to check the processes and procedures set up by the ISO's of the campuses and remediate their findings.		

Priority	Initiative	Status	Notes
	• Investigate new technologies to improve auditing and security throughout the campuses		
	5. Disaster Recovery and Business Continuity **By 2014, ITSD will have well-developed DR/BC plans and a process for regularly testing them.**		
	• Develop an IT Services Catalog, identifying critical services and what is needed to support them.		FY 10-FY 11
	• For each service, develop Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO)		
	• Provide IT staff with training on using CPO Tracker software to maintain DR/BC documents and plans		
	• Enter services data into CPO Tracker		
	• Create a business plan and process to set up dependencies and testing capabilities.		FY 11
	• Work with other UMass campuses to work out emergency situations to include failover, notification, space requirements, class scheduling, environmental issues etc.		FY 11-12
	• Build a business continuity plan and run through testing to see where there are lapses in coverage. Remediate and retest.		FY 12-13
	• Continue testing on a annual basis and record outstanding issues and make recommendations for improvement.		

Area Six: IT Operations

As a service organization, ITSD seeks to enhance its own processes and improve customer service on a continuing basis.

Priority	Initiatives	Status	Notes
U	**1. Customer Service Culture** **On an ongoing basis, ITSD will strive to improve customer service and make it part of the culture of the staff.**		
	• Surveys: Client Services, Training, Classrooms, and Labs implement customer feedback surveys	O	FY 10
	• Maximize the use of HEAT and associated modules – new and existing: upgrade to HEAT 9.x, Knowledge base, inventory modules will be installed	O	FY 11
	• Surveys: other ITSD units add customer feedback surveys		FY 11
	• Staff training: add customer service training activities to staff meetings	O	FY 10-11

	• Continue to offer annual Customer Service Award	O	
	• Develop new activities around Customer Service Week	O	FY 11-12
U	**2. Communication Methods** **By 2014, ITSD will offer new channels for improving communications with our community; as well as use existing channels such as email, constant contact, etc. to educate and make our community more knowledgeable about IT services and protocols.**		
	• Leverage email and other electronic communication tools that will be deployed as part of Exchange 2010and implementation of unified communications	O	FY 11
	• The design and development of an Intranet as a tool for sharing information	P	Possibly completed after the web redesign project
	• Digital signage at key locations across campus; as part of the AV budget the installation of monitors at the service desk, etc.	O	FY 11
	• Desktop Direct Messaging / Marquees	P	The ability to push out messages to the desktop
	• The use of new telecom technologies – PBX/ACD [Information distribution and call avoidance capabilities]With the telecom system being upgraded the ability to implement some of the new technologies becomes feasible.	P	FY 11
I	**3. Operational Efficiencies** **By 2014, ITSD will improve operational efficiencies in the following areas:**		
	• Problem and Change Management	P	FY 11-12
	• Centralization of activities ▪ Forms ▪ Licenses ▪ Inventories ▪ Asset Information and Attributes	P	
U	**4. IT Service Desk** **By 2014 ITSD will have an IT Service Desk that meets the needs of the organization and one that others will want to imitate.**		
	• Implement new modules from HEAT – HEAT Self Service, Knowledgebase, Asset Discovery, etc.	P	FY 10
	• Implement a knowledge management system that clients and IT service desk staff can use to resolve issues	O	FY 11
	• Review / Select and Implement an ITIL-based solution	P	FY 13
	• Implement a student and staff training program that will increase the "first call resolution" rate	P	FY 13
U	**5.New Staff and Student Orientation** **By 2014 ITSD will implement an Orientation program for**		

	new staff and students		
	• Implement a "Buddy System" for IT orientation – preferably deployed during the first week of employment	P	FY 11

	• Implement employee training program based on:
	  ▪ Service catalog
	  ▪ Workflow
	  ▪ Service Level Agreements (SLAs)
	  ▪ IT Services Request Forms
	  ▪ IT Policies & Procedures (Security, role of IT Service Desk, Customer Service Center)
	  ▪ Assistance for initial setup of desktop, phones and mobile devices
	  ▪ Organization chart
	  ▪ Data Center Tour
		P	FY 12

U	**6. Establish a Network Operations Center (NOC)** **By 2014 ITSD will Implement a Network Operations Center (NOC) that Controls / Monitors all IT Hardware, Software, and Datacom/ Telecom Components**	P	FY 11 – FY 14
	• Research NOC's at other institutions		FY 11
	• Collaborate with Facilities & Public Safety in the design and development of the NOC		FY 12
	• Determine the Applications (mission critical) and the Hours of Coverage Needed		FY 12
	• Determine Staffing Levels, Hire & Train Staff		FY 13
	• Test System		FY 13
	• Add Additional Applications & Services, such as building management systems for new buildings		FY 14

Appendix 2:
ITSD Customer Satisfaction Surveys—June 2010

Appendix 3:
ITSD Professional Development Activities

ITSD participates in the following professional organizations:

ACUTA

Consortium Assisted Language Instruction Organization (CALICO)

EDUCAUSE

Help Desk Institute (HDI)

International Association of Language Learning Technology (IALLT)

International Association of Law and Policy (IALAP)

National Education Association (NEA)

National Scholars Honor Society

New England Regional Association for Language Learning (NERALLT)

Northeast Modern Language Association (NEMLA)

North East Regional Computing Program (NERCOMP)

Office for Women in Higher Ed (OWHE)

Project Management Institute (PMI)

Quality Matters (Inter-institutional Quality Assurance in Online Learning)

Sino American Bridge for Education and Health (SABEH)

Sloan-C Distance Learning Consortium

Society for Information Management (SIM) – Boston Chapter

Society of College and University Planners (SCUP)

ITSD staff members participated in the following training/professional development:

Formal Classes

- Alexandrine Policar – Doctoral Candidate in Law and Policy, Northeastern University
- Bhavesh Shah – Database Management Systems, University of Massachusetts Boston
- Jessica Downa- -Instructional Design masters program (CCDE)
  Three fall 2009 classes INSDSG 604 Communication Theory for Organizations; INSDSG 605 Production of Media Materials; INSDSG 618 Assessment in the Instructional Design Process
- Zack Ronald -DLVPC Staff Member obtained his BA
- Salina Allen-Sharpp—completed 4 University courses in Human Services and Labor Management program

Conferences/Meetings

- An Event Apart
- Boston College E-Technology Day
- Boston IT Roadmap
- Boston's first Accessibility Unconference

- Campus Technology Conference – Boston
- Campus Technology Forum
- Checkpoint Seminar
- CIO Executive Summit (Boston)
- CIO Executive Summit (Hartford, CT)
- CIT Conference UMass Boston
- CollegeNET Annual Conference
- CollegeNET X25 Customer Focus Panel Member
- Design of Learning Spaces – Master Plan Subcommittee
- Digital Content Conference-Intel
- Faculty Development – Northeastern University
- Gartner Executive Summit
- Gartner Forum for Women CIO's
- Green Pages Virtual World Fall 2009 Event
- HEAT Regional User Group
- IANS Security Conference
- InterOp Conference 2010
- MAC Academic X
- MIT Mobile Camp
- NEMLA Conference
- NERALLT -New England Association of Learning Lab Technologies
- NERCOMP 2010 Annual Conference
- NERCOMP Blackboard User Group
- NERCOMP CIO Forum
- NERCOMP SIG Planning - Open Curricula
- New England VMWare User Group Conference
- Northeastern University e-tech day
- Olin Innovation Studio
- Open Education Forum at Tufts University
- PMI Mass Bay Chapter
- Quest Software Seminar "spend a day with the experts"
- SCUP National Conference
- Sloan-C Blended Learning Conference
- SQL Saturday Boston Event
- Systems & Information Management (SIM)- Boston Chapter Meetings
- UMASS Lowell Ed-tech day
- Usability Professionals Association Boston Meeting
- Virtual Computer Lab – George Mason University
- Infoblox Seminar
- Secure World Conference

Workshops/Training

- Instructional Designer for Synchronous Conferencing Support (Ellen Foust) completed three-part Synchronous Learning Expert – Full Certification program through InSync Training Synchronous Learning Expert (SLE) designation and certification process, a national certification for "Individuals whose job responsibilities or future responsibilities include designing, delivering and promoting synchronous training within their organization" that the "United States Distance Learning Association ... recognizes and recommends: Facilitation Certificate: September 1 – September 29 / Design Certificate: October 27 – December 8 / Capstone Certificate: February 9 – February 23, 2010

- 2009 Curtis Backup School
- Accordent Classroom Capture Webinar
- AD 2008 Knowledge Transfer
- Air Magnet Seminars (multiple)
- Apple AcademIX workshop
- Cisco CCNA Discovery workshop - BATEC Summer Institutes
- CollegeNET Web Services training
- Configuring, Managing and Troubleshooting Microsoft® Exchange Server 2010
- EDUCAUSE Learning Initiative 2009 Online Fall Focus Session
- ETC Studio Lighting Dimming System Training
- Extron TouchLink System Training
- Extron Global Viewer Training
- Final Cut Pro Training
- Four Winds Digital Signage System Webinar
- Grant Writing Institute
- Green Pages Virtual World Fall 2009 Event
- HEAT User Training
- Heinle Cenage Learning World Languages Symposium
- Identity Theft and Privacy workshop
- Identity Theft Seminar
- ITIL – Foundation
- LifeSize VTC Training
- MacLearning Webinar- iTunes U
- MacLearning Webinar- iTunes U and the iTunes store
- NERCOMP – "Transitioning to On-Line Course Evaluation"
- Network Observer Training
- New England VMWare User Group Conference
- Online Web training via group membership to Lynda.com
- Packet Shaper Knowledge Transfer
- People Soft Security Training
- Snow Leopard Seminar
- Syncsort/NetApp: Virtualize without Compromise
- Visix Digital Signage TV System Webinar
- WISER Security
- WM Ware Seminars (multiple)

- X25 User Training
- Xythos Training

Participation in University and other Professional Committees
- Academic Council
- Academic Technology Committee
- A & F Policy & Procedures Committee
- Bayside Due Diligence Team
- CCDE Distance Learning Workgroup
- Chancellor's Award Committee
- Chancellor's Leadership Team
- CIO Award Committee
- CIT Advisory Board
- Commencement Committee
- Distance Learning Workgroup
- Organizational Unit Committee
- EdTech Annual Conference Planning Committee
- Faculty Development Committee
- General Academic Building Steering Committee
- Healey Library Streaming Media Task Force with Healey
- Integrated Science Complex Steering Committee
- IT Liaison Committee
- Newton Public Schools Technology Advisory Committee
- Ortiz Evaluation Committee
- R25 and X25 User Group Moderator
- Safety Committee
- SAT – Subcommittee on Academic Technology
- Strategic Planning Commitee
- Student Video Contest Committee
- UMass Boston Video Branding Committee
- UMOL Learning Platform Review Committee
- UMOL User Group
- University of Massachusetts Information Technology Leadership Team
- University Energy Committee
- University Master Planning Committee
- U$AVE

Appendix 4: ITSD Presentations/Publications 2009-2010

Anne Agee
Beyond the Help Desk: Creating a Culture of Service in the IT Organization. (Research Bulletin, Issue 17). Boulder, CO: EDUCAUSE Center for Applied Research, 2009. Available from http://www.educause.edu/ecar [with Robert Renaud].
"Collaboration in the Cloud." With Bill Rogers. Presentation to the Boston CIO Executive Forum. Boston MA. 6 October 2009.
"Email in the Cloud: What are the Implications?" Northeast Regional Computing Program Conference. Providence RI. 9 March 2010.
"Leadership for Change: Frugal Innovation." NERCOMP SIG. Norwood MA. 12 November 2009.
"Making Security Popular." Presentation to the Boston IT Roadmap Conference. Boston MA. 25 May 2010.
"Sharing the Wealth: Creating a University-Wide Security Council." Northeast Regional Computing Program Conference. Providence RI. 10 March 2010.
"Technology: Understanding the Challenges and Opportunities." HERS Institute. Wellesley College. October 2009 and Bryn Mawr College, June, 2010.
"Time Management, Prioritization and the Fine Art of Delegation." EDUCAUSE/NERCOMP Managers' Series. Norwood MA. 15 September 2009.
"Top-Ten IT Issues, 2009." Anne Scrivener Agee, Catherine Yang and the EDUCAUSE Current Issues Committee. *Educause Review* 44.4 (2009): 44-58.

Caroline Cappuccio
"Building a Campus Wide Training Program at UMass Boston." NERCOMP. Providence, RI. March 10, 2010 [with Apurva Mehta].

Robert Caron
"Case Study: Running Schedule25 in R25". CollegeNET User Conference. Portland OR. July 2009.
"Schedule25 for Dummies: What Schedule25 Does and Does Not Do". Series25 NE Regional User Group. University of Massachusetts Dartmouth. January 2010.

Lisa Link
"Integrating YouTube Materials into your websites", University of Massachusetts Boston
'History of London Web Site" panel presentation to faculty and graduate students, University of Massachusetts Boston

Apurva Mehta
"Building a Campus Wide Training Program at UMass Boston." NERCOMP. Providence, RI. March 10, 2010 [with Caroline Cappuccio]
"IT Service Desk Operations." NERCOMP SIG. Worcester, MA. December 1, 2009
"The Benefits of real-Time Support" – NERCOMP – Providence, RI – March 9th 2010
"The New helpdesk: Resolving Any Issue, Anywhere, at Anytime" – EduComm – Las Vegas – June 9, 2010

Mark Lewis
"Immersion and Continuity: A Blended Model for College-Level Introductory Language Courses." Poster Session at Sloan-C Blended Learning Conference. Oak Brook, IL. April 19-20, 2010.

Eileen McMahon
"Open Courseware at UMass Boston: A Case Study" (poster Session) Campus Technology 2009 Conference, Boston, MA, July 2009
"Publishing Open Course Curricula: What It's All About and Why It Matters" (event Producer and Presenter) NERCOMP SIG, Norwood, MA, Oct. '09
"Using Web 2.0" (Presenter) Blackboard Usergroup, Nercomp SIG, UMass Amherst, Nov. '09

Gene Shwalb
"Using the Web's Resources to Support Student Rsearch: YouTube and Video", co-presented with Amy Todd and Lakshmi Srivinas, EdTech Conference at UMass Boston, May 13, 2010.

Mary Simone
"Wikis –Using new tools to teach Chinese"- Open Microphone RYMAEC, Institute of Contemporary Art, Boston. March 2010.
"itunes U- Supporting Foreign Language Learning on a Tight Budget, NERALLT Conference, Boston University, April 2010

Appendix 5: Selected ITSD Metrics for AY 09-10

Application Services
Web Services
- Received 818 requests for service and completed 550, serving 42 campus departments
- 5.8 million visits to the www.umb.edu web site, an increase from AY08-AY09 of 90.6%, visited by 212 countries, top 6 are US, Canada, China, India, German, UK
- 2.7 million visits to the IT Home Page, an increase from AY08-AY09 of 69.1%.
- 11 departmental web sites migrated and content owners trained in new CMS (Content Management System)

Enterprise Applications & Projects
- IT provided 77 training sessions in PeopleSoft applications for 381 staff members.

Client Services
- Total # of tickets created at the service desk: 16,821
  - WISER: 7,201
  - Blackboard: 552
  - Repair Shop: 329
  - Desktop Consultants: 4,865
  - GIS : 49
  - Network: 575
  - Systems: 1,270
  - Web: 67
  - Operations: 260

Communications and Infrastructure
Video Production Center
- Provided AV Support and Video Recording for over 48 Events in 2009/2010
- Produced over 90 video files for: Chancellor's Office, University Advancement, Athletics, McNair Program, Veteran's Services, COSMIC Program, OLLI Program, Labor Resource Center, McCormack Graduate School, University Communications, etc
- Over 400 File Creations for YouTube, Real Media, Flash Video, Accordent Capture System, etc…
- Over 340,00 views on the UMass Boston YouTube site for videos produced by the DLVPC, University Advancement, etc…
- 412 hours of classroom capture services for ITV and Face to Face Classes
- Over 132 hours of Videoconferencing Support
- 1,100 hours installing new AV equipment or repairing existing equipment in Classrooms, etc…
- Supported 9,391 hours of Wimba Synchronous Meeting sessions
- Created Over 675 Slides for UMB Digital Signage System

Telecom User Services
- 160+ Blackberries in service
- 70+ Iphones in service
- 85 Cell phones in service

- 1687 Helpdesk Tickets processed

IT Systems & Networking
- Viruses   11804
- Total Messages   49,634,077
- Total Spam   8,657,644
- Annual Spam %   17.44 %

Educational Technology
Digital Learning Studio
- 110 Virtual language labs in Blackboard
- 6101 hits on iTunes U courses
- 3614   Camtasia views of 32 recordings
- 485 wikis, 3294 users, 46,431 individual page edits

Labs
- 118,411 visits to the UMass Boston Labs
- 1,221 visits to the Adaptive Computing Lab
- 52,651 visits to the Graduate Research Center
- 8,305 class hours held in the labs

Media Services
- Equipment Loans from Media Labs – 14,757
- Service Transactions in TEC's – 6,602
- Special Events Supported – 472
- Over 18,000 hours of laptop usage was documented in the Technology Enhanced Classrooms
- Installation of multimedia in Ryan Lounge
- Classroom support of Camtasia Relay pilot program
- Installation of wireless USB microphones in Level 2 TEC's for Camtasia Relay program
- Installation of iClicker base stations in Level 2 TEC's for classroom support
- Replace PC's in Level 2 TEC's – W-2-200, M-1-409, M-2-116
- Construction of new Level 2 TEC's – H-4-031, M-2-404 & M-2-423
- Upgrade three LCD projectors in University Club (H-11-B)
- Installation of wireless microphone systems in Level 2 TEC's

Training and Instructional Support
- 233 participants in Teaching with Technology Workshops
- Faculty Consultations: 702
- Blackboard courses: 202 online, 559 web-enhanced, 4 blended
- Events supported in Presentation Rooms: 1877
- 102 classes offered in MS Office, Intro to Technology and Statistics; 779 people attended

IT/ HR Office
- Full time staff 96
- Non-benefit staff 11
- Student staff 74
- Graduate Students 3
- Students hired with grant funds